THE

MEDICAL TIMES:

A JOURNAL

OF

ENGLISH AND FOREIGN MEDICINE,

AND

MISCELLANY OF MEDICAL AFFAIRS.

VOLUME THE TENTH.

MARCH 31st to OCTOBER 5th, 1844.

LONDON:

J. ANGERSTEIN CARFRAE, ESSEX STREET, STRAND.

M.DCCC.XLIV.

WELLCOME HISTORICAL MEDICAL LIBRARY

WELLCOME INSTITUTE LIBRARY
Coll. SER
Call No. WI 1042

INDEX TO VOL. X.

Abdomen, wound of, 327
Abercrombie, Dr., pencilling of, 336
———— on hæmorrhage from the liver, 525
———— J., Esq., on hæmorrhage of the liver, 312
Absorption of certain substances, and the modifications which they undergo, by MM. Laveron and Millon, 434
———— of animal poison into the circulation; death, 407
Abscess under the dura mater, Mr. Liston on, 269
Acid boric, the action of, on alcohol and esprit de bois, 283
Academy of Sciences in Paris (see Parisian Intelligence)
Academy, Medical, of Paris (see Parisian Intelligence)
Acetate of lead, poisoning by, unattended by fatal consequences, 476
Acid, butyric, its composition, 160
—— experiments on arsenious, 79
—— on the heat disengaged when water is added to sulphuric, by M. Abria, 150
Acids, theory of, by Liebig, 394
Addison, Mr., on the transformation of pus cells into mucous or fibrous tissue, 437
Adelaide Gallery, mesmeric experiments at, 188
———— Mr. Wakley, Jun., and mesmerism, 79
Adulterations, 219
Agassin, M., on the classification of fishes, 354
Age, old, and public competency, 378
Agrégés in surgery, nomination of, 304
Ague treated by venesection, 41
Albuminuria, its causes and nature, 396
———— on the causes of, by Dr. Fourcault, 136
———— cause of, by Mr. Ross, 270
Albuminorrhœa, or Bright's disease, 28
Alcali, a new organic, 434
Alcaline bases, on the combinations of two new, containing platina, by M. J. Reiset, 238
Alcoholic ferments, by M. Bouchardat, 258
Alexis, the somnambulist, experiments with, 267
———— report of an interview with, 451, 472
—— clairvoyance of, by T. P. Healey, Esq., 286, 312
——, recent experiments with, by W. B. Costello, M.D., 356
Allies, M., on epidemic pseudo-syphilis, 526
Allnatt, R. H., M.D., observations on neuralgia, 405
———— on the causes and treatment of neuralgia, 396
Almonds, poisoning by the essential oil of, 524
Alveolar exostosis, case of, 524
Ammonium, fluoride of, 497
Ammonia, action of, upon the protochloride of platinum, by Dr. Mich. Peyrone; translated by Dr. Muspratt, 381, 423, 444, 461
———— and bisulphurate of carbon, 497
———— externally, in neuralgia, by Mr. Barrett, 226
———— its action on butyric æther, by M. G. Chancel, 174
Amputations, cases of, 317
———— results of, 497
Amussat, J. Z., M.D., on an operation of enterotomia, successfully performed without opening the peritonæum, 401, 425, 441
———— surgical cases by, 68
Amylum, or starch, experiments on, 488
Anatomy act, motion for a select committee to inquire into its working, 229
Anatomical researches on the electrical organ of the torpedo, by M. Jobert de Lamballe, D.M.P., 271, 301
Anæsthesia of the left side of the body, without paralysis of movement, 503
Ancle, compound dislocation of, by W. Ilott, Esq., 259
Anderson, Mrs. J., obstetric cure by, 152
Aneurism of the carotid artery, 417
———— popliteal; ligature of the femoral artery, 385
Aneurismal varix, Dr. Chisholm on, 190
Animal magnetism, by M. Thorilier, 259
Antimony, its effects on infants, 437
Antrum maxillare, disease of the, 476
Anus artificial, successful cases of the formation of, by M. Daguesceau, 446
—— imperforate, by Professor A. Berard, 282
Aorta, malposition of the, and its thoracic branches, 161
Appendix cœci vermiformis, inflammation of, 445
———— ulceration and gangrene of, case, 224
Appointments, naval and military, 188, 210, 229, 250, 270, 318, 338, 358, 378, 418, 438, 458, 526, 552
Apothecaries' Society, 291
———— Irish, and the new bill, 519, 540
Apothecaries' Hall, gentlemen admitted members of, 22, 42, 57, 81, 102, 121, 142, 161, 188, 210, 229, 250, 270, 273, 318, 338, 358, 378, 398, 418, 438, 458, 477, 498, 552.
———— strictures on, 132
———— Society, protection of medical men, by the, 132
———— Company and the elective franchise, 226
Arago, M., on the new comet, 374
———— on an austral aurora borealis, 284
Armstrong, Dr., on distemper amongst cattle, 11
Army medical department, 534
Arsenic, poisoning by, 552
———— supposed poisoning by, 397
———— poisoning by, 315
———— test for, 417
———— its presence in the soil of church-yards, and absorption by the bodies there interred, by Dr. Ollivier d'Angers, 347
Arsenicalis liquor, on the, by M. Bally, 375
Arteriotomy and its consequences, by Mr. Liston, 225
Arthrodynia, acute, on the treatment of, by M. Legrand, 238
Arytenoid cartilages, caries of the, 435
Arythenoidian ganglion, on the, by Prof. Barkow, 466
Asbestos in dental practice, 457
Ascites, arsenic in, 317
Asiatic cholera, statistical records of its progress over the globe, by Dr. Merriman, 296
Asthma caused by ipecacuanha, by Uriah Turner, M.D., 168
Atkinson, Mr., on ovarian disease, 395
Atlee, Dr., on a case of molluscum, 437
———— W., Esq., on a case of ovarian extirpation, 474
Atmosphere, a regulated, warm, and moist, in the sick room, 395
Atropa belladonna, a communication on, by Mr. Ley, 314
Atropine as a substitute for belladonna, Mr. Cooper on, 227
———— Mr. L. Bullock on, 270
Ayres, Dr., on the nutrition of plants, 226

Baillarger, M., on "heredity" as the cause of insanity, by, 30
Bainbridge, Mr., on funis presentations, 317
Baldy, Mr. J. P., on peritonitis and apoplexy successfully cured without bleeding, 101
Baudelocque, L., M.D., on two cases of imperforate anus, 466
Baumanns, M., on a test for arsenic, 417
Barrett, Mr., on ammonia, externally, in neuralgia, 226
Barnes, Dr., on acute rheumatism, 316
Barkow, Professor, on a new ganglion, 466
Barker, T. H., Esq., on the Bedford medical meeting, 546
Bartholomew's, St., rules and regulations for midwifery, 541
Bath waters, Dr. Granville on the, 59
Baths, on the use of, 456
Bean, Dr., on the treatment of phthisis, 215
Bedford, Dr., on a case of molar pregnancy, 456
———— on vaginal hysterotomy, 456
Bedford medical meeting, by T. H. Barker, Esq., 546
Belladonna, two cases of poisoning, by, 427
———— in tetanus, 189
———— on its external use as a discutient, by M. Philippe, M.D., 238
Bennet, Dr., on the use of blisters, 477
Benzoin water, on its preparation, 227
Bernard, A., Professor, on imperforate anus, 282
Berncastle, Mr., on a case of injury to the thigh, 395
Berthold, M., M.D., on the duration of gestation, 198
Berigny, M., on a case of lusus naturæ, 410
Berthet, Dr., on vesico-vaginal fistula, 326
———— on extirpation of the spleen, 476
Biographical record, 199, 394
Bile on the, and the products of its decomposition, by Theyer and Schlosser, 306, 351
Bill, Sir James Graham's: meeting of committee of the East London Medical Association, 471
—— new, Sir James Graham's, meetings on, 490, 515, 516, 517
—— for the better regulation of medical practice throughout the United Kingdom, 411
Birmingham General Hospital, unfortunate strife in, 552
———— medical meeting at, 498
Bird, Dr. F., on ovariotomy, 437
Bladder, carcinoma of, 135
———— vesication of its mucous membrane, and development of pseudo-membranes, caused by the application of a blister, 305

Bladder, stone of, complicated disease of, 523
Blamey, Dr., a medical epic poem, 286
Blandin, Prof., on a case of tumour of the palate, 458
———— on restriction of the upper extremity of the humerus, 173
Bleeding, peritonitis and apoplexy successfully treated without, 101
———— mode of determining its propriety 230
Blisters, use of, 477
Blood, on a new method of analysing it, 325
——— some suggestions with reference to the circulation of, by Dr. Rosenthal, 376
——— state of, in morbus Brightii and various forms of anæmia, 437
——— epitome of recent opinions on, inflammation and its sequelæ, by G. D. Dermott, Esq., 482
Blyth, Dr., on a new substance called Styrol, 496
Bonaparte, Prince Louis, on the poison of the viper, in the treatment of hydrophobia, 208
Borrett, J., M.D., on the present state and prospects of the profession, 414
Bohemian Remedy, by Dr. Foley, 293, 312
———— for hydrophobia, by M. Malet, 394
Braid, I., Esq., on the effect of garlic on the magnetic needle, by, 98
———— observations on mesmeric and hypnotic phenomena, by, 31, 47, 450
Branson, Dr. Ferguson, on two cases of pericarditis, 357
Brain, concussion of the, case, 455
—— concussion of, case, 523
—— laceration of the, case, 397
—— pistol shot traversing its substance, 417
Brideswell dispensary, report of, by Dr. O'Connell, 290
Bright's disease, case of, 310
Bronchocele, depending on rheumatism, 417
Bronchi, on a foreign body in, expulsed spontaneously, by Dr. Faivre, 282.
Bond, Dr. H., on the extraction of retained placenta in cases of abortion, 475
Boudet, M., on the chemical composition of the parenchyma pulmonaris and tubercles, 504
Bouchardet, M., on alcoholic ferments, 258
Bossingault, M., on the effects produced by different kinds of food on cows, 447
Bourdois de la Motte, pencilling of, 154
Boyd, Dr., statistics of phthisis, 269
Breast, fibrous and cancerous tumors of the, by Mr. Prowse, 227
——— and liver, carcinoma of the, 327
Brooks, H., Esq., on sleep waking, or second consciousness, 181, 206, 221, 263
Brown, R. W., Esq., on a case of scirrhus of the thyroid gland, 210
Bullock, Mr. Lloyd, on adulteration of drugs; on sesquioxide of iron, 160
———————— on preparing the mist. ferri comp., 338
Bullen, Mr., some conclusions on amputations, 497
Bull, Dr., on moxas in a peculiar form of paralysis, 190
Bunde, Dr., on a case of umbilical hernia, 190
Buswell, Dr., on the injudicious use of the secale cornutum; on some singular cases in midwifery, 457
Burdett, Sir Francis, letter on the death of, 141
Burns, cases of, 187
——— Dr. John, pencilling of, 178
Butyric æther, 488
Butyrone, researches on, by M. Chancel, 216
Byrne, John and Oliver, Esqs., the fallacies of our own time, review of, 178

Calamus rotang, on the distillation of its resin, 503
Calamine, or carbonate of zinc, Dr. R. D. Thompson on, 227
Calculus complicated with vesico-vaginal fistula, by M. Segalas, M.A.M., 216
——— cure of, by electricity, 435
Calomel, its efficacy in large doses, in typhus fever, 427
——— as a remedy in diseases of the eye, 376
Callias, Dr., on circular iridectomia, 199
Cagots, on a race of men so called, 503
Campbell de Morgan, Mr., on the injury done to the spinal cord during hanging, 435
Campbell de Morgan, Mr., on the use of alcalies in consumption, 543
Camphine produced by the action of nitric acid on amber, 488
Cancer, removal of by the knife, by M. Leroy d'Etiolles, 250
——— on its medical treatment, by Dr. Tanchou, 238
——— gelatiniform, peculiar case of, by J. C. Warren, M.D., 313
——— on the frequency of, by Dr. Tanchou, 135
Candidates for vacant place at the Academy of Medicine, 283
Caoutchouc, remedy for toothache, 488
Carbon, secretion of, by animals, by Robert Rigg, F.R.S., 424
Carpenter, W. B., M.D., F.R.S., Popular Cyclopædia of Natural Science, Zoology, &c., Review of, 491
———— on mesmerism, 99, 131
Carcinomatous tubercle of the face, 297
Carotid, ligature of the, 497
Carfrae, Mr., and Mr. Wakley, 77
Carpenter, Dr., on mesmerism, 99
Castor, odour of, 488
Castle, Dr., on lancing the gums, 436
Cassels, Dr., on a case of tubercles in the lungs, in a child, 270
Case, singular, 378
Cattle, distemper amongst, 111
Cataract, operations for; effects of argentum nitratum on the colour of the eye, 407
Cerebral apoplexy, M. Freschi, on, 206
Cerebellum, cancer of the, 88
Chancel, M., researches on butyrone, 216
———— M. G., on the action of ammonia on butyric æther, 174
Charter, surgical, Mr. Guthrie's disavowal of all connection with, 202
Chalybeate waters, Dr. Thomson on, 60
Chabrely, Dr., on the treatment of inflammation of the cellular tissue by caustic potash, 377
Chambers, Dr., on abscess of the heart, 396
Cheek, on the glandular swelling of the, by Professor Berard, 149
——— fistulous opening in, 417
Chemical types, researches on, 466
Chest, use of alum in diseases of the, 41
——— penetrating wound of the, 21
Chimney-sweeper's cancer, case of, 356
Cholera, caused by the roe of the barbel, 444
——— Mr. Ranking on the treatment of, 59
Chorea, cases of, with their treatment, by John Water, M.D., 444
———its causes, symptoms, treatment, &c., by Professor Chomel, 502
———its symptoms, terminations, causes, and treatment, by Dr. Jadelot, 463
Chomel, Professor, on the causes, symptoms, diagnosis, treatment, &c., of chorea, 502
———————— on the causes and treatment of emphysema pulmonaris, 172
———————— on pleuritis with effusion, 383
———————— on the treatment of syphilitic diseases, 432
Choroido-iritis, chronic, artificial pupil, &c., 273
Chisholm, Dr., on disease of the tibia, 176
———————— on aneurismal varix, 190
Chloride of sodium, its uses in diseases of the eye, by Dr. Tavignot, 228
Christian, Dr., on a case of poisoning by sulphate of iron, 228
Churchill, Mr., admission that the "Medical Times" is the leading medical journal, 94
Clay, Ch., M.D., on relaxation and separation of the pelvic symphyses and ligaments, 322
———————— on lacerations of the perinæum, and artificial support to this part, during the last stage of labour, 213, 253.
———————— on the effects of diet on the fœtus in utero, 279
———————— on the application of the plug in cases of uterine hæmorrhage, 147, 171, 195
———————— on the mode and proper time for making examinations per vaginum, in cases of labour; and on the premature rupture of the membranes, 362
Clark, J., M.D., on the origin and treatment of syphilis, 296
—— P. F., M.D., on the discharge of a lumbricus teres, eleven inches long, from the male urethra, 218
Clavicle, on the treatment of its fractures, by A. L. Cox, M.D., 218
——— fractures of the, 498
Clairvoyance, startling cases of, 312
Clarkson, J., on the state of medicine in ancient Egypt, by, 90
Clendinning, Dr., on Indian hemp, 378
Close, A. W., Esq., on the treatment of convulsions in children, 507
Cod-liver oil, 219
Coffee, a remedy, 109
College charter, mode of carrying out its provisions, 415
——— of surgeons, fellowship of, a provincial surgeon on, 519
——— election of councillors, 369
——— charter; meeting at Exeter-hall, 471
——— Mr. Owen's situation at, 188
——— their statement, 179
——— remonstrance to the, 9
Collier, Dr., on mesmerism, 101
Colon, stricture of, 525
Colica pictonum, on; organic lesions; symptomatology and etiology, 49
——— treatment, purgatives, narcotics, antiphlogistics, regimen, 50
Coleraine union workhouse hospital, report of, by T. H. Babington, M.B., 268
Colchici pulvis, its obstetrical properties, by M. Metta, 190
Common sewers, powder for purifying, 385
Commons' House of, discussion relative to the literary pensions, 188
Comet, new, on the, by M. Arago, 374
Consumption, incipient pulmonary, cure of, 467
———————— use of alcalies in, 435
Congenital ulceration and gangrene, Dr. T. W. Potts, on, 190
Conical cornea, 219
Condylomata, on venereal, 122
Convulsions, puerperal, 136, 524
Confectio ferri composit., a formulary for, 42
Coniine, in scrofulous ophthalmia, 376
Councillors, election of, and the medical bill, 431
Concia, action of, on the blood, 457
Cooper, Mr., on atropine as a substitute for belladonna, 227
——— W. White, Esq., on a case of acute retinitis, caused by the use of the microscope, 295
——— Sir Astley, the late, bust of, 552
——— Mr. B., case of penetrating wound of the chest, by, 21
Copper, on a new oxide of, 51
Cornea, punctured wound of the, 360
——— opaque, excision of, by Dr. Hamilton, 210
Corrosive sublimate, poisoning by, by Dr. Watson, 228
Correspondents, notices to, 32, 33, 53, 72, 92, 112, 132, 176, 200, 220, 240, 260, 284, 308, 328, 348, 368, 388, 411, 428, 448, 468, 488, 517, 542
Cormack, Dr., on ipecacuanha as a counter irritant, 417
Costello, W. B., M.D., on lithotrity, lithotomy, and diseases of the urinary orgacs, 441, 481, 509
———————— on recent experiments with alexis, 356
Cough, mechanical support in, 132
Cowan, Dr., on a case of vicarious menstruation, 397
Cox, Dr., on fractures of the clavicle, 498
—— A. L., M.D., on the treatment of fractures of the clavicle, 218
Cow pox, on a new, by M. Magendie, 198
Craig, Mr., on idiopathic erysipelas, 226
———————— on laceration of the perinæum during labour, by, 21
Creosote in the treatment of certain diseases of the conjunctiva and cornea, by Dr. Tanisville, 250
——— researches on, 325
Croup, terminating fatally, without the formation of false membranes; sulphate of copper in, 508
Cruveilhier, Professor, on fibrous tumours of the mammæ, 12
Cummins, R. H., M.D., on anomalous hysteria, 169
Curling, Mr., on compression in the treatment of varicocele, 270
Cyanosis, case of, 338

Curtis, J. H., Esq., on the present state of ophthalmic surgery, review, 411
Cyanuret of potassium, its utility in removing the stains produced on the tunica conjunctiva by argentum nitratum, 407
Cyst, case of, occupying the position of a psoas abscess, 395

Dalby's carminative, 60
Dagueseau, M., on the formation of artificial anus, 446
Daniellsen, Dr., on elephantiasis, 30
Daniell, Mr., on vaccination during the existence of small pox, 476
——— on a case of gun-shot wound, 525
Dangerfield, Dr., on the traitement Arabique in obstinate cutaneous affections, 337
D'Angers, Dr. Ollivier, on the presence of arsenic in soil of churchyards, and its absorption by the bodies there interred, 347
Danyau, M., on spoutaneous evolution, 258
Dana, J. A. M., on a system of mineralogy, including the most recent discoveries, foreign and American, review of, 350
Daphne mezercum, poisoning by its berries, 427
Davis, Dr., J. H., fugitive accoucheur, by J. Waddington, Esq., 208
——— on prolapse of the cord, 270
——— on protracted labour, 436
Day, Mr., on the specific gravity of urine, 269
Death from potato-skin in the larynx, 228
—— from abuse of ardent spirits, 327
Deaf and dumb, blind and insane, in the races of European and African origin, in the United States, relative proportion, 437
De Cavey, Dr., on the use of arsenic in ascites, 317
Delaporte and Cigalla, MM., memoir on the plague, 464
Delirium tremens, opium in the treatment of, 327
——— some views on, 508
Dental Hæmorrhage, case of, by Mr. Stainthorpe, 100
——— surgery, remarks on the theory and practice of, by — Waite, Esq., M.R.C.S., 366
Dermott, G. D., Esq., letter to Mr. Wakley, 7
——— epitome of recent opinions on the blood, inflammation and its sequelæ, 482
Desportes, Dr. H., on the administration of nitras potassæ in different diseases, 6
——— an experiment on the influence of electricity on the tissue of the kidney, and on the excretion of urine, 486
Despres, Dr., on a method of embalming bodies, 174
Deschamps, Dr., on the anatomy and physiology of the ova and corpus luteum in the ovaria of women and mamiferæ, 347
Deville, M., some researches on creosote, 325
De Quatrefages, M., on the mollusca gasteropodes, phlebenteres, 347
Diabetes mellitus, case of, 325
——— cured by alcalies and sudorifics, 476
Diagnosis, Mr Stafford, on mistaken, 58
Diet, effects of, on the fœtus in utero, by Dr. Clay, 279
Dickson, Dr., on intermittence of disease, 20
Digitalis, a communication on, by Dr. Houlton, 313
——— poisoning by, 437
Disease, intermittence of, 20
——— Mr. Scott on malignant, 121
Dissection of a cyst containing seminal fluid, by J. Paget, Esq., 296
Dissecting aneurism of the aorta, innominata, and right carotid arteries, causing suppression of the urine, and white softening of the right hemisphere of the brain, by R. B. Todd, M.D., F.R.S., 209
Dislocation, unusual, Mr. Spender on, 269
Dobereiner, Professor, on potatoe oil, and the purification of brandy, 175
Downey, Mr., letter on the Leicester case of mesmerism, 514
Dracunculi, their extirpation from the eye, by Dr. W. Lovey, 226
Dropsy, case of ovarian, 122
——— peritoneal, case of, 327
——— state of urine in, 436
Drug, price list, 62, 298
—— adulteration of, 169
Dudgeon, Dr., on the cure of pannus by inoculation, 228
Dumeril, Prof., on the bite of a viper, 375
Duncan, Dr., on carotid aneurism, 417
Duodenum, ulcer of, case, 270
Dutrochet, M., on the volubility of the stems of certain plants, 409

East India Company's Service, 535
Ebelman, M., on silicic ether, 447
Edinburgh Veterinary College, 454
Editorial Observations on--Construction of the Apothecaries act, 9—The leading journal and medical reform, 33—Lord Ashley's committee on poor law medical relief, 34 — Persecution of medical men by medical corporations; the Irish Apothecaries' company and Irish general practitioners, 53—Dissection of a foolish address; the provincial medical association and its journal, 73—The factory question, 92—Parliamentary prospects: is wrong to be mended by wrong? 112—The Apothecaries' Society and their defence, 133—Sir James Graham's new medical bill, 152—Statement of the College of Surgeons, 177 — Impolitic and insulting absurdities of the surgical council's manifesto, 200 — The anatomy bill and the late debate, 220 — The hopes and delusions of medical legislation, 240—Death from delayed medical aid, 241—Mr. Wakley in Chancery! his threat of a chancery process against the "Medical Times," 260—Death of Geoffroy St. Hilaire, and French encouragement of science, 284—Quackery *versus* the profession, 308—Elections by the new fellows, 328—The probabilities and improbabilities of mesmerism, 348—Remarks on the recent elections to the surgical council, 368—Announced sale of a medical journal; hospital appointments; civil list and science, 369—Government bill of medical reform, 388—"Medical Times" and the stamp returns, 389 — Gross interruptions of medical meetings; legislature and lunacy, 428—Observations on the new medical bill, 429—The "Times" attacks on Sir James Graham. The true policy of medical reformers, 448—Sir James Graham and the "Times," 469—Poor-law Medical relief, 470—Sir James Graham and the registration of the profession, 488—Silly resolutions of a medical association, 489—The Council of Health, and its constitution, 518—Address to the new classes of students; Council of Health, 542—Best and worst of scientific corporations, 543—Mr. Deshon and the Poor-law guardian, 544.
Edwards, Mr., on some cases of spontaneous evolution. 189
Egypt, ancient, state of medicine in, 90
Electro-lithotomy, Mr. Samuel on, 100
Electricity, an experiment on its influence on the tissue of the kidney, and on the excretion of urine, by E. H. Desportes, M.D., 486
Elephantiasis, on, 30
Elkington, Mr., on rupture and fibrous tumours of the uterus, 525
Emphysema pulmonaris, its causes and treatment, by Prof. Chomel, 172
Embalming bodies, on a new method of, by Dr. Despres, 174
Enteritis, simulating pregnancy and labour at the full time, 60
——— muscular, epidemic of, 475
Entorotomia, on an operation of, successfully performed without opening the peritonæum, by J. Z. Amussat, M.D., 401, 425, 441
Ephidrosis, case of, the perspiration having an alkaline reaction, 444
Epilepsy, digitalis in, 82
——— a cure for drunkenness, 90
Epigastric region, contusion of, 335
Ergotine, Dumas's new researches on, 31
Ergot of rye, action of, 316
——— its uses, 477
Erysipelas, Dr. J. A. Wilson on idiopathic, 38, 62
——— of the face, 474
——— idiopathic, Mr. Craig on, 226
Ethnological Society, report of, 187
Empyema, singular case of, 338
Eventration, case of, 316
Evans, Dr. Julian, on the microscopic anatomy of the spleen in man and mammalia, 61
Eve, Dr., on the bilateral operation of lithotomy, 475
Eves, Mr., on a case of eventration, 316
Examining medical bodies in England, Scotland, and Ireland, rules and regulations:—University of London, 527
Royal College of Physicians, London, 529
Examinations per vaginam, mode and proper time for making in cases of labour; and on the premature rupture of the membranes, by Ch. Clay, M.D., 362
Exomphalus, on a new mode of reducing, 409, 433
Extracts from the German and Italian journals, 30
Extension, on the use of, in injuries of the spine, by E. W. Tuson, Esq., F.R.S., 380
External iliac artery, ligature of the, 338, 378, 475
Eyelid, hypertrophy of the, 337
Eye, diseases of, their treatment, by Dr. Rognetta, 373
—— Mr. Holmes Coote on injuries to the, 102
—— on diseases of the, 180, 28, 148, 70
—— contused wound of the, 122

Faculty of physicians and surgeons of Glasgow, 538
Face, cancerous ulceration of the, connected with the jaw, 436
Faivre, Dr., on a foreign body in the bronchi, expelled spontaneously, 282
Feculæ, influence of iodine vapour on the different, 122
——— factitious and genuine, 122
Femur, fractures of the neck of, with penetration of the lower fragment into the spongy substance of the trochanter major, by M. Robert, D.M.P., 408
Fever, intermittent, cured by quinine, 13
——— typhus, case of, 310
——— cases of, 311, 474
——— malignant puerperal, 82
——— with pneumonia, case of, 522
Fibrous system and its nerves, 503
Fife, Sir J., on cancerous ulceration of the face connected with the jaw, 436
——, on lithotomy, 476
Figuier, M., on a new method of analysing blood, and on the chemical composition of the globules of blood, 325
Filing the teeth, Mr. Robinson on, 225
Finding drowned bodies, 219
Fistula in ano, Mr. Chilly on, 67
——— vesico-vaginal, treatment of, 326
Fistulous communication between the ileum and the bladder; simulating stone in the latter organ, by W. C. Worthington, Esq., 296
Fishes, on the classification of, by M. Agassiz, 354
Flint, Dr., on the pathology of the spinal cord, 386
Fletcher, Dr., a specimen of malformation of the heart, by, 22
Food, effects produced by differeut kinds of, on cows, by M. Boussingault, 447
Fœtus, spontaneous expulsion of, 396
Foley, W., M.D., on hydrophobia, 170
——— on the Bohemian remedy, 293
Forbes, Dr., on mesmerism, by M. Marcillet, 354
Formulary, select practical, by M. Foy, of Paris, 22, 42, 160, 230, 298, 318, 397, 418, 478, 526
Forget, Prof., on aneurism of the heart, 504
Forry, Dr., on the automaton with articulated voice, 102
——— on the relative proportion of the deaf and dumb, blind and insane, in the races of European and African origin in the United States, 437
Fractures, new apparatus for, 110
France, on the climate of, 347
Fremy, M. G., on several new salts formed by the union of sulphurous and nitrous acids with alcalis, 238
——— On osmium and its compounds, 493
Freschi, M., on cerebral apoplexy, 208
Frowning, ingenious mode of cure of, 397
Fuge, Mr., on a gunshot wound of the heart, 358
Fungus hœmatodes of the eye, 524
Funis, influence of its length on delivery, by Mr. Hunter, 190
Furnivall, Dr., on acute rheumatism and heart-disease, 226
Fuster, Dr., on the climate of France, 347

Ganham, Dr., on inversion of the uterus, 475

Garden, Dr., on polypus uteri, 475
Gastritis, acute, cured by clysters of musk, 445
Galls, aqueous infusion of, as a test, 281
Gay, Mr., on gonorrhœal orchitis, 435
——— on orchitis treated by hyoscyamus, 226
Garland, John, trial of, for manslaughter, 358
Gelatine, Mr. J. A. Walker on the use and abuse of, in the diet of invalids, 161
German chemical science, letter from Dr. Muspratt, 219
——— journals, selections from, by Sigismund Sutro, M.D., 376, 427, 444, 466, 488, 508
Gestation, on the duration of, by M. Berthold, M.D., 198
Gintrac, M., on abscess of the heart, 317
Gillkrest, Dr., on epidemic meningitis, 316
Glanders acute, cases of, 325, 374
——— in the human subject, case of, 476
Gonorrhœa, seat of, in the female, 391
Gosselin, M.L., on hœmatocele, produced by effusion external to the tunica vaginalis, 283
Gossip of the week, 42, 57, 102, 121, 141, 161, 187, 210, 229, 250, 270, 318, 338, 358, 378, 398, 417, 438, 458, 477, 498, 526
Gout, produced by local injuries, 58
Graham's Sir James, new medical bill, report of discussion in the House of Commons, 389
Grattan, N., Esq., on a remedy for hydrophobia, 290
Granivora, Dr. Letellier, on sugar employed as food for, 50
Greenwood, Dr., on diseases of the maxillary antrum, 476
Greece, its midwives and their remedies, 31, 94
Greenhow, Mr., on fungus hæmatodes of the eye, 524
Green, Dr., on a melanotic tumour of the left labium pudendi, 498
——— P. Hennis, M.B., on tubercle of the lungs in children, with remarks, 313
Grïmaud, M., on poisoning by arsenic, 552
Gruby, Dr., on tinea tonsurans, by, 30
Guersant, D., sen., on the symptoms and treatment of typhoid fever, 257
Guillon, Dr., on a lithotriteur and sound for emptying tbe bladder, 284
Guastalla, M., on sea-side air as a remedial agent, 190
Gums, Dr. M. Hall, on the scarification of during dentition, 160
Guerin, Dr. Jules, introductory leeture, on subcutaneous surgery, 197, 214
Gum Arabic, 281
Gun-shot wound, case of, 525
Guthrie's, Mr., disavowal of all connection with the charter granted to the College of Surgeons, 202
——————— petition against the charter to the College of Surgeons, 378

Hall, Dr. J., on lepra vulgaris, 316
Hall, Dr Marshall, sterility cured by, 20
——————— on scarification of the gums during dentition, 160
——————— on the regulation of the atmosphere for the sick room, 395
——————— on procidentia vaginæ, 498
Hamilton, Dr., on excision of the opaque cornea, 210
Hæmatocele produced by effusion external to the tunica vaginalis, by M. L. Gosselin, 283.
Hæmorrhage after delivery, case by Mr. Hicks, 227
——————— after extraction of teeth, Mr. Purland on, 225
——————— internal uterine, 525
——————— uterine, new instrument for suppressing, 50
——————— Dr. J. Hall Davis, and Mr. J. Symons on, 41
Hæmorrhoids, on the nature and treatment of acute and chronic, by M. Lisfranc, 5
Hair dyes, by Dr. Wimmer, of Munich, 94
Hare, Dr., on human electricity, 175
——— Mr., on curvature of the spine, review of, 153
Harrison, Mr., on a rare disease of the heart, 397
Heart, a case of wound of the, 230
——— rupture of the, case, 436
——— experiments on its co-operation, as regards the production of caloric, 376
——— abscess of the, 317, 396
——— malformation of the, 22
Heart, gun-shot wound of, 358
——— rare disease of, 397
——— aneurism of the, by Professor Forget, 504
Healey, T. P. Esq., on the clairvoyance of Alexis, 286, 312
Heidelberg diploma, letter from Professsor Tiedemann, 391
Heming, Dr., on prolapsus uteri. 496
——————— on procidentia vesicæ, 497
——————— on the signs of pregnancy, 315
Hemp, on the properties of Indian, 121, 378
Hemiplegia, after fatigue, a case of, 122
Henrotay, Dr., on the treatment of podagra, 238
Hernia, internal, 281
——— cerebri, causes of, 327
——— strangulated femoral, case of, 436
Hermann, Prof., on laryngotomy in polypus of the larynx, 30
Hermel, Dr., on electro-puncture in neuralgia, 358
Hewett, Mr. P., on spina bifida, 317
Hicks, Mr., on a case of hæmorrhage after delivery, 227
Highland hydropathy, by J. S. Knowles, Esq., 269
Hocken, Dr., some observations on scrofula, 227
Hodgkin, Thos., M.D., letter on medical reform, 223
Hofman, Dr., researches on cyanol and leucol, 219
——————— on scrofulous abscess of the neck, 317
Hogg, Mr., on abscess of the liver and ovarian disease, 338
Holding, Dr., on a case of poisoning by acetate of lead, unattended by fatal consequences, 476
Holland, G. Calvert, M.D., the plagiarisms of Julius Jeffreys, F.R.S., in his treatise on the statics of the human chest, review of, 372
Hollings, Mr., letter on the Leicester case of mesmerism, 511
Hospital Reports.
Westminster Hospital.—Case of lumbar abscess, 39—treatment of, 40—lacerated wound of the scalp, and erysipelas, 14—psoas abscess; scrophulous disease of the fingers, 120—injury to the spine, paraplegia, 187—cases of burns, 187—ulceration and gangrene of the appendix cœci vermiformis, 224—fracture of the orbitar process of the frontal bone: wound of the right antcrior lobe of the brain, 297—carcinomatous tumour of the face, 297—retention of urine, caused by stricture; phlebitis of the caphalic vein, death; 335—contusion of the epigastric region, 335—Lithotomy, 57.
Royal Westminster Ophthalmic.—Mr. Guthrie's address to the students, 224—operations for cataract and strabismus; effects of argentum nitratum, in turning the tunica conjunctiva of a dark olive colour, and utility of cyanuret of potassium in removing this, 407.
Surrey Dispensary.—Acute rheumatism, with inflammation of the pericardium, 186—warty vegetations in the larynx, 187
St. Bartholomew's Hospital.—Acute rheumamatism, with affection of the heart, 13—disease of the heart; death from apoplexy, 13—rheumatism, followed by endocardites, 40—acute peripneumony, 37—acute rheumatism, treated by purgatives and Dover's powder, 57—typhus fever, 310—Bright's dropsy, 310—case of fever, 311—acute peripneumonia, 377—death, from the absorption of animal poison into the circulation, probably that of small-pox, 407—rheumatism, with endocarditis, followed by inflammation of the pericardium, 474—erysipelas of the face, 474—case of fever, 474—fever, with pneumonia, 522
King's College Hospital.—Syphilitic iritis, 309—punctured wound of the cornea, 310—chimney-sweepers' cancer, 356—stricture of the rectum, 357—strangulated hernia, 387—concussion of the brain, 455—medullary disease of the testicle, complicated with hydrocele, 473—comminuted fracture of the base of the skull, 495—concussion of the brain, 523—penetrating wound of the right lung, 551
Hospice Necker, recapitulation of the different patients received in M. Bricheteau's wards in the: and of the diseases with which they were affected, from the 1st of January to the 1st of July, 1843, 71
Hosack, Dr., on the extirpation of a tumour of the parotid gland, 228
Hoskins, S. E., M.D., F.R.S., on the introduction of solution of lead into the bladder for the decomposition of phosphatic calculi, 266
Houlton, Dr., on digitalis, 313
Human beings, manufactured, 476
Human electricity, Dr. Hare on, 175
Humerus, malignant disease of the, 82
——— resection of its upper extremity, by Professor Blandin, 173
Hunefeld, Professor, on the action of coneia on the blood, 457
Hunter, Mr., on the influence of the length of the funis on delivery, 190
Hussey, Mr., on the efficacy of the ergot of rye, 316
Hutchinson, Dr., on the action of belladonna in tetanus, 189
Hutchinson, Mr., on vital statistics, obtained by means of a pneumatic apparatus for valuing the respiratory powers of man, in connection with health, 248
Hydrophobia, case of, by Mr. H. Haynes Walton 142
——— case of, by W. Foley, M.D., 170
——— treated by the the poison of the viper by Prince Louis Buonaparte, 208
——— remedy for, by N. Grattan, Esq., 290
——— the late case of, 290
——— some inquiries on, 229
Hydrostatic bed, 477
Hydrocele, on the cure of, by iodine injections, by Professor Velpeau, 257
Hygroma, or tumours of the bursæ mucosæ, their treatment, 433
Hyoscyamine, its use in dilating the pupil, 376
Hypnotism, conversazione on, 137
——— or Mr. Braid's mesmerism, 98
Hysteria, an anomalous ease of, by R. H. Cummins, M.D., 169

Ichthyosis, intra-uterina, eases of, 327
Ileus, terminating favourably, 466
Iliacus externus, on ligature of the, by M. Malgaigne, 216
Ilott, W., Esq., on compound dislocation of the ancle, 259
Imperforate anus, on two cases of, by L. Baudelocque, M.D., 466
Innominata, aneurism of, treated by ligature of the subclavian and primitive carotid, 208
Incipient pulmonary consumption, eure of, 467
Infectious disease, 219
Inflammation, Mr. Earle on, 58
——— of the cellular tissue, treatment of, by caustic potash, 377
Inguinal hernia, strangulated, case of, with operation, 387
Insanity, hereditary, on the cause of, 30
Intermittent fever, arsenious acid in, 230
——————— antagonism of phthisis and, 41
Iodine vapour, influence of, on the different feculæ, 122
——— researches on, by M. Millon, 215
——— the action of on plants, 284
Ipecacuanha as a counter-irritant, 417
Irritation, sympathetic and local, 58
Iritis syphilitic, 309
Iris, congenital fissure of, 395
Iron, carbonate of, in neuralgia, 20
——— advantageous method of preparing lactate of, 30
——— Mr. Hemingway on the double salts of, 59
——— sesquioxide of, 160
——— on its presence in river-water, by M. E. Marchand, 247

Jackson, J., Esq., on the pons asinorum, 453
Jadelot, Dr., on the symptoms, terminations, causes, and treatment of chorea, 463
Jarring medical governments, mischiefs arising from, 225
Jeaffreson, W., Esq., practical treatise on diseases of the eye, review of, 521
Jobert de Lamballe, D. M. P., anatomical researches on the electrical organ of the torpedo, 271, 301
——————— on a cancerous tumor of the sigmoid flexure of the colon, with the removal of the affected portion, and final cure of the patient, 385
——————— on poplitlal aneurism; ligature of the femoral artery, 385

obert de Lamballe, D. M. P., on the cure of ranula, 433
——— on the structure of the uterus, 498

Keratoplasty, operation of, 457
Kidneys, Dr. Heaton on the granular disease of the, 59
King, T. Wilkinson, Esq., on reflex nervous acts and their disturbances, and the more probable parts of nervous sympathies, 343, 403, 442, 549
—— J., Esq., on Mr. Jackson's views on the spleen, 508
King's and Queen's College of Physicians in Ireland, 539
King's College, Aberdeen, 538
King, Dr., on the intellectual character of the Esquimaux, 267
Kissam, Dr., on the operation of keratoplasty, 457
Knee-joint, lardaceous cancer of the, case, 436
—— extraction of a foreign body from, terminating fatally, 270
Kollock, Dr., on an epidemic of muscular enteritis, 475
Knowles, R. B., Esq., thoughts on the character of mead, 202
——— J. S., Esq., on Highland hydropathy, 269
Krause, M., on a singular case of empyema, 338
Kreuznach, on the efficacy of its mineral springs, 468
Knox, Robert, Esq., on the physiological anatomy and physiology of man, 342, 363
—— Dr., of Edinburgh, pencilling of, 245

Labour, protracted case of, 436
——— the process of, 316
Lachése, Dr., on the progress of scorbutus, 198
Lactation and after pains, Mr. J. Pattison on, 160
Le Calvé, Dr., on veratria in facial neuralgia, 225
Lancet," the, on the Apothecaries' Company, 521
———— the true enemy to the medical profession, 293
———— abandoned injunction, 491
Language, loss of, in lesion of the anterior lobe of the brain, 273
Landerer, Dr., on the midwives of Greece and their remedies, 31
Landouzy, M., on glanders in the human subject, 325, 476
Larynx, ulceration of the, 333
——— laryngotomy in polypus of the, 30
——— warty vegetations of, 187
Laryngitis, case of acute, by Dr. D. P. Thomson, 122
Latour, Dr. A., on the treatment of pulmonary phthisis, 324
Laurent, M., on a new organic alkali, amarine, 434
Laveran and Millon, MM., on the absorption of certain substances, and the modifications which they undergo, 434
Lavalée, Dr. Morel, on vesication of the mucous membrane of the bladder, and development of pseudo-membranes on its surface, caused by the application of a blister, 305
Laurie and King, Drs., on trephining in injuries of the head, 176
Laycock, Dr., on the periods regulating the recurrence of vital phenomena, 395
Learned Societies :—
Royal Medico Chirurgical Society.
Case of vitiligo infantilis; dislocation of the astragalus, 17—obstruction in the intestinal canal, 18—on the oxalic acid diathesis; case of aneurism of the external iliac, in which a ligature was applied to the common iliac artery, 55—paracentesis thoracis as a curative measure in empyema and inflammatory hydrothorax, 95—account of a case of empyema which recovered after repeated punctures of the plueral sac, 96—case of tumour in the right hypochondrium occurring after injury; table of cases of strangulated hernia operated upon at St. George's Hospital in 1842-3, 156—case of dissecting aneurism of the aorta, innominata, and right carotid arteries, causing suppression of urine, and white softening of the right hemisphere of the brain, by R. B. Todd, M.D., F.R.S., 209—case of scirrhus of the thyroid gland, by R. W. Brown, Esq.; necrosis of the lower jaw, recovered from, without deformity, by W. Sharp, Esq., F.R.S., 210—two cases of tubular expectoration from the bronchi in the adult, by J. Reid, M.D.; on the introduction of solution of lead into the bladder for the decomposition of phosphatic calculi, by S. Elliott Hoskins, M.D., F.R.S.. 266—observations on the recorded cases of operation for the extraction of ovarian cysts, by Benjamin Phillips, F.R.S., 293—cases of mollities ossium, with observations, by S. Solly, Esq., F.R.S.; case of acute retinitis, caused by the use of the microscope, by W. White Cooper, Esq., 295—some statistical records of the progress of the Asiatic cholera over the globe, by S. W. T. Merriman, M.D.; an account of the dissection of a cyst containing seminal fluid, by J. Paget, Esq.; a few remarks upon the origin and treatment of syphilis, and the extraordinary prevalence of the disease in the East, as compared with the West Indies, with the marked influence of famine in extending its ravages, by John Clark, M.D.; case of fistulous communication between the intestinum ileum, and urinary bladder, simulating stone in the bladder, 296—proposals for the improvement of diagnosis in the investigation of diseases of the uterus, with an account of a newly-invented speculum uteri, by Protheroe Smith, Esq., 297—case of hæmorrhage of the liver, by James Abercrombie, M.D., 312—peculiar case of gelatiniform cancer, in which nearly all the organs in the body contained colloid tumours, with the appearances on dissection, by John C. Warren, M.D.; tabular view of 180 cases of tubercle of the lungs in children, with some remarks on infantile consumption, by P. Hennis Green, M.D., 313
Pharmaceutical Society.—Annual meeting; distribution of prizes, 56—on the formation of scientific committees for the advancement of pharmacology, by Jonathan Pereira, M.D., F.R.S.,; on the presence of iron in river water, by M. Eugene Marchand, 247—experiments on the extraction of the active soluble principles of senna, by Mr. H. Deane; on iodide of potassium, with a new method for its formation, by R. Phillips, jun., Esq., 334
Medical Society of London.—Intestinal tumour; discharge of fat from the bowels; intestinal malformation; abuse of enemeta, 39—abdominal tumour; mesmerism, 80—sloughing of the vagina; specific action of the ergot of rye, 117—action of the ergot of rye in parturition, 118 case of sponge swallowing, 140—labour, complicated by ovarian tumours and sphacelus of the vagina, 157—ovarian tumours obstructing delivery; ovariotomy, 184—on the effect produced by free perspiration in the treatment of inflammation, by Dr. Rees, 186
Ethnological Society.—Postans Captain, on the Bitúchi tribes inhabiting Sindh, in the lower valley of the Indus and Cutchi, 56—on the inhabitants of the Maldivian islands, by Capt. Young and Lieut. Christopher, 208—on the intellectual character of the Esquimaux, by Dr. King, 267
Royal Medico-Botanical Society.—Lecture on the diagnostic symptoms produced by poisonous plants, 20—lecture on the effects of the tides in the atmosphere on the diseases of the chest, by Dr. Sigmond, 184—on a new preparation of conium, by Dr. Houlton; a communication on digitalis, by the same, 313—a communication on the atropa belladonna, by Mr. Ley, 314
Statistical Society.—A third contribution towards a knowledge of the influence of employments upon health, by Dr. Guy, 158—on vital statistics, obtained by means of a pneumatic apparatus, for valuing the respiratory powers of man in connection with health, by Mr. Hutchinson, 248
Westminster Medical Society.—Case of syreniform monster, post-mortem examination of; the osseous system; discussion on, 19—internal strangulated hernia; hydrophobia, discussion on, 54—secondary symptoms in a child, eight years old; depressing influence of calomel, 79—supernumerary nipples; urinary abscess; treatment of stricture and fistula in perinæo, 116
Lectures :—
Dr. C. J. B. Williams, F.R.S.
On the Theory and Practice of Medicine :—
Lecture 17.—The different sounds of the heart; does the auricular systole produce a sound? the murmurs; their causes; how to distinguish them, 24
Lecture 18.—Sounds of the heart; the radial pulse, as indicative of disease of the heart; diseases of the heart; functional maladies; physical signs accompanying palpitation; treatment of palpitation of the heart, 64
Lecture 19.—Functional diseases of the heart (continued); symptoms of cerebral syncope; treatment of functional diseases of the heart; angina pectoris, its causes and treatment, 83
Lecture 20.—Effusion into the sac of the pericardium; pericarditis, its symptoms; adherent pericardium, its signs; alteration in the shape of the chest, resulting from adherence of the pericardium; inflammation of the internal lining of the heart; endocarditis, its chief physical signs; inflammation of the muscular structure of the heart, carditis; treatment of inflammation of the heart, 124
Lecture 21.—Pericarditis and endocarditis, their causes and treatment; organic diseases of the heart, hypertrophy, dilatation, sthenic plethora; their treatment, symptoms, effects, 143
Lecture 22.—Treatment of disease of the heart (continued); atrophy of the heart; dilatation, its pathological effects and symptoms; its physical signs and treatment; slight dilatation of the heart, 166
Lecture 23.—Softening of the heart; fatty tumours; cancer; changes in the structure of the heart; abscess; tubercles; polypus of the heart; polypoid concretions; rupture; disease of the valve and orifices; endocarditis; different diseases of the orifices and valves, 192
Lecture 24.—Diseases of the valves of the heart; valvular diseases, conjoined with hypertrophy or dilatation of the muscular substance; atrophy of the valves; physical signs of these lesions; the murmur a certain indication of valvular disease; natural sounds superseded by the murmur; general symptoms of aortic lesions, 232
Lecture 25.—Disease of the cardiac valves; prognosis of valvular disease of the heart, combined with other lesions; treatment of these affections; general treatment of a diseased heart; complications of heart disease, 254
Lecture 26.—Disease of the arterial tubes, aneurism, &c.; signs of arteritis; dilatation of the aorta, its symptoms and consequences; this morbid condition produced by hypertrophy of the heart, as well as disease of its valves, and *vice versâ*; signs of aneurism of the aorta; its usual situation; modes of distinguishing it from other diseases; prognosis of these affections; their treatment, 277
Lecture 27.—Diseases of the alimentary passages, the mouth, fauces, &c.; dyspepsia; treatment; tonsillitis, or angina tonsillaris, symptoms and treatment; enlargement or hypertrophy of the tonsils; aphtha or thrush; angina membranosa; parotitis, symptoms, treatment, &c., 299
Lecture 28.—Diseases of the alimentary canal; acute and subacute forms of gastritis; gastritic dyspepsia; duodenitis; intense enteritis; inflammation of the jejunum and ileum; softening; ulceration; treatment of gastritis, and gastro-duodenitis with jaundice, 340
Lecture 29.—Inflammation of the intestines, treatment; enteritis, its treatment; subacute form of gastritis; chronic gastritis; relation of a case terminating in death; chronic duodenitis; morbid appearances of chronic gastritis; causes of the subacute form of these affections; treatment of chronic gastritis, 360
Lecture 30.—Intestinal inflammation; chronic enteritis, causes, symptoms, treatment; dysentery, its varieties and symptoms; malignant dysentery, treatment; chronic dysentery, treatment, 400
Lecture 31.—Hæmorrhagic affections of the intestinal canal; hæmatemesis; hæmorrhoidal flux, causes, symptoms and treatment; forms

of diarrhœa; bilious diarrhœa; diarrhœa crapulosa, 439

Lecture 32.—Dyspepsia and its varieties, the inflammatory, the atonic, and the irritable; their form and treatment; pyrosis or waterbrash, symptoms and treatment; the irritable form of dyspepsia, treatment; analogous affections, 479

Lecture 33.—Duodenal dyspepsia; form of constipation corresponding with inflammation; predisposing causes, symptoms, illustrative cases, and treatment, 500.

Sir B. C. Brodie, Bart.

Clinical Lectures on some important points of surgery, delivered at St. George's Hospital:—

Lecture 1.—Inflammation of the veins; morbid appearances; symptoms of venous inflammation, 1

Lecture 2.—Occasional concomitants of venous inflammation; does the absorption of pus explain these affections? illustrative cases; treatment; the use of mercury; puncture; Sir E. Home's plans; the use of bandages for varicose veins; the question of giving up customary stimulants; Sir B. Brodie's opinion, 23

Lecture 3.—Lithotomy and Lithotrity; calculi originally formed in the kidneys; their nuclei may exist in the bladder; operation for removing calculi without incision; do. do. by incision; cases in illustration; lithotomy preferable in children; lithotrity preferable in adults; combination of the two methods, 63

Lecture 4.—Lithotomy and Lithotrity continued; adaption of the operation to individual cases; cases in which lithotomy is preferable; ditto in which lithotrity is preferable; dangers of lithotomy, as compared with lithotrity; results of Cheseldon's experience; combination of the two methods in certain cases; mode of extracting stones from the female bladder; Mr. Thomas's practice in a case in which a foreign body was introduced into the female bladder; the urethral dilator of Mr. Weiss; method proposed by Mr. Hodgson, of Birmingham, in operating on the female; cases in illustration; greater difficulty of the operation in women than in men, but most especially in children, 83

Lecture 5.—Lithotomy; dangers attending this operation; infiltration of urine into the cellular tissue; mode of operation by the blunt gorget; instruments as modified by Martineau, Hawkins, Cline, Sir Astley Cooper, Blizard, &c.; danger of hæmorrhage from the operation; danger of cutting into unsound parts; fistula in ano; danger of the abscess bursting internally; mode of operation for this disease; prolapsus of the rectum, generally originating from internal piles; mode of treatment by the recumbent posture, &c.; cases in illustration, 103

Lecture 6.—Carcinoma of the lip, generally occurs in the male sex, its causes, and modes of extirpation; diseases with which it is likely to be confounded; tubercles and chancre occurring on the lips and face; characters by which we are to distinguish these diseases one from another; tumours formed by the labial glands, in consequence of the obliteration of their ducts; their mode of cure; ranula, its causes and treatment; abscess of the parotid gland; method to be adopted to obliterate the fistulous opening, 123

Lecture 7.—Stricture of the urethra; ordinary mode of treatment of the disease; course to be pursued where the above is inadmissable; shivering and fever in some cases following the passing of the catheter; treatment of these symptoms; impossibility of getting the instrument through the urethra into the bladder; operation to be adopted in such cases; Mr. Stafford's instrument for cutting through the stricture; "dissecting out the stricture," as formerly adopted in some hospitals; its dangerous consequences, 143

Lecture 8.—Some diseases of the breast occurring more particularly in private practice; enlargement or tumefaction of the lactiferous tubes; its great resemblance to carcinoma; signs by which to distinguish it; it may consist of one or more tumours, which are moveable and contain fluid; it is not malignant; anatomical description of the disease; its mode of treatment; when its extirpation ought and ought not to be performed; cases in illustration, 163

Lecture 9.—Encysted tumours of the breast (continued); hydatids of the breast and of the testicle; necessity of distinguishing this from scirrhus; pain in the loins, as indicative of disease; causes which may produce it; lumbago, accumulation of the fæces in the colon, rheumatic or gouty diathesis, inflammation of the neurilemma of the spinal chord or of the spinal marrow itself, disease of the kidneys, calculus, caries of the vertebræ, &c.; symptoms and treatment of these various affections, 191

Lecture 10.—Stricture of the urethra in the male; contraction of the orifice of the membranous portion, or of the intervening space; contraction of the orifice caused by ulceration; symptoms of this affection; its mode of treatment; dangerous effects of the conical bougie; sloughing of the glans, and subsequent contraction of the orifice; mode of alleviation, illustrated by cases; contraction of the orifice, combined with phymosis; its degeneration into malignant disease; gristly or cartilaginous state of the urethra, its treatment, 211

Lecture 11.—Diseases of the male urethra (continued); contractions of the anterior part of the urethra; the membranous portion, the most common seat of stricture; symptoms produced by this affection; difference between spasmodic and permanent stricture; undoubted existence of spasmodic stricture; its mode of treatment; when long continued, it may terminate in thickening, or permanent stricture; this disease seldom occurs before puberty; may be produced by local injuries, also by gonorrhœa or strong injections, though the latter is but rarely the case; morbid states of urine or of the urinary organs a frequent cause of stricture; liability of mistaking it for other morbid conditions; rupture of the bladder and urethra caused by this condition, its symptoms and treatment, 231

Lecture 12.—Diseases of the male urethra (continued); inflammation of the urethra behind the stricture; gristly indurations of the membrane; enlargement of the prostate gland a cause of stricture, and vice versâ; irritable state of the bladder induced by this enlargement; distension of this viscus produced by the same cause; diseased state of its mucous secretion; formation of calculi; ulceration of the mucous membrane; thickening of the muscular coats; hernia of the mucous lining of the bladder; secondary diseases of the kidneys; dangers attending this condition; cases in illustration, 274

Lecture 13.—Diseases of the male urethra (continued); retention of urine arising from stricture; its mode of treatment; difficulty of passing the catheter; plan to be adopted when this instrument cannot be introduced; periodic retention of urine, its mode of treatment; different modes of puncturing the bladder, their advantages and disadvantages; retention produced by abscess in perinæo, symptoms and mode of cure; rupture of the urethra; its consequences, &c., 319

Lecture 14.—Treatment of stricture of the urethra; different kinds of bougies usually employed; mode of passing them explained; method in which to judge of the size to be employed; various points to be observed in the treatment; frequency with which the operation should be performed; necessity of guarding against pushing the instrument through the walls of the canal; usual spot in which this occurs; mode of treating this accident, 359

Lecture 15.—Method of treating strictures of the urethra (continued); application of caustic, as practised years ago, and lately revived; mode of performing this operation; practice of Mr. Hunter and Sir E. Home; cases in which this application is useful; bad effects which it is occasionally apt to produce; different plans adopted in these diseases; necessity of constantly passing the bougie; nature and treatment of some kinds of fistula in perinæo; their dependance on stricture, and removal, with the cure of the latter; difficulty of getting these false passages to heal, when they communicate likewise with the rectum; dangerous consequences sometimes resulting from the mere passage of a bougie, and best mode of preventing them, 399

Lecture 16.—Treatment of stricture of the urethra (continued); instrument invented by Mr. Stafford for its division; dangers attending its employment; new mode of operating in such cases; danger of lithic-acid deposit; mode of treatment to be adopted for its prevention; system of diet to be enforced; cases of congenital contraction of the urethra cured by operation; stricture of the female urethra; excrescences at its orifice; their mode of treatment, 459

Lecture 17.—On the importance of operative surgery; its dangers as well as advantages to the patient; states of constitution in which operations should, if possible, be postponed; inflammatory diathesis indicated by the state of the urine; necessity of examining this excretion before performing even the most simple operations; cases in illustration of this point; the old system of "preparing" for operations; its evil consequences; proper treatment to be adopted in such cases, 499

Professor Schönlein.

Clinical Lectures delivered at the Charité Hospital, Berlin:—

Lecture 5.—Different kinds of excitement of the brain in typhus; opinions respecting the abdominal symptoms; affection of the larynx; the episodes in typhus; unequal division of temperature; nervosa versatilis; death; sectio, 2

Lecture 6.—Case of pleuropneumonia; exudation into the left sac of the pleura; ectopia of the heart; importance of increasing the secretions; delirium tremens; the operation of paracentesis thoracis; decrease of the effusion; case of articular rheumatism; commencement of pneumonia; miliaria; pericarditis and pleuritis; re-appearance of pleuropneumonia; retrogression of the rheumatic malady: cure, 25—27—28

Lecture 7.—Rheumatismus articulorum acutus; affection of the heart; miliaria; mental derangement; re-appearance of rheumatism of the joints; aphtha; pneumonia; death; section, 43

Lecture 8.—Dilatation of the left ventricle of the heart, with hypertrophy and disease of the valves of the aorta; enlargement of the left lobe of the liver; œdema of the feet; sequelæ of the itch; absence of marked phenomena in diseases of the heart; employment of digitalis in disease of the valves of the heart; views on the administration of digitalis in general; encouragement of the intestinal and urinal secretions; application of the moxa; convalescence, 66

Lecture 9.—Hypertrophy and dilatation of the left side of the heart, with disease of the valve of the aorta; rheumatismus articularis; protuberance of the heart; simple crisis through the skin; narcotic effects of digitalis; increase of the phenomena of the heart; urinary crisis; delirium; connection of it with the disease of the heart, 85

Lecture 10.—Rheumatism of the abdominal muscles; inflammation of the peritonæum terminating in effusion; removal of the inflammation; gradual disappearance of the swelling, caused by the inflammation; recovery, 107

Lecture 11.—Peritonitis terminating in effusion; febris hectica nervosa; uneasiness of the patient from dietetic errors; continuous green vomiting; exhaustion; death; sectio, 128

Lecture 12.—Hæmorrhagia uterina, with inflammation of the right ovarium; attacks of shivering; apprehension of an extension of the inflammation to the plexus pampiniformis; tumour perceptible on examining the vagina and rectum; gradual diminution of the swelling; recovery, 145

Lecture 13.—Peritonitis puerperalis; metritis septica; phlegmasia alba dolens; collapse;

apparent hardness of the pulse; phlebitis in different external veins; attacks of shivering; abscesses on the upper part of the right thigh and on the right arm; pneumonia; exhaustion; death; result of the post mortem examination, 193
Lecture 14.—Peritonitis and phlebitis uterina in the puerperal state; contusion and excoriation of the vagina; strict antiphlogistic treatment; repeated copious abstractions of blood; pus in the urine; dysenteric phenomena; slow progress of convalescence; perfect cure, 233
Lecture 15.—Hepatic and splenic symptoms; attacks of shivering; inflammation of the hepatic veins; pneumonic phenomena; their relation to the inflammation of the veins; collapse; death; sectio, 275
Lecture 16.—Icterus after the use of mercury; itching sensation in the skin; delirium; tendency to the deposition of fat; death; result of post mortem examination; epicrisis; cirrhosis hepatis; colica pictonum, the 20th attack: the influence of aliments on the production of this disease; paralytic phenomena in the extremities; recovery, 339
Lecture 17.—Hæmatemesis originating from an affection of the liver; intestinal evacuations of a black colour, containing decomposed blood; pain in the shoulder from affection of the liver; pulsus frequens ex inanitione; recovery, 379
Lecture 18.—Tumours of the abdomen, supposed to involve the spleen, the liver, and the mesenteric glands; no functional disturbances; evening exacerbation of the fever; limits of the medical art; convulsions, coma, death; sectio, 421
Lecture 19.—Disease of the left lobe of the liver, and atrophy of the spleen; diarrhœa; discharge of the food in an undigested state; condition of the blood; œdema; bronchial irritation; enlargement of the pylorus; death by exhaustion, 460
J. Wharton Jones, F.R.S.
Lectures on the Anatomy and Physiology of the Eye, delivered at Charing-cross Hospital:—
Lecture 4.—Pigmentum nigrum; retina; the intimate structure of the retina; stratum fibrillosum; stratum globulosum
Lecture 5.—Cause of the discrepancies among anatomists, in regard to the membranes of the eye; description of the vitreous body; description of the crystalline lens and its capsule; nature of the liquor Morgagni; the ciliary zone, or zonula Zinuli; nature of the halo signatus; the canal of Petit; chemical composition of the lens; chambers of the aqueous humour, 46
Lecture 6.—Vital physiology of the eye; innervation and mode of nutrition of its component structures; nerves of the eye; the optic, the the ciliary nerves, &c.; blood-vessels of the eye-ball; vascular capsule of the crystalline lens; mode of development of the iris; vessels, originally distributed to certain parts, become obliterated; disappearance of the capsulo-pupillary membrane; aqueous humour supplied by transudation from the vessels of the ciliary processes, 63
Lectures 7 and 8.—Physiology of the eye; optics proper; catoptrics; dioptrics; chromatrics; a medium; a ray; a pencil; diverging rays; converging rays; parallel rays; radiant point; focus; focal distance; reflected and refracted rays; angles; radiation; the transparency of inflammable bodies; curve, 106
Lecture 9.—The powers of the lenses of the eye, in bringing rays of light to a focus; the cornea; the aqueous humour; the crystalline body; the vitreous humour; the eye considered as an optical instrument; dioptric effects of the lenses, 252
Professor Piorry.
Lecture 1.—On albuminurorrhœa, or Bright's disease
Lecture 2.—On colica pictonum; its organic lesions; symptomatology and etiology; treatment, and regimen, 49
Professor Raspail.
Lectures on the Physiology of Health and Disease:—
Lecture 19.—Description of the ascarides; their anatomy, physiology, and habits: their effect on the human constitution; question as to their seat, 44
Lecture 20.—Signs by which we may recognise the presence of the vermicular ascaris in our organs; its morbid effects upon the human body; its emigration out of the human body; in what does the vermicular ascaris deposit its ova? 105
Lecture 21.—Description of the filariæ or dracunculi: F. medinensis; compound and articulated helmintha; tænia, or tape worm; T. cucurbi ina; T. vulgaris, or lata; hydatids; morbid effects of their development; summary of the therapeutic principles advocated by the author, 251
Lecture 22.—General considerations on the characters of the morbid state; symptoms, visible, odorous, tactile, or acoustic; classification of the various morbid effects described in our systems of nosology; therapeutical division of M. Raspail's work; precautions and medications; anti-azotic, or anti-asphyxiant; hygienic precautions; therapeutic medications, 320
Lecture 23.—Antithermanic precautions and medications; antitoxic ditto; antitraumatic ditto; antientomic ditto; critical observations on the therapeutical method sought to be superseded; general resumé of the foregoing, 419
Professor Velpeau.
Lectures on Diseases of the Eye:—
Lecture 1.—General remarks on the structures entering into the formation of the eye, 28
Lecture 2.—Inflammation of the eye-lids; inflammation of the conjunctiva; inflammation of the eye-lashes; inflammation of the edge of the lids, 70
Lecture 3.—Blepharitis mucosa; ditto granulosa; ditto glandulosa; ditto furfuracea; ditto folliculosa; ditto exulcerosa; ditto mucosa, 109
Lecture 4.—Blepharitis furfuracea; ditto ciliaria; ditto conjunctivosa; ditto granulosa; treatment; topical remedies; direct topical remedies, 148
Lecture 5.—Treatment of blepharitis of the conjunctiva palpebralis; blepharitis glandulosa; formulæ of collyria; resumé of the varieties of blepharitis, 196
Lecture 6.—On cataracta; genuine, spurious, and secondary; genuine or spurious, 237
Lecture 7.—Symptoms of pseudo-cataracta; complication of true cataracta, amaurosis, glaucoma and cancer, 282
Lecture 8.—Treatment of cataracta, 304
Lecture 9.—Preparatory treatment in operating for cataract; position in which the patient ought to be placed during the operation; consecutive treatment, 323
Lecture 10.—Acute inflammation of the eye; conjunctivitis ocularis; conjunctivitis simplex, 373
Lecture 11.—Conjunctivitis purulenta; varieties: ophthalmia Egyptiana; O. infantum; O. blenorrhagica; prognosis; treatment; conjunctivitis simplex; general and local remedies, 407
Lecture 12.—Conjunctivitis papulosa; C. purulenta; general treatment; local bleedings; purgatives; calomelas; local treatment; collyria; cauterization; nitrate of silver, 445
Lecture 13 (continued).—Inflammations of the cornea; their frequency, danger, and difficulty of establishing their treatment; classification; keratitis diffusa; ditto ulcerosa, 492
Professor Rostan.
Lecture on the utility of diagnosis in medicine, and the best method to be adopted in order to establishing a certain cure.
Leech-bites, new method of putting a stop to the flow of blood from, 109
Lecocq, M., on indigenous tea, 37
Lefevre, Sir George, on poisoning by arsenic, contained in well-water, 315
——— on the use of baths, 456
Legres, M., on the analysis of the secale cornutum, 305
Ley, Mr., on the atropa belladonna, 314
Legrand, M., on the treatment of acute arthrodynia, 238
Leicester, case of mesmeric amputation, 491, 510
Lepra vulgaris, treatment of, 316
Lepas anatifera, Mr. H. Lee, on animaculæ found in the stomach of the, 111
Lepra in Italy, 41
Leroy d'Etiolles, M., on the removal of cancer by the knife, 250
Liberal offer, 122
Lieven and De Moor, Drs., on a case of pistol-shot traversing the brain, 417
Liebig, Prof., truths and falsehoods of the theories of, 126, 146
——— what are the theories of, 51, 91
——— theories, what is their value, by Professor Schulz, 180, 211, 256
——— on the decomposition of water on amygdaline, 189
——— on a new theory of acids, 395
——— on ammonia and bisulphuret of carbon, 497
——— review of the reviewer of, by Kirby O'Sullivan, Esq, 288
——— researches on the urine, 217
——— the truths and falsehoods of his theories, 204, 235, 287, 415
Lienteria, case of, by Dr. Summers, 176
Liston, Mr., on arteriotomy, and its consequences, 225
——— on abscess of the septum nasi, 396
——— pencilling of, 370
——— on hypertrophy of the eye-lid, 337
——— on abscess under the dura mater, 269
Lisfranc, M., on the nature and treatment of acute and chronic hæmorrhoids, by, 5
Literary pensions, discussion in the House of Commons relative to, 188
Lithotomy, the bilateral operation of, 475
——— the operation of, by Dr. Post, 229
——— case of, 524
——— cases of, by Dr. Segalas, 348
Lithotriteur and sound for emptying the bladder, by Dr. Guillon, 284
Lithectasy, Dr. Wright, on, 132
Lithotrity, dangers of, 520
———, Lithotomy, lithotrity, and the diseases of the urinary organs, W. B. Costello, M.D., on, 441, 481, 509
Liver, abscess of the, and ovarian disease, 338
—— hæmorrhage from the, 525
——— of, by J. Abercrombie, Esq., 312
—— on the morbid tendencies of, by Professor Schultz, 281
—— What is it that propels a gallon of ale through it into the heart? 393
Longet and Mattencci, M.M., on the rapport between the direction of the electric currents, and the muscular contractions produced thereby, 503
Long bones, necrosis of, 437
Lovey, Dr. W., on the extirpation of dracunculi from the eye, 226
Lower jaw, extirpation of part of the, 82
——— necrosis of, recovered from without deformity, by W. Sharp, Esq., F.R.S., 210
——— neuralgia of the, 525
Lumbricus teres, eleven inches long, its discharge from the male urethra, by P. F. Clark, M.D., 218
Lungs, gangrene of the, 327
——— injury of the, 82
——— right, penetrating wound of, 551
——— tubercles of, in a child, by Dr. Cassells, 270
Lussac, M. Gay, critical observations on the chemical phenomena of respiration, 29
Lusus naturæ, case of, 410
Lymphatic vessels, the functions of the, 131
Lyon, Mr., on fracture of the vertebræ, 249

Mackin, Dr., on congenital fissure of the iris, 395
Mackenzie, Dr., on disease of the tricuspid valve, 207
MacDonagh, J. A., on carbonate of iron in neuralgia, by, 20
Madder, on the colouration of the chyle, by, 110
Magendie, M., on a new cow-pox, 198
Magée, M. Robin, on the action of iodine on plants, 284
Magnetic needle, effect of garlic on the, 98
Malgaigne, Dr., on the dangers attendant on myotomy in deviations of the spine, 239
Malformation, case of, 378
Malaria, effects of, evident at a distance from its source, 525
Malgaigne, M., on ligature of the external iliac artery, 378

Malgaigne, M., on myotomy and tenotomy, 216
——————— on ligature of the left iliacus externus, 216
Malet, M., on the Bohemian remedy for hydrophobia, 394
Mammæ, on fibrous tumours of the, by Professor Cruveilhier, 12
————Professor Roux on fibrous tumors of the, 7
————cast of, containing milk, 493
Marchand, M. E., on the presence of iron in river water, 247
Marylebone, St., vestry, economy of, 250
Marcillet M., on Dr. Forbes' impartiality towards mesmerism, 354
Mathieu, Dr., on the oxide of zinc, 503
May, Mr., on the cure of a case of drowning, 397
Mayer, Dr., on the electrical organ of the torpedo, 304
Maxilla, case of necrosis of the lower, by Mr. Brown, 142
———— superior, fracture of, 417
Meningitis, encephalo-rachidian, on an epidemy of, by MM. Pariset and Brassard, 216
Measures, French, 190
Mead, thoughts on his character, by R. B. Knowles, Esq., 202
Medical clubs, letter on, 520
——— meeting at Birmingham, 498
——— reform, letter from Dr. Hodgkin, 223
——— Association of Ireland, meeting of, 250
——— attendance under the new poor-law, 246
——— Soc. Berlin, prizes for distribution, 150
——— Soc. London, obscure abdominal humour; use of taraxacum; mesmerism, discussion on, 80
——— Soc. London, action of secale cornutum; swallowing sponge, 140
——— Soc. of London, case of intestinal humour; discharge of fat from the bowels; intestinal malformation; abuse of enemata, discussion on, 39
——— reform, letters on, 514, 515
——— feeling, state of, 491, 515
——— reform, meeting on, in Marylebone, 430
——— Protection Society, transactions of, 9, 417
——— reform, meeting at Exeter Hall, 458
——— practitioners, caution to, 477
——— profession, meeting of, at Norwich, 546
——— reform, by Dr. G. H. Weatherhead, 545
——— trial (a surgeon charged with manslaughter), 358
——— publishers and medical men, 454
——— honours, fraudulent assumption of, by W. Strange, M.D., 414
——— epic poem, by Dr. Blamey, 286
——— bill, Sir James Graham's, report of discussiou in the House of Commons, 389
——— reform, Senex on, 179
Medullary tumour, connected with the kidney, case, 358
Medicine, academy of, sittings, 7, 30, 51, 72, 89, 110, 136, 150, 174, 198, 216, 239, 259, 284, 305, 325, 347, 374, 385, 410, 434, 447, 466, 494, 503
Members of the College of Surgeons, an address to, 472
Menstruation, notes by Mr. Warwick, on 59
———————— vicarious, case, 397
Meningitis, epidemic, report on, 316
Mental affections, influence of diet on, 167
Mercurial preparations, decomposition of, by the product of fermentation, 457
Mercury, metallic, experimental researches on the existence of, in the blood and other organs, by Dr. Osterten, 280
Merat, M., on the juice of the urtica urens as a hæmostatic, 375
Merriman, Dr., statistical records of the progress of Asiatic cholera over the globe, 296
Mesmerism, by H. Prater, Esq., 311
———————— by L. Storer, 207
———————— physiological explanation of, by James Braid, Esq., M.R.C.S.E., 450
———————— practice of, in India, 292
———————— hypnotic phenomena of, observations on, 31, 47, 98, 137
———————— Dr. Carpenter on, 99, 139
Mesmeric amputation, the Leicester case of, 491, 510
Method, new, of giving medicine to infants, 378
Metta, M., on the obstetrical properties of pulvis colchici, 190
Mezereon cerate, to prepare it, by M. Pleischl, 190
Mialhe and Contour, MM., on diabetes mellitus, cured by alcalies and sudorifics, 476
Midwifery, rules and regulations at St. Bartholomew's, 541
———————— statistics, Dr. F. H. Ramsbotham, on, 250
Millon, M., on the oxydation of organic matter by iodic acid, 385
———————— researches on iodine, 215
Milk, microscopic examination of, 432
Mistura ferri comp., preparation of, 338
Mitchell, Dr., on a case of spina bifida, 229
Moisdorf or Ems, waters of, 427
Molluscum, case of, 437
Mollusca gasteropodes phlebenteres, on the anatomy of, 347
Mollities ossium, case of, with observations, by T. Solly, Esq., F.R.S., 295
Molar pregnancy, case of, 456
Monograph on the Mexican orchideæ, 6
Monstrosity, singular case of, by Mr. Tibson, 405
Morphia, inoculation of, for neuralgia, 438
Morris, Mr., on the effects of ague on teetotallers, 524
Moraud, M., on scrofulous ophthalmia, 174
Morren, Prof., some researches on the gases that salt water dissolves during the day, and under the influence of seasons, 325
Moxas in a peculiar form of paralysis, Dr. Bull on, 190
Mucous membranes, chlorate of potass in phagedœnic ulceration of the, 21
Muratori and Cerulli, MM., ou the valerianate of zinc, 298
Muspratt, Dr., letter from, on German chemical science, 219
Mustard, on its use in the convulsions of children, by C. S. Tripler, M.D., 219
Myotomy and tenotomy, M. Malgaigne on, 216
———————— in deviations of the spine, the dangers attendant on it, by Dr. Malgaigne, 239

Nason, Mr., on rupture of the heart, 436
Naval Medical Department, 534
Neck, scrophulous abscess of, 317
—— carcinomatous tumour of, mistaken for aneurism, 498
—— extirpation of a steatomatous tumour from the, by Sir John Fife, 82
New regulations for candidates for the Fellowship of the Royal College of Surgeons of England, 532
Newman, Mr., of Glastonbury, a letter to, &c., review of, 177
Neuralgia, its nature and treatment, 396
———————— observations on, by R. H. Allnatt, M.D., 405
———————— electro-puncture in the treatment of, 358
———————— carbonate of iron in, 20
———————— cold a curative agent in, 497
———————— use of tobacco in cases of, 161
Nitras potassæ, on the administration of, in different diseases, 6
Nitrate of potash and sulphate of quinine, large doses of, in rheumatism, 269
Norwich, meeting of medical profession at, 546
Non-qualified physicians, 334
Nævus superficial, treatment of, 338
Nunn, Mr., on the preservation of the secale cornutum, 498

Obituary, 188, 212, 221, 250, 263, 283, 318, 338, 358, 378, 418, 438, 458, 552
Obstinate cutaneous affections, 337
Observations on a work entitled "Chemistry in its applications to agriculture and physiology," by Professor Liebig, 332, 353, 365, 382, 405, 452
———————— on midwifery, by Mr. Smith, 226
O'Connell, Dr., report of the Brideswell Dispensary, 290
Oil of bitter almonds, poisoning by, Mr. Smith on, 227
Oke, Mr., on necrosis of the long bones, 437
Oleata, 219
Ophthalmia, on the scrofulous form of, by M. Morand, 174
Orbitar process of frontal bone, fracture of, 297
Orchideæ, Monograph on the Mexican, 6
Orchitis, a new mode of treatment, by Dr. Vidal de Cassis, 493
Orchitis, gonorrheal, 435
———————— treated by hyoscyamus, by Mr. Gay, 226
Ordnance, medical, 535
Organic nature, review of the chemical and physiological balance of, 37
Ornamental sugar, poisoning by, 495
Osmium and its compounds, 493
O'Shea, Mr., on fracture of the radius, 62
———————— on caries of the arytenoid cartilages, 435
O'Sullivan, Kirby, Esq., Review of the reviewer of Liebig, 288
Osterten, Dr., Experimental researches on the existence of metallic mercury in the blood and other organs, 280
Osteo-sarcoma, sub-cutaneous removal of part of the lower jaw, 524
Ova and corpus luteum, their anatomy and physiology, 347
Ovariotomy, statistics of, 270
———————— successful case of, 437
Ovarian disease, cure of, homœopathically treated, by Mr. E. Phillips, 159
——— cases of, 475, 476
——— cysts, observations on the recorded cases of operation for the extraction of, by B. Phillips, Esq., F.R.S., 293
——— cases of, 395
——— extirpation of cases of, by W. Atlee, Esq., 474
——— Mr. Wilkins on a case of, 226
Ovum, death from hæmorrhage from, 122
Owen, Richard, Esq., F.R.S., Lectures on the comparative anatomy and physiology of the invertebrate animals, review of, 350
———————— situation at the College of Surgeons, 188
Oxide of nitrogen, its combinations with acids, 466
Oxidation of organic matter by iodic acid, 385

Pains, progressive labor, unexpected termination of, 101
Paget, J., Esq., on the dissection of a cyst, containing seminal fluid, 296
Palate, tumour of the, 458
Patents, discussion on the law concerning, 51
Pancreatitis, its distinction from hypersemia pancreatis, 467
Pannus, cure of, by inoculation, by Dr. Dudgeon, 228
Pappenheim, Prof., on the fibrous system and its nerves, 503
Parotid gland, extirpation of, 436
Parisset and Brassard, M. M., on an epidemy of encephalo-rachidium meningitis, 216
Paraplegia, case of, by Mr. R. B. Gorham, 142
Parturition, hæmorrhage after, 41
Paralysis, of the face, Dr. Marshall Hall on, 41
Paracentetis thoracis, a new instrument after, by R. A. Varicas, 137
Parenchyma pulmonaris and tubercles, on the chemical composition of, by M. Boudet, 504
Par vagum, its influence on digestion, by M. Bernard, 198
Parisian Intelligence.
On the nature and treatment of acute and chronic hæmorrhoids; prize, offered by the Société Médico-Pratique, Paris, 5
On the administration of nitras potassæ in different diseases; proceedings of the Academy of Sciences, 25th March; monograph on the Mexican orchideæ, 6
On ioduret of potassium in mercurial tumour, and saturnine disorders. Proceedings of the Academy of Medicine, 26th March, 7
On albuminorrhœa, or Bright's disease; Professor Velpeau on diseases of the eye, 28
Critical observations on the chemical phenomena of respiration, 29
Laryngotomy in polypus of the larynx; on elephantiasis; on the tinea tonsurans; on hereditary causes of insanity; on the danger attendant on myotomy in deviations of the spine, 30
Lecture by Piorry on colica pictonum; its organic lesions; symptomatology and etiology; treatment, and regimen, 49
Proceedings of the Academy of Sciences, April 8th, 50
On the compounds formed by hydrogen and

phosphorus ; proceedings of the Academy of Medicine, April 9th, 51
Professor Velpeau on diseases of the eye, 70
Recapitulation of the different patients received in M. Bricheteau's Wards, Hospice Necker, from the 1st of January to 1st July, 1843; proceedings of the Academy of Sciences, April 15th, 71
Proceedings of the Academy of Medicine, April 16th, 72
On the utility of diagnosis in medicine, and the best method to be adopted in order to establish a certain one, by Professor Rostan ; introductory lecture, 87
Cancer of the cerebellum ; proceedings of the Academy of Sciences, April 22nd ; philosophical researches on sugar, albumine, and gelatine, 88
On the component parts of the slime of the Nile, by M. Lassaigne ; on the dangers attendant on myotomy ; proceedings of the Academy of Medicine, April 22nd, 89
Diseases of the eye, by Professor Velpeau ; blepharitis mucosa ; ditto granulosa ; ditto glandulosa ; ditto furfuracea ; ditto folliculosa ; ditto exulcerosa ; ditto mucosa ; new method of putting a stop to the flow of blood from leech-bites ; coffee, a remedy, 109
Proceedings of the Academy of Sciences, April 29th ; on the colouration of the chyle, by madder ; new apparatus for fractures ; on rachidian myotomy. Proceedings of the Academy of Medicine, April 30th ; inauguration of the New Assembly Room, 110
On febris intermittens and hypertrophy of the spleen, by Professor Piorry, cases ; hæmaturia ; carcinoma of the bladder, case ; treatment of the secondary symptoms of syphilis. Proceedings of the Academy of Sciences, May 6th ; on the frequency of cancer ; on the plague and quarantines ; on the influence of the sun's rays, transmitted through coloured glass, on the growth and germination of plants ; on the causes of albuminuria. Proceedings of tbe Academy of Medicine, May 7th ; on the treatment of rheumatism, by sudorifics ; on varicocele, 134
Professor Velpeau on diseases of the eye—Blepharitus furfuracea ; ditto ciliaria ; ditto conjunctivosa ; ditto granulosa ; treatment ; topical remedies ; direct topical remedies, 148
Variola developing itself on vaccinated persons ; on a glandular swelling of the cheek, 149
Prizes offered by the Medical Society of Berlin and the German Union for the propagation of medical sciences. Proceedings of the Academy of Sciences, May 13th ; on the epithelium of mucous membranes, by Dr. Mandl ; on the heat disengaged when water is added to sulphuric acid, by M. Abria ; on the retraction of albuginous tissues, by Professor Gerdy. Proceedings of the Academy of Medicine, May 14th, 150
On emphysema pulmonaris, by Professor Chomel ; on resection of the upper extremity of the humerus ; Professor Orfila's pamphlet ; on the action of ammonia on butyric ether ; on the compounds of phosphorus ; on a method of embalming bodies. Academy of Medicine, May 21st ; proceedings of the Academy of Medicine, May 14th (continued) ; on the conservation of medicinal plants ; on obesity of the umbilical chord ; Professor Velpeau on scrofulous ophthalmia ; Professor Gerdy on cancer of the eye-lids, 179
Professor Velpeau on diseases of the eye ; treatment of blepharitis of the conjunctiva palpebralis ; blepharitis glandulosa ; formulæ of a collyria ; resumé of the varieties of blepharitis, 196.
On subcutaneous surgery, by Dr. Jules Guerin ; introductory lecture, 197
Proceedings of the Academy of Sciences, May 28 ; on a new cow-pox ; new vegetable alcali ; on the influence of the par vagum on digestion ; on the duration of gestation. Proceedings of the Academy of Medicine, May 28th ; on the case of plague mentioned in M. Joly's report ; on hydrophobia ; bust of Dupuytren ; on scorbutus, 198
On circular iridectomia, 199
On subcutaneous surgery, by Dr. Jules Guerin, introductory lecture ; parts II. and III., practical part, &c., 214
Dr. Beau on the treatment of phthisis ; on typhoid fever. Proceedings of the Academy of Sciences, June 3rd ; Millon's researches on iodine, 215
Chancel on butyrone ; on the action of nitric acid by the same, and on chloro-butyrone ; on the ligature of the left iliacus externus, by M. Malgaigne. Proceedings of the Academy of Medicine, June 4th ; Malgaigne's memoir on myotomy and tenotomy ; Bricheteau on an epidemy of encephalo-rachidian meningitis ; Segalas on a case of calculus, complicated with a vesico-vaginal fistula, 216
Professor Velpeau on diseases of the eye ; on cataracta—genuine, spurious, and secondary genuine or spurious, 237
On the medical treatment of cancer ; Parisian Medical Society ; M. Philippe on the external use of belladonna as a discutient, in ganglionitis, adenitis, and epididymitis ; efficacy of tartar emetic in acute arthrodynia ; on strangulated hernia ; on podagra. Proceedings of the Academy of Sciences, June 10th ; on the combinations of two new alcaline bases, containing platina ; on a lusus naturæ ; on a climate of France ; on the nervous fluid. Proceedings of the Academy of Medicine, June 11th ; incidents relative to Dr. Malgaigne's memoir on the dangers attendant on myotomy in deviations of the spine, 239
On typhoid fever ; on the cure of hydrocele by iodine injections, by Professor Velpeau, 257
On phlebitis infantum, by Professor Trousseau ; on spontaneous evolution. Proceedings of the Academy of Sciences, June 17th, 258
Proceedings of the Academy of Medicine, June 18th, 259
Professor Velpeau on diseases of the eye ; symptoms of pseudo-cataracta ; complication of true cataracta, amaurosis, glaucoma, and cancer ; Dr. Faivre on a foreign body in the bronchi, expulsed spontaneously ; Professor Berard on imperforate anus, 282
On hæmatocele produced by effusion external to the tunica vaginalis, by M. Gosselin ; obituary ; candidates for the vacant place at the Academy of Medicine. Proceedings of the Academy of Sciences, June 24th, 283
Proceedings of the Academy of Medicine, June 25th, 284
On the diagnosis of pneumonia, by Professor Rostan, 303
Professor Velpeau on diseases of the eye ; treatment of cataracta ; nomination of agrégés in surgery. Proceedings of the Academy of Sciences, July 1st ; Dr. Mayer on the electrical organ of the torpedo, 304
Dr. Guerin on diseases of the uterus ; Dr. Lavellee on vesication of the mucous membrane of the bladder, and development of pseudo-membranes on its surface, caused by the application of a blister ; on secale cornutum, by M. Legres. Proceedings of the Academy of Medicine, July 1st ; Dr. Pravez on deviations of the spine ; discussion on ophthalmology, 305
Professor Velpeau, on diseases of the eye ; preparatory treatment in operating for cataract ; position in which the patient ought to be placed during the operation ; consecutive treatment, 323
Professor Rostan on the treatment of pneumonia ; Dr. A. Latour on a new mode of treatment for phthisis, 324
Proceedings of the Academy of Sciences, July 8th. Proceedings of the Academy of Medicine, July 9th, 325
Professors Roux and A. Berard on cataracta ; comparison of the two methods, extraction and couching ; reasons for the preference given to the former, 345
Prize offered by the Société Royale de Médicine de Toulouse ; prophylactic remedy against ptyalism. Proceedings of the Academy of Sciences, July 15th ; on the climate of France ; on the mollusca gasteropodes phlebenteres ; extirpation of the scapula and removal of the external third of the clavicle, for a tumour developed on the former. Proceeedings of the Academy of Medicine, July 15th ; on the presence of arsenic in the soil of churchyards, and its absorption by the bodies there interred ; discussion on ophthalmology, 347
Observations on lithotomy, 348
Professor Velpeau on diseases of the eye ; acute inflammation of the eye ; conjunctivitis ocularis ; conjunctivitis simplex ; analysis of Dr. Rognetta's work on ophthalmology, 373
On a case of fungous tumour of the tibia, by Professor Roux ; Geoffrey St. Hilaire's bust. Proceedings of the Academy of Sciences, July 22nd. Proceedings of the Academy of Medicine, July 23rd, 374
On pleuritis with effusion, by Professor Chomel ; symptoms ; treatment, 383
Rupture of the uterus, 384
Popliteal aneurism ; ligature of the femoral artery, by Dr. Jobert de Lamballe. Proceedings of the Academy of Sciences, July 30th ; operation of enterotomia, &c., by Dr. Amussat ; M. Dufrenoy on the genito-urinary organs of reptiles ; M. Millon on the oxydation of organic matter by iodic acid ; powder for the purifying common sewers. Proceedings of the Academy of Medicine, July 30th ; M. Dupres on the employment of metallic capsules instead of tar ; Dr. Jobert de Lamballe on cancerous tumour of the sigmoid flexure, &c., 385
Pathology of the spinal cord, 386
Professor Velpeau on diseases of the eye.—Conjunctivitis purulenta ; varieties ; ophthalmia Egyptiana ; O. infantum ; O. blenorrhagica ; prognosis ; treatment ; conjunctivitis simplex ; general and local remedies, 407
On fractures of the neck of the femur, &c., by Dr. Robert, 408
On a case of cancerous cachexia ; new mode of reducing exomphaos. Proceedings of the Academy of Sciences, Aug. 5th ; M. Dutrochet's researches on the volubility of the stems of certain plants, and on the cause of this phenomenon ; on the compounds of phosphuretted hydrogen, by M. P. Thénard, 409
Professor Velpeau on varicocele ; on spontaneous separation of the uterus ; lusus naturæ, 410
On the treatment of syphilitic diseases, by Professor Chomel, 432
On ranula, by Dr. Jobert de Lamballe ; apparatus for the radical cure of exomphalos ; hygroma, or tumours of the bursæ mucosæ, 433
Proceedings of the Academy of Sciences, Aug. 12th ; on the absorption of certain substances, and the modifications which they undergo ; on a new organic alcali-amarine ; facts illustrative of the history of phosphorus. Proceedings of the Academy of Medicine, Aug. 13th ; critical examination of vitalism, by Dr. Virey, M.A.M., 434
On artificial anus ; on a new mode of administering different substances ; crural hernia, 435
Professor Velpeau on diseases of the eye.—Conjunctivitis papulosa ; C. purulenta ; general treatment ; local bleedings ; purgatives ; calomelas ; local treatment ; collyria ; cauterization ; nitrate of silver, 445
On artificial anus ; case of spina bifida, 446
Proceedings of the Academy of Sciences, Aug. 19th ; M. Boussingault's researches on the effects of different kinds of food on cows ; M. Ebelmen on silicic ether. Proceedings of the Academy of Medicine, Aug. 20th ; M. Louis de la Porte on pestis, 447
M. Segalas on the influence exercised by traumatic lesions of the spinal marrow on the functions of the urinary organs, 448
Dr. Jadelot on chorea ; symptoms ; forms ; terminations ; causes ; treatment, 463
MM. Delaporte and Cigalla on pestis ; its antiquity ; causes ; propagation ; incubation, and probable duration, 464
Academy of Sciences ; sitting of the 26th August ; M. E. Peligot on the theory of the fabrication of sulphuric acid, 465
Researches on chemical types ; Dr. Baudelocque on two cases of imperforate anus ; Professor Barkow on a new ganglion. Academy of Medicine, sitting of the 27th August ; death of Dr.

Lagrange; Dr. Segalas on the influence of traumatic lesions of the spine on the genito-urinary organs; discussion thereon, 466
On diseases of the eye, by Professor Velpeau, (continued); inflammations of the cornea; their frequency, danger, and difficulty of establishing their treatment; classification; keratitis diffusa; ditto ulcerosa, 492
Dr. Vidal (de Cassis) on orchitis and lithotomy; cyst of the mamma containing milk; remedy against pertussis; secondary symptoms of syphilis. Academy of Sciences, sitting of the 2nd Sept.; M. S. Fremy on osmium and its compounds, 493
On the fabrication of sulphuric acid. Academy of Medicine, sitting of the 3rd Sept.; discussion on some points of Dr. Segalas' memoir; M. Hoffman on the administration of pistacia terebinth in asthma, 494
Professor Chomel on chorea; its causes; symptoms; pathology; diagnosis; prognosis; treatment; case of inversio uteri, by Professor Velpeau, 502
Academy of Sciences, sitting of the 9th Sept.; on the distillation of the resin of the calamus rotang; Professor Pappenheim on the fibrous system and its nerves; Dr. Matthieu on the oxide of zinc; M. Guyon on a race of men called Cagots; case of anæsthesia of the left side of the body, without paralysis of movement. Academy of Medicine, sitting of the 10th Sept., 503
Parotid gland, extirpation of a tumour of the, by Dr. Hosack, 228
Paste, mineral, to fill hollow teeth, 378
Pasquier, Dr., on a new mode of reducing exomphalos, 402
Pencillings of Eminent Medical Men: Parent Duchatelet, 265 — Dr. John Burns, 178 — Dr. Knox, of Edinburgh, 245—Jeffray, Prof., of Glasgow, 8, 36—Orfila, Prof., 115—Mr. Liston, 370—Dr. Abercrombie, 336
Pelvic symphyses and ligaments, relaxation and separation of, by Charles Clay, M.D., 322
Peligot, M., on the fabrication of sulphuric acid, 465
Pelouze, M., on the compounds of phosphorus, 174
Pereira, Jonathan, M.D., F.R.S., on the formation of scientific committees for the advancement of pharmacology, 247
Perinæum, on lacerations of the, and artificial support during the last stage of labor, by Charles Clay, M.D., 213, 253
Perinæum, laceration of the, during labour, 21
Periscope of the Week.
Lancretion of the perinæum during labor; period of incubation of syphilis; penetrating wound of the chest; fissure of the anus, 21
Malformation of the heart, 22
On albuminorrhœa, or Bright's disease; Professor Velpeau on diseases of the eye, 29
Critical observations on the chemical phenomena of respiration, 29
Laryngotomy in polypus of the larynx; on elephantiasis; on the tinea tonsurans; on hereditary causes of insanity; on the danger attendant on myotomy in deviation of the spine, 30
Mistaken diagnosis; gout produced by local injuries; sympathetic and local irritation; inflammation, 58
The Bath waters; urinary deposits; treatment of cholera; the double salts of iron; granular disease of the kidneys; erection of stoves; notes on menstruation, 59
Adhesion of the pericardium; Dalby's carminative; chalybeate waters; enteritis simulating pregnancy, and labor at the full time; tests for the semen, 60
Malignant disease of the humerus; digitalis in epiplepsy; malignant puerperal fever; effects of uterine hæmorrhage; adipocire in the stomach; extirpation of a steatomatous tumor from the neck; injury of the spine; union surgeons; extirpation of part of the lower jaw; inversion of the uterus; the use of the alcoholic lotion in phthisis pulmonalis; acrid saliva; colored saliva; colica hepatica; lactation and after pains; epilepsy, a cure for drunkenness; animalculæ found in the stomach of the lepas anatifera; injuries to the eye; secondary cancer; stricture of the rectum, 82
Union surgeons; inversion of the uterus; injuries to the eye; secondary cancer; the automaton with articulated voice, 102
Frothy saliva; urinary ditto; gelatinous ditto; milky ditto; Indian hemp; malignant disease; hemiphlegia; a liberal offer; contused wound of the eye; ovarian dropsy; chronic pleurisy with effusion; laryngitis; fatal hæmorrhage; origin of condylomata; on the formation of hydrocyanic acid, &c.; influence of iodine vapor on the different feculæ, 121
Artificial dilation of the os uteri; fungoid excrescence of the cervix uteri; paraplegia; pregnancy mistaken for ovarian dropsy; necrosis of the lower maxila; hydrophobia; chancre in the urethra; iodide of potassium; puerperal convulsions; irregular contraction of the uterus during pregnancy; pregnancy and cancer uteri, 142
Gentlemen admitted to the Royal College of Surgeons; ditto ditto Apothecaries' Hall; military and naval appointments; obituary; appearance of a new malady amongst the French Canadians; the father of the Royal College of Surgeons; communications from Professor Orfila; lectures by Jules Guerin; new hospital at Liverpool; annual dinner of the Medico-Botanical Society; Professor Liebig's researches on urine; Mr. Stedolph's invention to assist the blind to read; exposure of Mr. Vernon's clairvoyance, &c., 161
Action of vegetable caseine on amygdaline; belladonna in tetanus; spontaneous evolution; naptha in phthisis; sibbens; umbilical hernia; medical witnesses; sea-side as a remedial agent; length of the funis; congenital ulceration and gangrene; influence of diet on mental affections; mode of detecting the adulteration of vinegar with sulphuric acid, 189
Tooth ache; excision of the opaque cornea, 210
Veratria in facial neuralgia; salivary concretions; filing the teeth; hæmorrhage after extraction of teeth; arteriotomy and its consequences; idiopathic erysipelas; acute rheumatism and heart disease; ovarian disease; ammonia externally in neuralgia; extirpation of dracunculi from the eye; orchitis treated by hyoscyamus; railway travelling and abortion; the Apothecaries' Company; the nutrition of plants; observations on midwifery; fibrous and cancerous tumours of the breast; poisoning by the oil of bitter almonds; atrophine as a substitute for belladonna; hæmorrhage after bleeding; the mortality at different ages in certain diseases; calamine, or carbonate of zinc; precipitated sulphur; oxide of zinc; red oxide of iron; tartarised antimony; venereal warts; injury to the knee; benzoin water; observations on scrophula; cure of pannus by inoculation; poisoning by corrosive sublimate; nitrate of potash in spasmodic asthma; use of chloride of sodium in diseases of the eye; death from potatoe-skin in the larynx; poisoning by sulphate of iron; extirpation of a tumour of the parotid gland; the operation of lithotomy; spina bifida, 225
Tubercular dropsy; fracture of the vertebræ; midwifery statistics; creosote in the treatment of certain diseases of the conjunctiva and cornea; removal of cancer by the knife, 248
Unusual dislocation; abscess under the dura mater; trephining; the specific gravity of urine; large doses of nitrate of potash and sulphate of quinine in rheumatism; statistics of phthisis; cause of albuminuria; rupture of the bladder; ulcer of the duodenum; varicocele treated by compression; atropine; extraction of a foreign body from the knee, terminating fatally; extract of rhatany in the treatment of fissure of the anus, dangerous in a tuberculous patient; excision of the teeth; cyanura in acute rheumatism; tubercles of the lungs in a child; chronic choroido-iritis, and spurious cataract; keratonyxis; artificial pupil, 269
Signs of pregnancy; poisoning by arsenic, 315.
Lepra vulgaris, 318
The process of labour; case of eventration; the ergot of rye; opacity of the cornea; acute rheumatism; use of naphtha in phthisis; funis presentation; amputations; scrophulous abscess of the neck; ossification of the heart; epidemic meningitis, 316.
Spina Bifida; transverse presentations; cancer of the pylorus, 317
Hypertrophy of the eyelid; excitement of uterine action; traitement arabique in obstinate cutaneous affections, 337
Abscess of the liver and ovarian disease; cyanosis; sloughing of the uterus; large doses of quinine in epilepsy; superficial nævus; singular case of empyema, 338
Pericarditis, 357
Medullary tumour connected with the kidney; ulceration of the larynx; gunshot wound of the heart; electro-puncture in neuralgia, 358
Treatment of inflammation of the cellular tissue by caustic potash; the seeds of the ricinus communis as a purgative, 377
Mineral paste to fill hollow teeth; a new method of giving medicine to infants; ligature of the external iliac artery; imperforate vagina; singular case of malformation; Indian hemp, 378
Theory of acids, 394
The periods regulating the recurrence of vital phenomena; congenital fissure of the iris; ovarian disease; a regulated warm and moist atmosphere in the sick room; the atmosphere for tetanus and hydrophobia; pleuritis and peritonitis; injury to the thigh; case of cyst occupying the position of a psoas abscess; uterine polypus, 395
Abscess of the septum nasi; abscess of the heart; albuminuria; spontaneous expulsion of the fœtus, 396
Rare disease of the heart; supposed poisoning by arsenic, 397
Pistol-shot traversing the brain; bronchocele; ipecacuanha as a counter-irritant; carotid aneurism; fractured superior maxilla; fistulous opening in the right cheek; test for arsenic, 417
Gonorrhœal orchitis; injury to the spinal cord during hanging; the urine in dropsy, 435
Rupture of the heart, 436
Relative proportion of the deaf, dumb, blind, and insane, in the races of European and African origin in the United States; necrosis of the long bones; transformation of pus cells into a mucous or fibrous tissue; on the state of the blood in morbus Brightii and various forms of anœmia; poisoning by digitalis; case of molluscum, 437
Use of baths; warm baths; sea-sickness a remedy for jaundice; vaginal hysterotomy; molar pregnancy, 456
Keratoplasty; action of coneia on the blood; calculus in the bladder; cases of midwifery; case of twins, injudicious use of secale cornutum; decomposition of mercurial preparations by the product of fermentation, 457
Asbestos in dental practice; strychnine in chorea; tumour of the palate, 458
Muscular enteritis; inversion of the uterus; ligature of the external iliac artery; polypus uteri; on the extraction of retained placenta in cases of abortion; ovarian disease; the bilateral operation of lithotomy; use of vegetable acids in acidity of the stomach, 475
Ovarian disease; poisoning by acetate of lead unattended by fatal symptoms; diseasc of the maxillary antrum, 476
Diseased teeth; prolapsus uteri; styrol, 496
Cystiform tumor in the anterior chamber; neuralgia; fluoride of ammonium; ammonia and bisulphuret of carbon; amputation; procidentia vesicæ, 497
Procidentia vaginæ; nitrate of urea as a diuretic; preservation of secale cornutum; carcinomatous tumour of the neck, mistaken for aneurism; melanotic tumour of the left labium pudendi; fractures of the clavicle, 498
Stone in the bladder, complicated with extensive scrophulous disease, 523
Lithotomy; fungus hæmatodes of the eye; puerperal convulsions; effects of ague on teetotallers, 524

Pestis, report and discussion on, 447, 464
Pericardium, Dr. Norman Chevers on adhesion of the, 60
Pertussis, a remedy for, 493
Pericarditis, cases of, 357
Peripneumonia acute, case of, 377
Petri, M., on tetanus following the operation for fistula lachrymalis, 397
Petition against the surgical charter, 393
Philippe, M., M.D., on the external use of belladonna, as a discutient, 238
——— on a case of acute glanders, 374
Phillips, B., Esq., F.R.S., observations on the recorded cases of operation for the extraction of ovarian cysts, 293
——— R., jun., Esq., on the iodide of potassium, with a new method for its formation, 334
——————— on the sesquioxide and protocarbonate of iron, 229
Phlebitis infantum, by Professor Trousseau, 258
Phosphorus, on its compounds, by M. Pelouze, 174
——————— M. Paul Thenard on the compounds formed by hydrogen and, 51
Phosphuretted hydrogen, on the compounds of, 409
Phthisis pulmonalis, Dr. Marshall Hall on the use of the alchoholic lotion in, 81
——— on the treatment of, by Dr. Latour, 324
——— pathology of, 35
Physiology of materia medica, by Prof. Soberuheim, 182, 203, 241, 326, 344, 375, 426, 468, 485
Physiological anatomy and physiology of man, by Robert Knox, Esq, 342, 363
Piorry, Prof., case of Albuminorrhœa, or Bright's disease, by, 28
——— Prof., on colica pictonum, by, 49
Pitton, M. E., on the secondary symptoms of syphilis, 493
Plague, on a case of, by M. Joly, 198
Plants, on the influence of the sun's rays transmitted through colored glass, on the growth and germination of, 136
——— on their nutrition, by Dr. Agres, 226
Pleischl, M., on the mode of preparing mezereon cerate, 190
Pleuritis, with effusion, by Prof. Chomel, 383
——————— and peritonitis, treatment of, 395
Pleurisy, Dr. Richard Chambers' on, 122
Pneumonia, on the treatment of, in old people, 508.
——————— on the diagnosis of, by Prof. Rostan, 303, 324
——————— observations of bilious, followed by some considerations on this phlegmasia, in hot climates, 150
Podagra, on the treatment of, by Dr. Henrotay 2
Poor-law, new, medical attendance under, 246
——————— martyr, appeal to the profession, by
Poggiale, M., on the solubility of salts, 284
Pous asinorum, by J. Jackson, Esq., 453
Post, Dr., on the operation of lithotomy, 229
Potassium, on ioduret of, in mercurial tremor and saturnine disorders, 7
——————— the iodide of, with a new method for its formation, by R. Phillips, Jun., Esq., 334
——————— iodide of, 132
Potts, Dr. T. W., on congenital ulceration and gangrene, 190
Potatoe oil, and the purification of brandy, by Professor Döbereiner, 175
Polypus uteri, case of, 475
Poultice, application of, prior to leeching, 436
Prater, H. Esq., on mesmerism; attack of Liebig on Berzelius, and evidence of the correctness of the opinions of the latter, 311
Prairie Surgery, 477
Pregnancy, mistaken for ovarian dropsy, 143
——————— signs of, 315
Presentation of funis, case of, 317
——————— transverse, case of, 317
Prize, offered by the Societé Medico-Pratique, Paris, 5
Profession, on the present state and prospects of the, by J. Borrett, M.D., 414
Provincial Medical and Surgical Association, annual meeting of, 418
Prowse, Mr., on fibrous and cancerous tumours of the breast, 227
Prussic acid, administered to a dog, 526
Ptyalism, prophylactic remedy against, 347
Pupil artificial, chronic choroido-iritis, &c., 273
Purland, Mr., on hæmorrhage, after the extraction of teeth, 225
Pus-cells, transformation of, into mucous or fibrous tissue, 437
Pylorus, cancer of, 317

Quackery, 219
Quarantines, and on the plague, by Dr. Sturmer, 135
Quinine, intermittent fever cured by, 13
——————— large doses of, in epilepsy, 338

Reviews.
Introduction to the study and practice of midwifery, by William Campbell, R.N., and Alexander Campbell, B.A., 10
Prize essay on the natural objects of medical science, by P. H. Williams, M.D., 11
An essay on the tongue, in functional derangement of the stomach and bowels, by J. Williams, M.B.; the chemical and physiological balance of organic nature, by J. Dumas, and J. B. Boussingault, 37
A practical treatise on diseases of the uterus, by Dr. J. C. W. Lever; the nervous system of the human body, as explained in a series of papers read before the Royal Society of London, with an appendix of cases and consultations on nervous diseases, by Sir Charles Bell, K.G.B., F.R.S.L., 120
Remarks on vivisection, by Richard Jameson; elements of anatomy, by Jones Quain, M.D.; contributions to the diagnosis of empyema, with cases by R. L. Macdonnel, Esq.; medicines, their uses and modes of administration, including a complete conspectus of the three pharmacopœias, an account of the new remedies, and an appendix of formulæ, by J. Moore Neligan, M.D., 137
Practical observations on the prevention, causes, and treatment of curvitures of the spine, with an etching and description of an apparatus for the correction of the deformity, and engravings illustrative of the cases, by S. Hare, 153
A letter to Mr. Newman, of Glastonbury, being an answer, &c.; remarks on the efficacy of matico, by Thomas Jeffreys, M.D., 177
The fallacies of our own time, by Oliver and John Burne, Esqrs., 178
Scrofula, its nature, causes and treatment, and on the prevention and eradication of the strumous diathesis, by W. Tyler Smith, M.B., 243
Dysmenorrhœa, and other uterine affections in connection with derangement of the assimilating functions, by Edw. Rigby, M.D., 309
Physiology of inflammation and the healing process, by Benj. Travers, Esq., F.R.S., 349
Lectures on the principles and practice of physic, by T. Watson, M.D., 349
Lectures on the comparative anatomy and physiology of the invertebrate animals, by Richard Owen, Esq., F.R.S., 350
Oculist's vade-mecum, a complete practical system of ophthalmic surgery, by John Walker, Esq., 350
System of Mineralogy, including the most recent discoveries, Foreign and American, by J. Dana, A.M., 350
Plagiarism of Julius Jeffreys, Esq., F.R.S., in his treatise on the statics of the human chest, by G. Calvert Holland, M.D., 372
Diseases of children, their symptoms and treatment, by G. A. Rees, M.B., 410
Present state of ophthalmic surgery, by J. H. Curtis, Esq., 411
Modern surgical instruments, chiefly of France and Germany, 411
German interpreter, 438
Hand-book of Bathing, by a physician, 478
Popular Cyclopædia of natural science, zoology, &c., by W. B. Carpenter, M.D., F.R.S., 491
Practical treatise on diseases of the eye, by W. Jeaffreson, Esq., 521
Lecture on physical and intellectual life, by S. Wright, M.D., F.R.S., 521
Radius, Mr. O'Shea's case of fracture of, 62
Radix Sambuci, case of poisoning by, 467
Ramsbotham, Dr. F. H., on midwifery statistics, 25
——————— on transverse presentation, 317
Ranque, M., on new diagnostic signs in typhoid diseases, 176
Raynes, H., Esq., on a case of tetanus, caused by carious teeth, 473
Rees, Dr., on the the effect of frec perspiration in the treatment of inflammation, 186
——— G.A., M.B., on the diseases of children, their symptoms and treatment, review of, 410
——— Dr. Owen, on the state of the blood in morbus Brightii and various forms of anæmia, 437
Rectum, stricture of the, 93, 357
Ricord, Professor, on the period of incubation of syphilis, 21
Rendell, Mr. C., on the unexpected termination of progressive labour pains, 101
Reform, practical medical, 152
Reflex nervous acts and their disturbances, and the more probrble parts of nervous sympathies, by S. Wilkinson King, Esq., 343, 403, 442, 549
Regnault, M., on the action of boric acid on alcohol and esprit de bois, 283
Reid, J. M. D., two cases of tubular expectoration from the bronchi in the adult, 266
Reiset, M. G., on the combinations of two new alcaline bases, containing platina, 238
Resin isica, on the, by M. Scribe, 325
Respiration, critical observations on the chemical phenomena of, 29
Respiratory murmur, seat of the, 161
Retained placenta, extraction of, in cases of abortion, 475
Retinitis acute, case of, caused by the use of the microscope, by W. White Cooper, Esq., 295
Rhatany, extract of, in treatment of fissure of the anus, 273
Rheumatism, the water cure, for acute, 78
——————— acute, with inflammation of the pericardium, 186
——————— acute, and heart-disease, Dr. Furnivall, on, 226
——————— acute, treatment of, 316
——————— with endocarditis, followed by inflammation of the pericardium, 474
Ricinus communis, seeds of, as a purgative, 377
Riegel, Dr., on the decomposition of mercurial preparations, by the product of fermentation, 457
Rigg, Robt., F.R.S., on the secretion of carbon by animals, 421
Rigby, Edw., M.D., on dysmenorrhœa, and other uterine affections, in connection with derangement of the assimilative functions, review of, 309
——————— reports on uterine diseases, 505, 547
Rigaud, M., on the extirpation of the scapula, and removal of the external third of the clavicle, for a tumour developed in the substance of the former, 347
Robinson, Mr., on filing the teeth, 225
——————— on a case of fistulous opening in the right cheek, 417
Robert, M., D.M.P, on fractures of the neck of the femur, with penetration of the lower fragment into the spongy substance of the trochanter major, 408
Rognetta, Dr., on the treatment of diseases of the eye, 373
Roisdorf, or Ems, waters of, 427
Ross, Mr., on the cause of albuminuria, 270
——————— on the state of the urine in albuminuria, 396
——————— of the state of the urine in dropsy; on the use of a poultice prior to leeching, 436
Rougier, Dr., on strychnine in chorea, 458
Rosenthal, Dr., some suggestions with reference to the circulation of the blood, 376
Rostan, Prof., on the diagnosis of pneumonia, 303, 324
Roux, Prof., on a case of fungous tumour of the tibia, 374
——————— on fibrous tumours of the mammæ, 7
Royal College of Physicians, Edinburgh, 536
——————— of Surgeons of England, 530
———————————, Edinburgh, 537
——————————————— in Ireland, 540
——————— election of council of the, 56
——————— of Veterinary Surgeons, great meeting of the, 56
Rules and regulations of examining medical bodies in England, Scotland, and Ireland, 527
Russell, Mr., on a medullary tumour connected with the kidneys, 358

Russell, Dr. E., on ovarian disease, 475
Rye, hysteria cured by ergot of, 30

Saliva, Dr. T. Wright on the physiology and pathology of the, 81, 121
Salivary concretions, 225
Salts, the solubility of, 284
—— some new, formed by the union of sulphurous and nitrous acids with alkalis, by M. E. Frémy, 238
Sarcoma, medullary, 161
Saturnine disorders, on ioduret of potassium in mercurial tremor and, 7
Sayle, G., Esq., on chlorate of potassa in phagedœnic ulceration of the mucous membrane, by, 21
Scarlatina, active depletion for, 97
Schoepf, Dr., on a remedy against ptylism, 347
Schultz, Professor, on the value of Liebig's theories, 180, 211, 256
———————— on the morbid tendencies of the liver, 281
Sciences, academy of, sittings, 6, 29, 50, 71, 88, 110, 135, 150, 174, 198, 215, 238, 258, 283, 304, 325, 347, 374, 385, 409, 434, 447, 465, 493, 503
Scientific committees, on the formation of, for the advancement of pharmacology, by Jonathan Pereira, M.D., F.R.S., 247
Scorbutus, its progress, by Dr. Lachesse, 198
Scrotum, sloughing of the, 525
Scrofula, observations on, by Dr. Hocken, 227
Sea-sickness, a remedy for jaundice, 456
Sea-side air as a remedial agent, by M. Guastalla, 190
Secale cornutum, 421
———————— its properties, 305
Segalas, Dr., on cases of lithotomy, 348
———— on the influence exercised by traumatic lesions of the spinal marrow on the functions of the genito-urinary organs, with the analyses of the different secretions, 462, 484, 506
———— on a case of calculus complicated with vesico-vaginal fistula, 216
———— memoir, discussion on, 494, 503
Serpents, power of facination in, 552
Sesquioxide and protocarbonate of iron, by M. Phillips, jun., Esq., 229
Senna, experiments on, 334
Septum nasi, abscess of, 396
Sharp, W., Esq., F.R.S., on a case of necrosis of the lower jaw, recovered from, without deformity, 210
Shepherd, Mr., on alveolar exostosis, 524
Sibbens, its identity with the fungoid venereal ulcer, by Mr. Wills, 189
Sigmond, Dr., on the effect of tides in the atmosphere on diseases of the chests, 184
Sigmoid flexture, cancerous tumour of, removal of the affected part, cure by M. Reybard, 385
Silicic ether, researches on, 447
Simon, Dr. Franz, on what are the theories of Liebig, 15, 51, 91
——— M., on the action of the oil of juniper on the animal economy, 524
Skae, Dr., on the pathology of neuralgia, 436
Skene, Mr., on tubercular leprosy, 248
Skull, comminuted fracture of its base, 495
Sleep waking, or second consciousness, by H. Brooks, Esq., 181, 206, 221, 263
Smethurst, Dr., on excision of the teeth, 270
Smith, Mr., on the excitement of uterine action, 337
—— P., Esq., proposals for the improvement of the diagnosis of diseases of the uterus, with an account of a newly invented speculum uteri, 297
—— W. Tyler, M.B., on scrofula, its nature, causes, and treatment, and on the prevention and eradication of the strumous diathesis, review of, 243
—— Mr., some observations in midwifery, 226
———— on the treatment of secondary syphilis, 396
———— on poisoning by the oil of bitter almonds, 227
Société Medico Pratique, prize offered by, 5
Society, Medical Protection, 9, 417
Societies, non-aggregate meeting of the non-organised, 16
Solly, S., Esq., F.R.S., on a case of mollities ossium, with observations, 295
Somnambulent state, 291
Soubeiran, M., on the seed of the vicinus communis as a purgative, 377
———————— on the physiology of Materia Medica, 182, 203, 241, 326, 344, 375, 426, 468, 486
Specific gravity of urine, Mr. Day on, 269
Spender, Mr., on an unusual dislocation, 269
Spencer, Herbert, Esq., on the situation of the organ of amativeness, 305
Spinal cord, injury to it during hanging, 435
Spine, on the danger attendant on myotomy in deviations of the, 30
—— injury of with paraplegia, 187
—— on deviations of the, 305
—— distortion, treatment of, 327
—— pathology of the, by Dr. Flint, 386
Spina bifida, Dr. Mitchell, on a case of, 229
———————— cases of, 446.
Spiritus æthcris nitrici, M. Dalpiez, on the formation of hydrocyanic acid in the preparation of, 111
Spleen, extirpation of the, 326, 476
——— on fibrous intermittants and hypertrophy of the, 134
——— Dr. Julius Evans on the microscopic anatomy of the, 61
——— Mr. Jackson's views on, by J. King, Esq., 508
——— on the proximate cause of its enlargement in intermittents, and fevers in general, 508
Sponginess of the gums, treatment of, 438
Spontaneous evolution, by M. Danger, 258
———————— Mr. Edwardson, 189
Sproule, Mr. J., cases in private practice, by, 33
Square, Mr., on imperforate vagina, from injury during labour, 378
———————— on inversion of the uterus, 437
Statistics of midwifery, 273
Statement of the college of surgeons relating to their charter, 179
Stafford, Mr., intermittent fever cured by quinine, by, 13
Sterility, cured by Dr. Marshall Hall, 20
Stomach, adipocire in the, 82
Storer, Mr., on some mesmeric experiments, 207
Stoves, erection of, 59
Strange, W., M.D., on the fraudulent assumption of medical honours, 414
Stricture, treatment of, by potassa fusa, 176
Strychnine in chorea, utility of, 458
Sudorifics, on the treatment of rheumatism by, 136
Subcutaneous surgery, introductory lecture, by Dr. Jules Guerin, 197, 214
Sulphate of iron, poisoning by, Dr. Christison on, 228
Sulphuric acid, on the theory of the fabrication of, 465
———————— adulteration of, with vinegar, 167
Summers, Dr., on a case of lienteria, 176
Surgical Council's manifesto, 223
——— cases, by M. Ammussat, M.D.; enormous lupia situated on the scalp; treatment of; remarks on; tumours of the breast, 68
——— examination of the tumours when extirpated; remarks, 69.
Sutro Sigismund, M.D., selections from German journals, 376, 427, 444, 466, 488, 508
Syme, Mr., on obstinate cases of urethral stricture, 176
Synopsis, a sessional, for London, 541
Syphilis, secondary treatment of, 396
——— tartar-emetic in, 397
——— treatment of the secondary symptoms of the, by Dr. Devergie, 135
——— origin and treatment of, by J. Clark, M.D., 296
——— period of incubation of, 21
——— secondary symptoms, 493
Swooning, Greek remedies against, 94
Syphilitic diseases, on the treatment of, by Professor Chomel, 432

Tancy, Dr., on the use of vegetable acids in acidity of the stomach, 475
Tanchon, Dr., on the medical treatment of cancer, 238
Tanesville, Dr., on creosote in the treatment of certain diseases of the conjunctiva and cornea, 250
Taroni, M., on the efficacy of large doses of quinine in epilepsy, 338
Tavignot, Dr., on the use of chloride of sodium in diseases of the eye, 228
Taylor, Mr. F., on active depletion for scarletina, 97
Teeth, excision of the, by Dr. Smethurst, 270
—— diseased, effects of, 496
Teaching, accurate, by Dr. Sutro, 431
Tea, indigenous, 374
Teetotallers, effects of ague on, 524
Testicle, medullary disease of the, complicated with hydrocele; castration, 473
Tetanus, Mr. Solly, on
——— hydrophobia; epilepsy; chorea; neuralgia; 89
——— tinea capitis; eczema, 90
——— belladonna in, 161
——— following the operation for fistula lachrymalis, 397
——— and hydrophobia, the atmosphere for, 395
——— a case of, caused by carious teeth, by H. Raynes, Esq., 473
Thenard, M., on the compounds of phosphuretted hydrogen, 409
Therapeutics, report upon some late statements in, of inflammation in general; pneumonia; 75—croup; catarrah; stomatitis; muguet; dysentery; hydrocephalus; menengitis; neuritis; orchitis; ophthalmia; iritis; strumous conjunctivitis; gout, 76—rheumatism, 77—impetigo; lichen; prurigo; lepra and psoriasis; rupia; molluscum; lupus; cancer of the uterus; cancer of the nose; 113—corroding ulcer of the uterus; treatment of syphilis; strangulated hernia; maschaliatica; on fever; intermittent fever; senile hectic; variola; 114—spermatorrhœa; gonorrhœa; lucorrhœa; chlorosis, 151
Theyer and Schlosser on the bile, and the products of its decomposition, 306, 351
Thigh, injury to, 395
Thomson, Dr. R. D., on calamine or carbonate of zinc, 227
Thorilier, M., on animal magnetism, 259
Thyroid gland, scirrhus of, by R. W. Brown, Esq., 210
Tibson, Mr., on a singular case of monstrosity, 405
Tibia, disease of the, from injury, by Dr. Chisholm, 176
—— on a case of fungous tumour of the, by Prof. Roux, 374
Tiedemann, Prof., letter from, on Heidelberg Diploma, 391
Tinea tonsurans, on, 30
Tissues, on the retraction of albuginous, by Prof. Gerdy, 150
Todd, R.B., M.D., F.R.S. on a case of dissecting aneurism of the aorta, innominata and right carotid arteries, causing suppression of urine, and white softening of the right hemisphere of the brain, 209
Teeth, a common succedaneum for the, 94
—— Vienna succedaneum for the, 95
—— Ostermaier's succedancum for the, 95
—— balsam, the celebrated Dr. Gauger's, 95
Tongue, reviews of Williams's essay on the, 37
Tooth-ache, palliative remedies for, 210
Torpedo, anatomical researches on the electrical organ of, by M. Jobert de Lamballe, D.M.P., 271, 301
Torpedo, on the electrical organ of the, by Dr. Mayer, 304
Tosswill, Mr., letter from, on the Leicester case of mesmerism, 510
Tracheotomy in asphyxia, Mr. Judd's case of, 61
Traitement Arabique, 11
Travers, Benj., Esq., F.R.S., on the physiology of inflammation and the healing process, review of, 349
Traumatic lesions of the spinal marrow; their influence on the functions of the genito-urinary organs, with the analyses of the different secretions. By — Segalas, D. M.P., 462, 484, 506
Trephining, in injuries of the head, by Drs. Laurie and King, 176
Tricuspid valve, disease of, 297
Tridectomia, on the circular operation, by Dr. Callias, 199
Tripler, C. S., M. D., on the use of mustard in the convulsions of children, 219
Trousseau, Prof., on phlebitis infantum, 258
————————, on an apparatus for the radical cure of exomphalos, 433

Tubercle of the lungs in children, 180 cases of, with remarks by P. Hennis Green, M.B., 313
Tubercular leprosy, Mr. Skene on, 248
Tumours, fibrous, of the mammæ; never degenerate, are very frequent; may be distinguished by certain signs; the extirpation optional; the mammæ may be the seat of, 7
———, fibrous in general; engrafted; character founded on the seat of the disorder; character founded on shape or size; character founded on the mode in which they are united to the organ in which they are situated; character founded on their texture; character founded on the mode of development (evolutio); character founded on the consecutive pathological symptoms; consecutive lesions of the surrounding tissues; consecutive changes which take place in the tumours themselves; symptoms, 12
———, case of clinical, and anatomo-pathological, facts of, 13
———, cystiform in the anterior chamber, 497
———, melanotic, of the left labium pudendi, 498
Turner, Uriah, M.D., on asthma caused by ipecacuanha, 168
Tuson, E. W., Esq., F.R.S., on the use of extension in injuries of the spine, 380
Typhoid fever, its symptoms and treatment, by Dr. Guersant, sen., 257
——— on an epidemic of, at Paris, 215
——— diseases, new diagnostic signs in, by M. Rauque, 176

Umbilical hernia, Dr. Bunde, on a case of, 190
Union surgeons, 102
University of Giessen, list of English gentlemen who have graduated there in medicine, 335
——— St. Andrew's, 539
——— Edinburgh, 536
——— Oxford, 533
——— Cambridge, 533
——— Dublin (Trinity College), 539
——— Intelligence, examination for degrees, 418, 438, 458
——— Heidelberg, list of English gentlemen who have graduated in medicine, 392
Urea, nitrate of, as a diuretic, 498
Urethral stricture, obstinate cases of, by Mr. Syme, 176
Urethra, chancre in the, 159
Urinary deposits, Dr. Griffiths on, 59
Urine, Liebig's researches on, 217
——— retention of, caused by stricture, 335
Urtica urens, juice of the, as a hæmostatic, 375
Uterine hæmorrhage, effects of, 82
———, on the application of the plug in cases of, 147
——— polypi, their varieties, 395
——— hæmorrhage, on the application of the plug in cases of, by Charles Clay, M.D., 171, 175
———, a new method of making pressure in, 250
——— action, mode of excitement of, 337
Uterine diseases, reports on, by Edward Rigby, M.D., 505, 547
Uterus, sloughing of the, 338
——— putrilaginous softening of its fundus at the last stage of pregnancy, 208
——— diseases of, proposals for the improvement of their diagnosis, with an account of a newly-invented speculum uteri, by P. Smith, Esq., 297
——— irregular contraction of the, during pregnancy, 142
——— artificial dilatation of the os, 142
——— Dr. J. Burn on artificial dilatation of the os, 142
——— case of fungoid excrescence of the os, 142
——— prolapsus of, 496
——— Mr. Barber on inversion of the, 102
——— successful removal of the, by ligature, 327
——— diseases of, 305
——— structure of the, 498
——— case of pregnancy and cancer, by Dr. Miller, jun., 159
——— inversion of, by Prof. Velpeau, 502
——— rupture of the, during labor, 384
——— rupture of the, 520
——— retroversion of the, 525
——— fibrous tumour of the, 525
——— on spontaneous separation of the, 410
——— inversion of, cases, 437, 475

Vaccination during the existence of small-pox, 476
Vaccinia and variola, co-existence of, 524
Vagina, imperforate, from injury during labour, 378
——— procidentia of the, 498
Vaginal hysterotomy, case of, 456
Vapours, coal fires and their, 94
Varicas, Mr. R. A., on uterine hæmorrhage, 52
Varicocele, on, 136
———, with the description of a new mode of operating in this disease, whereby a radical cure is obtained, by M. Vidal (De Cassis), M.D., 243, 262
——— treated by compression, by Mr. Curling, 270
Vegetable acids, use of, in acidity of the stomach, 475
——— diet, 421
Velpeau, Professor, on the cure of hydrocele by iodine injections, 257
——— on diseases of the eye, by, 28
——— on inversion of the uterus, 502
——— on spontaneous separation of the uterus, 410
Venesection, ague treated by, 41
Veins, obstruction of, by a substance similar to white cheese, 259
Veratria in facial neuralgia, by Dr. Le Calvé, 225
Vertebræ, fracture of the, by Mr. Lyon, 249
Vernon, Mr., his experiments and the Medical Society, 97
Vesica, procidentia of the, 497
Vidal (De Cassis) M., M.D., on Varicocele, with the description of a new mode of operating in this disease, whereby a radical cure is obtained, 243, 262.
Vidal (De Cassis) on a new mode of treatment for orchitis, 493
Virey, Dr., a critical examination of vitalism, 434
Vitalism, a critical examination of, by Dr. Virey, 434
Vital phenomena, on the periods regulating their recurrence, by Dr. Laycock, 395
Viper, on the bite of, 375.
Volubility of the stems of plants, researches on, 409
Waddy, Dr., on sloughing of the uterus, 338
Waddington, Josh., Esq., on Dr. J. H. Davis's, fugitive accoucheur, 208
Waite, Esq., some remarks on the theory and practice of dental surgery, 366
Walnut leaves, their use against scrofula, 376
Walker, John, Esq., the oculist's vade-mecum, review of, 350
Wakley, Mr., and Mr. Carfrae, 77
———Letter to, by Mr. Dermott, 7
———Report of his action against the Hope Insurance Company, 329
Wakleyism, rise and fall of the age of, 393
Warren, J. C., M.D., on a peculiar case of gelatiniform cancer, 313
Waters, John, M.D., on some cases of chorea, with their treatment, 404
——— a pencilling by, of Parent Duchatelet, 265
Water, its decomposing action on amygdaline, by Professor Liebig, 189
Watson, Dr., on poisoning by corrosive sublimate, 228
——— Lectures on the principles and practice of physic, review of, 349
Watt, Dr., on the mortality at different ages, in certain diseases, 227
Weatherhead, G. H., M.D., on medical reform, 545
——— on the water cure for acute rheumatism, 78
Whitehead, Mr., on retroversion of the uterus, 525
Wills, Mr., on sibbens and its identy with the fungoid venereal ulcer, 189
Williams, E. M. B., essay on the tongue, review of, 37
——— C. J. B., Dr., (see lectures)
Wilkins, Mr., on a case of ovarian disease, 226
Willshire, Dr. N. Hughes, a report upon some late statements in therapeutics, 76
Wilson, Dr. J. A., on the true character of idiopathic erysipelas, 62
——— ——— on poisoning by digitalis, 437
Wilton, Mr., on the effects of antimony on infants, 437
Wright, S., M.D., F.R.S., lecture on physical and intellectual life, review of, 521
Wolves in lambs' clothing, 546
Worthington, W. C., Esq. on a fistulous communication between the ileum and the urinary bladder, simulating stone in the latter organ, 296

Zinc, on the oxide of, 503
Zinc, valerianate of, by MM. Muratori and Cerulli, 208

THE MEDICAL TIMES.

A Journal of English and Foreign Medicine and Medical Affairs.

No. 1. Vol. X. LONDON, SATURDAY, APRIL 6, 1844. FIVEPENCE. Stamped Edition 6d

For the convenience of Subscribers in remote places, the Weekly Numbers are re-issued in Monthly Parts, stitched in a Wrapper, and forwarded with the Magazines.—Orders for the Stamped Edition (13s. per half-year, post free in advance) are received by any Bookseller or Newsman, or may be directed to J. A. Carfrae, at the Medical Times Office, 49, Essex Street, London.

A COURSE OF CLINICAL LECTURES ON SOME IMPORTANT POINTS OF SURGERY,

Delivered at St. George's Hospital, by Sir Benjamin C. Brodie, Bart.

Lecture I.

Gentlemen,—After the excellent advice which has been given you in the various introductory lectures at the commencement of the present session, it will be scarcely necessary for me to add anything with respect to the importance of those studies in which you are now engaged; I shall, therefore, proceed at once to the business of the course. These lectures should, as their title indicates, be delivered at the bedside of the patient, if there were proper convenience; but as they will not always be, strictly speaking, clinical, it may be as well for me to say that I thus vary them, because I think I can make them more useful to you. I have been told some gentlemen wish me to deliver a lecture on

INFLAMMATION OF THE VEINS,

because there is a case of some interest of this kind now in the house. As I have not, however, seen much of the patient, I shall confine myself to some general remarks on the nature of the disease, rather than any direct reference to this particular case. Inflammation of the veins is a very common disease, but was not much noticed till within the last forty or fifty years, but of late it has been the subject of very general investigation. One description will not apply to all cases, as it occurs under various circumstances, arises from various causes, is attended by different symptoms, leads to different results, requires, of course, different treatment, and has the additional characteristic of sometimes being not at all dangerous, and at other times extremely so. Let us, then, take the disease in its simplest form, for all diseases should be thus studied. I address this observation more particularly to those gentlemen who are just commencing their studies; I recommend them to study the simpler forms of disease first, namely: those cases which more advanced students look upon as of trifling importance, for, by thoroughly understanding these, you will be enabled more readily to comprehend those more difficult cases which you will meet with afterwards. Suppose, then, a man has varicose veins of the leg; he takes too much exercise; you therefore rest him; you also purge him, and bathe the parts with cold lotions. The pain probably soon ceases, and very slight constitutional disturbance results. Now, if from any cause this man should die, and an opportunity occurs for examining the body, you will find the veins which, during life, felt hard and like cords beneath the finger, filled with lymph, so as entirely to have obliterated their cavities. This form of the disease is not dangerous; it seldom leads to any bad result. Then there are cases where inflammation of a larger vein takes place, independently of wounds or mechanical injury, and these also are not generally dangerous. Let us suppose an ordinary case. A man takes too much exercise, or is exposed to cold; he gets a sense of weight and pain in the groin, extending down throughout the whole of the limb; there is tenderness along the course of the veins during the day; no constitutional disturbance; pulse a little quickened, but the symptoms not urgent: then, after a time, the calf of the leg swells, soon the whole of the leg swells—it is an elastic swelling, and is sometimes sufficient to make the leg double its natural size. These symptoms continue for a length of time, and then, either with or without treatment, begin to subside, and first, perhaps, the pain ceases, the swelling remaining; then, perhaps, the size diminishes, but not to the natural proportions, and sometimes the leg and ankle remain subject to swelling the remainder of the patient's life. Sometimes the swelling subsides every morning, but returns in the afternoon; here, again, there will be pain in the limb and tenderness in the course of the veins. In this case you will feel the vena saphena and the femoral vein like a cord in the groin, and you will be sure that this is the result of inflammation; but it will not be acute, and generally not attended with danger; but if it becomes more acute, and goes on to suppuration, then it is dangerous; and a particular feature of these last cases is the swelling of the thigh, leg, and foot. You may perhaps ask, why does venous inflammation produce this swelling? The reason is plain. The cavity of the vein becomes filled with lymph, the blood cannot pass back to the heart, and then, having to find its way by some circuitous route, it becomes collected in the veins below, and the serous portion escapes, I suppose by lateral apertures in the capillary vessels, and in this way produces the œdematous swelling. It is in this way effusion takes place in dropsy; it may be the consequence of disease of the heart, that the blood cannot make its way through the vena cava, and so you get the effusion in the same way. Another man, we will suppose, has disease of the liver; the blood gets confined in the vena portæ, and the serum escapes into the abdomen, thus laying the foundation of dropsy of the belly; if effused into the chest, it constitutes the disease called hydrothorax. Now to return; if you examine a case after death resulting from acute inflammation of the veins, you will find the veins filled with coagulated blood mixed with lymph, and I am disposed to believe that, when the coats of the veins become inflamed, they give the blood contained in them a tendency to coagulate. It is not the disposition of blood when effused to coagulate; for we know that it may be effused into the tunica vaginalis, and remain there a long time without its being coagulated. You have another familiar example of this in the leech, in which the blood does not coagulate; but when it is out of the body, stir it as you will, it will coagulate. When inflammation of the veins runs very high, it becomes a dangerous complaint. It was the practice of Sir Everard Home to put a ligature on the vena saphena in these cases, but its effect was the production of increased inflammation. Mr. Abernethy recommended cutting the vein in two, and I, being at that time much less experienced than I may claim to be now, tried his plan, but, to my dismay, in a few days the man was dead, with violent inflammation of the veins. The example, therefore, is not one to be followed.

I shall now describe to you some of the morbid appearances. These are different according to the period at which the patient dies; sometimes you find a red blush on the inner surface of the vein, and nothing more, this perhaps extending upwards towards the heart, and also downwards towards the capillaries, sometimes even to a greater extent in the latter direction than towards the heart; I do not by this mean that it runs a greater distance, but that it runs along a greater number of branches, because when it ascends it confines itself to the trunk, and does not enter the branches. In these cases it looks like a red stain, with a very little lymph effused on its surface; and with nothing more than this I have known the patient to die in a few days. But if he does not die, other changes take place. You find the blood coagulating in the veins (I say coagulating, for there is fibrine mixed with coloring matter), but this coagulum is evidently mixed with blood which has been effused, and sometimes you find a portion broken down, dissolved, and looking like pus, although I have not satisfied myself that this is pure pus. I have seen coagulum in the two ventricles mixed with this liquid-like pus, but it will not stand the test of a close examination, although it resembles the pus found in an aneurismal sac. If, however, the disease is allowed to go on, pure pus is formed, but then the vein becomes totally obliterated below, and the "vis a tergo" is wanting. In the greater number of cases where lymph is effused into the cavity of a vein, you will find pus secreted on the side nearest the heart; and although the pus at first puts on a doubtful appearance, if it goes on, there will be actual, pure, genuine pus, unmixed with anything else; and then another portion of coagulable lymph will be effused between the pus and the heart, thus forming a complete barrier to its farther progress. This second layer of lymph, however, is not unfrequently wanting; but even then it does not follow that the pus shall mount up to the heart; for you will remember there is an obstruction also formed by the effusion of lymph previous to the formation of pus; so that the "vis a tergo" to force it forwards is wanting, and in this case it will form a regular abscess in the vein. The vein may be filled with pus for two or three inches of its length, or pus and lymph, pus and coagulum, or all three mixed together. If this remain, you have suppuration taking place, and then you get, secondly, abscess round the vein, which is entirely destroyed; so that, if the patient dies, you find merely very indistinct remains of it on examination. This abscess will soon make its way under the skin, and present itself externally. These, then, are the principal morbid appearances which present themselves after the inflammation of a vein. There are some others of minor importance, but these I shall dismiss for the present.

I come now to speak of the symptoms of venous inflammation. Now, let us suppose there has been a wound in the vena saphena, or in the groin; the patient has violent headache; shivering; the pulse very quick; tongue dry: next day the pulse so rapid that you cannot count it; another attack of shivering and intense headache; great agitation of manner, and an expression of anxiety in the countenance; the tongue will get black, as if he were in the last stage of typhus, and probably the next day the patient will die. This is not an overdrawn picture, for I have known several cases run this rapid course. But you will also find tenderness above and below the wound, the skin being so tender that the patient cannot bear it to be touched, and yet the pain will be relieved by putting on a flannel bandage, because it prevents the inflamed veins becoming distended. If the symptoms are less urgent, there will be shivering; an anxious countenance; brown tongue; sallow appearance of the skin; disturbance of the mind, but to a less degree than in the former; and in these cases, where the symptoms are not so urgent, although the disease may go on for a long time, nevertheless the patient will ultimately recover. In these cases, where the disease persists for a long period the local changes which I mentioned become manifest, viz.: redness in the course of the vein; discharge of pus from the part where the ligature was applied; hardness of the vein, and swelling over the part which has been injured; and the abscess forms and breaks, and you will be able to press out the fluid from it even for several inches. If the disease has occurred after bleeding from the arm, several abscesses may form a few inches distant from each other, reaching up as high as the shoulder. But even cases which have gone on to the formation of these secondary abscesses may recover. The abscesses may be laid open; they will then go on secreting purulent matter for a long time, but ultimately granulations will form on the surface, and the patient will be restored. If this were all, there would be no reason why the majority of cases should not recover; but I have not yet described the principal thing which prevents this fortunate consummation. The patient goes on suffering the train of symptoms I mentioned before, viz.: shivering, headache, &c., which appears to be connected with venous in-

flammation in the first instance; but as the abscesses come forward, or as the inflammation subsides, the constitution does not recover, but appears to suffer more. As the local symptoms subside, you might expect the constitution to recover itself; but instead, you find the febrile excitement continuing, with an anxious countenance, sallow tinge of the skin, fresh attacks of shivering, and pains in other parts of the body. One will complain of pain in the opposite shoulder, another in the knee, whilst a third will have a short cough or pain in the liver. In fact, there will be a variety of symptoms present in various parts of the body; and if the patient dies, you will find that actual disease has taken place in them. In one patient you will find both knee-joints filled with a reddish fluid; another will have a deposition of cheesy matter in the liver, which goes on to abscess; a third will have it occurring in the lungs, whether beginning in the air-cells or not I know not; and these go on to abscess. You will also find effusion of fluid into the ventricles of the brain; effusion of lymph sometimes into the pericardium; inflammation of the pleura, and effusion here also. It is said the inflammation has been traced to the vena cava, but I do not think this observation correct. Mr. Hunter threw out the hint as if it were a possibility, and later writers have mentioned it as a matter of fact. Then you have fluids deposited in various parts of the body, and you may have fluid, and even lymph, without pus. Venous inflammation may be the consequence not merely of a ligature or wound affecting a venous trunk, but it may arise in this way. A man has erysipelas, which is a disease of the integuments. This may extend into the cellular membrane, producing sloughs there, and abscesses under the skin, and so you have abscesses and sloughs mixed together. Now, in this case, when the patient dies, you will find the veins have participated in the erysipelous disease. A man comes into the hospital (a gin-drinker) with a wound in the leg, and he has inflammation of the cellular membranes. The man dies, and when you examine him, you find pus deposited in the cellular membrane. Here again you have the disease of the veins. Inflammation of the veins also not unfrequently takes place after child-birth. Inflammation of the veins of the uterus, extending into the hypogastric, internal iliac, and cava veins, sometimes occurs in these cases. Here, also, if the patient dies, you find the veins filled with pus, and there is swelling of the lower limbs. In this way we account for "phlegmasia dolens," the white swollen leg. It is supposed that this swelling, which takes place after child-birth, is the result of venous inflammation; but if it is, it must be said that venous inflammation does not usually assume the violent character we have just described, but generally that milder form which I mentioned first; but very few of these cases occur where death follows. Indeed, Sir Charles Clarke told me he never saw a case which terminated fatally. For a more exact and minute account of this particular form of the disease, I must refer you to your lecturer on midwifery, Dr. Lee, and shall conclude my observations on the general subject at our next meeting.

CLINICAL LECTURES ON MEDICINE,

Delivered at the GREAT CHARITY HOSPITAL, Berlin, by Dr. SCHÖNLEIN, first Physician to the King of Prussia, founder of the Natural System of Medicine in Germany, and Professor of Pathology and Therapeutics in the University of Berlin.

Prepared from the German expressly for "The Medical Times."

Fifth Lecture.—Different kinds of Excitement of the Brain in Typhus. Opinion respecting the Abdominal Symptoms. Affection of the Larynx. The Episodes in Typhus. Unequal Division of Temperature. Nervosa Versatilis. Death. Sectio.

July 19, 1841. Auguste Kaes, servant girl, 18 years of age, was labouring under fever with cerebral and abdominal symptoms, and, on comparing them, we find an evident case of abdominal typhus before us. The patient has only been ill since the 11th of July; to-day is therefore the eighth, or ninth day of the disease, or the commencement of the second hebdomadal period; but the symptoms have already assumed a violence and intensity rarely observed in mild cases. The physiognomy of the patient exhibits the state termed "*status atonicus*;" she was very uneasy all last night; consciousness was entirely wanting; an involuntary discharge of fæces took place in bed. As to the cerebral symptoms, the head is hot, and partial deafness has taken place. The abdomen is soft, but pain is experienced in the cœcal region upon pressure; the peculiar rumbling noise also is perceptible; there are likewise the characteristic typhoid stools.* Respecting the fever, the tongue is dry and smooth, its epithelium contracted; the teeth covered with sordes; the skin is dry and hot; the urine dark and very acid; pulse 96 per minute in the morning, and 108 in the evening.

The organs principally threatened in this case are the intestines; the organs of respiration, however, are not entirely free, which was shown by slight coughing and dry rhonchus on both sides of the chest. In order to meet the general symptoms of the disease, we shall administer the hydrochlorie acid,† and for the local complaints we shall abstract blood topically by the application of twelve leeches to the cœcal region, and starch clysters with aqua oxymuriatica (half an ounce to a clyster), cold fomentations on the head, and the patient must be put into a warm bath.

July 20. The patient was very uneasy yesterday, in a state of muttering delirium, which continued through the night; no sleep, it was rather a state of *sopor*, from which she can only be roused with difficulty. There was again an involuntary evacuation of excrements during the night; no stools during the day. The nervous symptoms are also evidently increased. As to the local symptoms in the intestines: the abdomen is soft; the cœcal region but little swollen; *and although the capacity of perception in the patient is very much diminished*, she yet experiences pain on pressure; cœcal noise perceptible. There were only two greenish stools within the twenty-four hours. The fever is the same as yesterday; the tongue having a raw appearance; the skin hot and dry; the patient has again discharged urine in the bed; in short, all the symptoms, far from being abated, are increased. The development of the disease is so rapid, the local intestinal symptoms so violent, and the functions of the brain are so greatly interfered with, even at this early stage, that we must pronounce a very unfavourable prognosis. With regard to the *nervous* affection, especially with regard to the *cerebral symptoms* in typhus, I believe that they may originate from different causes, and that their treatment is to be regulated accordingly. There is an excitement of the brain which already exhibits itself on the third or fourth day of the disease, and which I believe generally takes place simultaneously with the eruption on the intestinal mucous surface—cerebral symptoms, for instance, similar to those which precede the eruption of the acute exanthemata, especially small-pox. The period in which this excitement takes place, the nature of the affection of the brain, the furious delirium, the turgid face, the full pulse, the hot skin, and the circumstance that the symptoms subside, or almost entirely disappear (generally towards the seventh day), are arguments in favour of this view. Another condition of the brain frequently occurs in the course of the disease, which consists in a state of congestion approximating to inflammation; it constitutes the form which is termed *cerebral typhus;* it frequently displays itself at an early period of the disease, but may also occur on the seventeenth or eighteenth day. We must mention a third kind of cerebral excitement in this disease, which evidently originates from the formation of lesions in the intestines, similar to the excitement of the brain in children produced by worms. A fourth kind of excitement of the brain may be found in a later stage of the disease, that is to say, when the crises have taken place, as is the case with those who, from whatever cause, have become greatly reduced; this is the anæmic form of delirium. Whilst these may be removed by good nourishment, &c., the remedies in the inflammatory form are—abstraction of blood, fomentations of ice, purgatives, and in the third or abdominal form, sedatives, clysters of milk, linseed, with castor, musk, &c. The same symptom may, therefore, have a very different signification in the same disease, and it is absurd always to consider it as having the same meaning, as *Marcus* has done, and as the French have repeated after him. It is necessary to ascertain the nature of the excitement of the brain in every individual case. In this instance there is evidently a sympathetic excitement caused by the affection of the intestines. We shall, therefore, administer a clyster of a decoction of valerian with castor, and put the patient into another bath.

July 21. The physiognomy of the patient is by no means satisfactory; continued inclination to sopor; the eyes are half opened; she only articulates a few sounds. Yesterday was spent somewhat calmly; the patient lay in a low, muttering form of delirium; she became more violent towards midnight; rest followed towards morning. The difficulty of hearing has considerably increased; this, however, can hardly be viewed as a very dangerous feature; indeed, it has been considered as a favourable symptom, which I, however, cannot admit. The abdominal symptoms are diminished; the abdomen is more shrunk; the sensation of pain slighter; the rumbling noise, however, still perceptible; there were only two involuntary stools. The abdominal symptoms, therefore, seem to be more favourable; but I must state that I have frequently observed this form of disease take a dangerous turn, just as these apparently favourable symptoms were manifesting themselves. I particularly recollect one case, where a whole family suffering from it were brought into Zürich Hospital; the abdomen was so contracted that the vertebral column could be felt through it; a state of stupor existed which rendered them insensible to all feeling of pain; instead of diarrhœa, the bowels were constipated; the intestinal mucous surface, on post-mortem examination, was found to be greatly ulcerated. The abdominal symptoms, therefore, ought to be judged of only in connection with the other symptoms, especially with those of the brain, for effusion may follow in consequence of the congestion of the brain; and in such case, the abdominal symptoms may exhibit themselves in the same manner as in hydrocephalus, in which disease the typhoid abdominal symptoms are strongly manifested. With regard to the febrile symptoms, they are the same; the tongue is red, dry, and rough; the skin dry and harsh; pulse 96 per minute. We shall repeat the clyster and bath, as administered yesterday.

July 22. The state of the patient is unfavourable; the affection of the head is increased, for which we were obliged last night to apply twelve leeches; symptoms of great uneasiness, tossing about her arms; the face is distorted, even to ugliness; the patient cannot be roused from her sopor. The abdominal symptoms also have increased; continual pain and rumbling noise in the cœcal region; involuntary, but not bloody, stools in great number. The permanent dryness of the tongue, which has a dark red-brown colour, is a very bad symptom. The moderate frequency of the pulse (96 per minute) does not compensate for the bad symptoms enumerated. To this we must add a decrease in the temperature of the

* These fluid intestinal evacuations, as they ordinarily occur in the second hebdomadal period of typhus abdominalis, separate themselves when received into a glass-vessel, into two strata—a flocculent yellow coloured sediment, and a grey, darkish fluid above it. The flocculent sediment consists of globules of mucus and pus, an amorphous granular mass (probably coagulated albumen), epithelium cells, and crystals, principally formed of the magnesian triple phosphates, to which Schönlein first drew attention (Müller's Archiv., 1836, p. 258). Dr. Simon found in the flocculent sediment 32 per cent of salts, of which nearly one-half consisted of earthy phosphates. In the fluid part of the evacuation there is a small quantity of albumen and much carbonate of ammonia, owing to which these stools always have an alkaline reaction.

† Solutio gummi mimos, five ounces;
Aq. oxymuriatica, half an ounce;
Sacch. albi., one ounce. A table spoonful to be taken every two hours.

skin, especially a coldness of the extremities, whilst the head is at times hot—one of the most dangerous and adverse symptoms. The clysters must be continued, and a *douche* of warm water applied over the head; besides this, we shall administer—

Infusi cort. Chinæ et rad Angelicæ (of each two drachms), four ounces;
Mucilag. salep., two ounces;
Acid muriat., one drachm;
Syrupi simpl., one ounce. Mix. A tablespoonful to be taken every two hours.

July 23. The first dangerous symptom observed to-day is that peculiar hoarseness or whistling noise during respiration, which causes us to apprehend that, even if the patient should get successfully over the typhus, a subsequent formation of lesions in the larynx may take place. The nervous symptoms have diminished considerably; the patient was very uneasy until midnight, but afterwards became calm, and fell asleep; her physiognomy indicates a return of consciousness; she no longer discharges her fæces involuntarily. The tenderness of the abdomen has disappeared; there was only one evacuation since yesterday; the fever is slight; the laryngeal symptoms, however, are alarming, both for the present and for the future fate of the patient.

July 24. The symptom in the larynx observed yesterday (namely, the remarkable change of the voice, a peculiar whistling noise during inspiration and expiration) has increased to violent spasmodic contractions in that locality, attended with great uneasiness and torture. This gave rise to the fear that inflammation in the mucous surface of the larynx would ensue, which rapidly terminates in malignant ulcerations—a state which causes a fatal result even at subsequent periods. I beg to remind you of a case which I mentioned in one of my lectures of last year. A young man, twenty-two years of age, was received into the hospital when suffering under typhus abdominalis. The typhoid complaint had a successful termination; but the respiratory affection, by which it was accompanied, still continued; an acute phthisis laryngea developed itself, and the patient died. Upon post-mortem examination, we found two small ulcers in the larynx, which had partially destroyed the thyroid cartilage, whilst most of the intestinal lesions were perfectly healed. This termination of the typhoid disease but rarely occurs; *Louis*, among a great number of observations, has only remarked two or three such cases. A second termination, which we may anticipate in this case, is the increase of the affection of the larynx to œdema glottidis. If the result first mentioned should take place, namely, a fatal termination owing to the material changes in the larynx, it advances with slow but certain progress; in the event of the possibility of the second, suffocation takes place more rapidly, frequently in ten or twelve hours. We now come to a third event that may occur, namely, a spasmodic contraction in the larynx, likewise extending itself to the pharynx, which symptom is succeeded by hydrophobia. I have seen instances of this latter description, although fortunately but few, and I should say that it must be considered as a sure sign of a fatal result. We have ample reason, therefore, to consider the appearance of the affection of the larynx as highly dangerous, demanding our instant interference by the application of leeches, mercurial frictions, &c.; and when the spasmodic symptoms take place, we should employ sinapisms. A favourable change has taken place in consequence of this treatment, but our apprehension is not yet removed; for although the spasms have disappeared, certain symptoms still remain, namely, the hoarseness of voice, and the continued hissing sound during respiration. This is the more remarkable, as the other signs of the typhoid disease, the *normal* symptoms of typhus, have diminished in a very satisfactory manner; the stupor and unconsciousness have partially given way; the patient is sensible, and asks for what she wants; the head is not so hot; the abdomen is soft, but still rather painful on pressure; the rumbling noise has disappeared; there have been three characteristic stools since yesterday; the fever likewise has diminished very much; the tongue begins to be humid, and has no longer that shrivelled appearance; the pulse 96 per minute; the skin harsh, tolerably warm. The laryngeal affection, previously described, therefore now occupies our chief attention. From what has already come under your notice, you must have acquired the conviction that, *besides the fundamental symptoms of typhus*, these episodic states (which, by their variety, modify and change the course of the disease) must form the principal guide to your treatment. It is this, indeed, which renders the treatment of typhoid patients so extremely difficult; and it is a merit due to modern medicine that the rational treatment is now based upon these fixed principles, thus extricating us from the labyrinth into which the descriptions of the ancient physicians (even of P. Frank) have hitherto led us.

July 26. We are now between the fourteenth and fifteenth day of the disease, but only unfavourable symptoms have as yet exhibited themselves. There is no trace of a crisis, or of a tendency towards it; on the other hand, we evidently observe an increase of the local abdominal symptoms, and, connected with them, an increase of the nervous phenomena; also a change in the fever. The abdomen is certainly soft, but still very painful on pressure about the cœcum, and partially also on the colon ascendens—a fact the more remarkable, as the patient has again relapsed into her former state of unconsciousness; and one might, therefore, suppose that the capability of feeling would be suppressed. Involuntary discharge of excrements again takes place. As to the febrile symptoms, there certainly is no great increase in the frequency of the pulse (108 per minute), but it has become weaker; there is again a very unequal distribution of temperature (this forms one of the most dangerous symptoms); the extremities, especially the upper, are cold, whilst the skin on the abdomen and thorax is burning hot. I have seen cases of typhus where the extremities were as cold as occurs in patients afflicted with the cholera. The only satisfactory announcement we can make to-day is, that the alarming symptoms in the larynx have somewhat diminished. The spasms in the larynx have not returned, but some hoarseness and coughing still exist.—*Preseription:* Aromatic bath; starch clyster (three ounces), with argentum nitratum (one grain); and infusum Chinæ, with acidum phosphoricum, internally.

July 27. Some improvement has taken place to-day, which, indeed, is partially indicated by the appearance of the patient. The nervous symptoms certainly still continue in a high degree, but consciousness has somewhat returned; the abdominal symptoms are diminished; a little pain is experienced on pressing the cœcal region; there were only two stools within the last twenty-four hours. The greatest improvement we have to mention, however, consists in the disappearance of the violent symptoms in the larynx; the fever also is more moderate, and there is to-day a pretty equal distribution of temperature. We shall repeat the clyster ordered yesterday, and add to it tincture of castor (eight drops); we shall also repeat the aromatic bath.*

July 28. To-day we observe that difference of the nervous symptoms which we have also seen in another case—a difference which was first presented by *P. Frank* as a peculiar species, and which opinion *Reil* subsequently adopted. *Frank* divided the nervous fever into *stupida* and *versatilis; Reil* into typhus attended with *erethismus*, and typhus attended with *torpor* (in a higher degree with *paralysis*). This difference of species is founded only and solely upon the modification of the nervous symptoms, which, however, is not so important as to justify this division; it determines no material and essential difference, but seems more to be founded upon individual circumstances. The *versatile* form, for instance, is particularly observed in people of an irritable, nervous temperament; therefore, principally, in women who are subject to hysteria, in young girls at the period of menstruation, and especially in chlorotic persons. It is, therefore, no material difference having reference to the disease itself, but rather an individual distinction. In one patient you may observe indifference, stupidity, sopor; in another, constant excitement, which may be increased by the slightest external object or motive. The *decubitus*, which in this case was observed to a certain extent before, though in a slight degree, is now more marked, and, therefore, requires a topical treatment (fomentations of vinum camphoratum, with aq. Goulardi). Within the last few days we have ordered tonic remedies and clysters of argentum nitratum, with castor. We shall now increase the dose of the latter to half a scruple, for we know that this remedy has a very powerful effect on the nervous symptoms, and, besides this, we shall administer musk to the patient (two grains every two hours).

July 30. We found, forty-eight hours ago, that the patient, compared with her former condition, had assumed a more favourable aspect. It will be borne in mind that, at the commencement, we apprehended that a fatal result would speedily occur—an apprehension which was considerably heightened by the appearance of the laryngeal symptoms. Compared with the former state of the patient, the present is more satisfactory, but still not of such a nature as to warrant us in anticipating a favourable termination; such hopes, indeed, in typhus, even when all danger is apparently passed, too frequently prove delusive; we are, therefore, only speaking of a relative improvement. The patient is more calm; sleeps quietly for hours; there is also a considerable decrease of the nervous symptoms. The abdominal symptoms are likewise more favourable; the abdomen soft and less tender. The chest is free; respiration easy; hoarseness moderate; the fever still continues in the same degree as before, but the pulse is extremely weak; and, taking into account the long duration of the malady, it is very doubtful indeed whether the strength of the patient will enable her to pass through the various phases of the disease. We shall add, therefore, light nourishing clysters of milk, yolk of egg, and similar matters, to the tonic remedies already ordered.

The strength of the patient, as we apprehended, was not sufficient to meet the many changes occurring in the course of the disease; the nervous symptoms again increased; the fever became more violent; the pulse continually weaker; and the patient finally sunk under it on the 3rd of August.

Sectio.—The result of the post-mortem examination corresponded with the extraordinary facts which displayed themselves during life. You will recollect that violent symptoms exhibited themselve in the larynx on the twelfth day of the disease, which were not only manifested by a change of the voiee, but likewise in violent spasmodic contractions of the throat and neck. We at that time stated this to be a most important symptom, and indicated our fears that it might lead to a fatal result: firstly, by causing either a rapidly destructive ulceration, and in the event even of the patient getting successfully over the typhoid disease, that a *phthisis laryngea*, leading to a speedily fatal

* Schönlein strongly recommends the application of baths in the treatment of typhus, especially at the period of the crisis (that is, about the fourteenth day of the disease). The crisis in this disease generally takes place through the medium of the skin; and it is, therefore, desirable, in order to prepare the latter for the performance of its function, to order a warm water or a soap bath about the eleventh or twelfth day of the disease, particularly if the skin should be very rigid or dirty. In individuals in whom the skin has a greater tendency to perspiration, and in whom the reaction is but slight, warm baths and *douches* of warm water should be applied; and decoctions of camomile, aromatic herbs, aromatic spirit, &c. &c., should be added to the warm baths, when a rapid collapse is to be apprehended. Cold *douches*, however, deserve the preference, when the skin is dry and very hot, and when violent congestion towards the brain is existing at the same time; it should, however, only be applied for a few minutes, and generally should be repeated every three or four hours. Affections of the organs of the chest, clammy colliquative perspirations, and petechiæ on the skin, contraindicate their application. Besides the baths, Schönlein also recommends sponging the skin. The latter is suitable likewise when the skin is covered with clammy, colliquative perspirations, and petechiæ; especially cold washings, with the addition of an acid (acetic or muriatic acid).

result, might ensue; secondly, by producing an exudation in the cellular tissue surrounding the opening of the larynx, and consequently causing death by suffocation; or, thirdly, by an increase of the nervous phenomena, amounting to a state of hydrophobia, thus producing a fatal termination. Topical removal of blood, mercurial frictions, &c., partially removed these symptoms; the convulsive contractions in the neck ceased, but the change in the voice continued, accompanied by a slight cough. The usual symptoms exhibited themselves, upon dissection, on the mucous surface of the small intestines — extensive ulcerations not perfectly healed; besides these, however, we found the whole mucous surface, commencing with the tongue, covered with a dirty yellow coating (which could be easily scraped off), and which extended itself along the pharynx, as well as down the larynx; beneath this coating the mucous surface was not ulcerated, but perfectly smooth. This covering also extended itself still further down the alimentary passages, filling the œsophagus in the form of a pappy mass, and even reaching the cardiac orifice of the stomach; it could also be easily removed in this region, under the form of a dirty yellow pap; the mucous surface beneath it was perfectly smooth, as if deprived of its epithelium. Dr. Güterbock instituted a microscopical analysis of this mass, and found, as we anticipated, that it consisted solely of epithelium cells, in all degrees of development, and also (which is frequently observed under similar circumstances) of a quantity of fatty globules. This fact is the more interesting, because the physical and, still more, the microscopical investigation, proves a great similarity between this mass and the pappy substance found in cases of *hospital gangrene*, as described by Delpech; also, in the *metritis putrida* of Baër, and the *angîna gangrenosa*; in which a new formation of epithelium takes place, as may also be observed in this disease in other parts covered with a mucous surface (for instance in the uterus). Indeed, in the abdominal typhus, these are just the kinds of masses which first exhibit themselves beneath the mucous surface of the intestines, and which subsequently terminate in ulcerations;—masses which may also be observed in the intestinal evacuations.

LECTURES ON THE ANATOMY AND PHYSIOLOGY OF THE EYE,

FORMING PART OF A COURSE OF LECTURES ON ANATOMY AND PHYSIOLOGY, DELIVERED AT CHARING CROSS HOSPITAL.

BY T. WHARTON JONES, F.R.S.

Lecture IV.—Feb. 21, 1844.

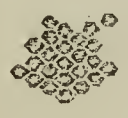
Gentlemen,—I have now to call your attention to the *pigmentum nigrum*.

[A demonstration of the pigmentum nigrum was here very minutely given.]

On the inner surface of the choroid, including the ciliary body, we observe a dark pigmentous substance, which may be scraped off in membraniform shreds. This is the, so-called, pigmentum nigrum.

If a shred be examined under the microscope, it is observed to be composed of nucleated cells of a hexagonal form, about one thousandth part of an inch in diameter, united to each other at their edges in a single layer.

This hexagonal form appears as if it had resulted from the cells, previously globular, and closely arranged in a stratum, being pressed flat, and at the same time acting on each other laterally. The nuclei of these cells are somewhat prominent on one of their flat surfaces, that towards the inner surface of the membrane. The cells contain in their interior the pigment granules, which are of extreme minuteness. The membrane thus composed of hexagonal cells, containing pigment granules in their interior, and united by their edges, is called *membrane of the pigment*.



The pigmentary membrane, which lines the surface of the choroid, presents this conformation, but that on the inner surface of the ciliary body has a different appearance, as if the cells were there coalesced into a more coherent structure.

On the ciliary body the membrane of the pigment, besides investing the ciliary processes, dips down into the intersticcs between them. The posterior surface of the iris has a pigment called *uvea;* but this term has been sometimes differently used, being by some authors applied to the whole iris, and even to the choroid itself. This portion is more loose and granular than the choroid pigment; and although the iris may be said to float in the aqueous humour, its pigment does not come in contact with that fluid, a fine membrane being interposed. This, which may be called the membrane of the posterior chamber, will require future notice.

[A preparation illustrative of the above description was here explained.]

In the eyes of those animals in which the inner surface of the choroid presents the bright-coloured spot called *tapetum lucidum*, there extends over this spot *(the tapetum)* a membrane, continuous with the membrane of the pigment, and, like it, composed of nucleated hexagonal cells, only not containing in their interor the dark pigment granules. In fact, it is a continuation of the same membrane, only transparent.

In the eyes of albino animals the membrane is, throughout, in this state, its component hexagonal cells containing no pigment granules at all. Around the ciliary processes only, there may perhaps be observed traces of the existence of pigment.

The next part to be described is the *retina*.

You observe, on the retina here shown, that it is semi-opake, but in its recent and natural state it is almost transparent. This fact, of the transparency of the retina, was pointed out more than a hundred years ago by Mery. To this circumstance I shall again have occasion to refer. The retina is situated within the pigment layer of the choroid, and extends from the optic nerve as far, at least, as the commencement of the ciliary body.

Before describing the structure of the retina, I would beg your attention to a few observations regarding the structure of the optic nerve, of which the retina is considered an expansion.

The optic nerve, on dissection, appears to the naked eye to be composed of fibrils, surrounded by neurilemmatous investments; but these fibrils are found, on microscopical examination, to be fasciculi of minuter fibrils.

To recur to the retina. At the place corresponding to the antero-posterior axis of the eye-ball (the eye-ball of man and of the monkey tribe only, you are to remember, for the structure I am about to describe does not exist in the rest of the mammifera), the retina is of a yellow colour, and right in the middle of it; and about one-fifth of an inch from the entrance of the optic nerve, on the temporal side, there is a transparent point, which, having been described by its discoverer, Sœmmerring, as a foramen, is commonly called the *foramen of Sœmmerring*, while the yellow colour is called the *limbus luteus foraminis centralis*.

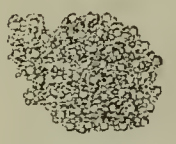
This part of the retina forms an elevated fold towards the interior of the eye. It is called the central fold of the retina, but there is a difference of opinion with regard to whether it exists during life, or is merely a *post-mortem* appearance. The carefully conducted observations of Dr. Jacob, of Dublin, appear to me to render it very probable that it exists during life.

The retina has blood-vessels, usually quite apparent, as in the eye presented. These blood-vessels are two of the three ramifications of the central artery of the retina, the third being that which, in the early stage of development of the eye, passes through the vitreous humour to the capsule of the lens, as will be afterwards more particularly shown.

The Intimate Structure of the Retina.—This is a very difficult but important subject of consideration, and it is only recently that it has received any satisfactory elucidation.

We may view the retina as consisting of three layers.

1. The *stratum bacillosum*. This is the outer layer of the retina. It consists of small columnar bodies, about 1-1100th of an inch long, and 1-14,000th of an inch thick, arranged closely side by side, and placed vertically in regard to the retina. If a bit of the retina, together with a portion of the vitreous humour, be carefully removed from the eye of an animal recently slaughtered, and placed on a glass plate, with the outer surface of the retina uppermost, care being taken to prevent the preparation from being moistened by water, or any other fluid; if this be examined with the microscope, the round and slightly knobbed ends of the columnar bodies are seen close together, like minute tesselated work, and interspersed through this tesselated-looking surface, at regular intervals, we observe nebulous-looking spots, as if two or three columns were wanting.



The signification of these spots I will immediately explain. Confining myself for the present to the columnar bodies, I would remark that the slightest violence—such as the superposition of a thin film of glass over the retina—is sufficient to *lay* them, as corn is laid by the wind. We thus obtain a side view of the columnar bodies, and in this state we often observe them as if radiating from a point, like the hairs of fine fur when we blow upon it.

These columns, when detached, and more minutely examined, are observed to present transverse markings, which appear to be clefts or fissures, and at these fissures readily separate.

The spots to which, a few minutes ago, I referred, are owing to this circumstance, that at the places corresponding to them there are thicker but shorter columns, and, therefore, not reaching to the surface of the retina. These bodies present at their extremity, corresponding to the surface of the retina, two short, blunt, conical processes; hence the bodies were named by Dr. Hannover, who discovered them, *coni gemini*, or twin cones.

The columns are held together by a delicate transparent substance, which appears to be also the medium by which the stratum bacillosum is united to the pigment membrane on the one hand, and to the other layers of the retina on the other.

I will not here enter into any account of the sheaths with which, according to Dr. Hannover, the ends of the columns are connected in the eyes of many of the lower animals, but proceed to call your attention particularly to the circumstance that the action of water speedily and remarkably alters the structure of the stratum bacillosum, both as a whole and in its component columns.

The change of the stratum bacillosum, as a whole, which is induced by the action of water, consists in its detachment from the rest of the retina, and that in a continuous membranous film, but of much greater superficial extent, than the surface from which it has been separated. In this state it constitutes what was first observed and described by Dr. Jacob, and has since then been usually demonstrated under the name of *membrana Jacobi*.

Its true natural condition, as I have just described it, was first observed by Dr. Hannover, of Copenhagen. In regard to the change in its component parts, we observe that the columns readily become variously distorted, and at last appear to acquire the form and appearance of very delicate globules, these being still held together by the fine transparent uniting medium.

It is to this change that the great increase of superficial extent is owing, which the stratum bacillosum, now altered into Jacob's membrane, presents.

2. After this comes the *stratum fibrillosum*. The fibres of this stratum are intermixed with globules of 1-3000th to 1-4000th part of an inch in diameter. These globules appear to be nuclei, round many of which may be detected very pale and delicate cells.

From the place where the optic nerve joins the retina, the primitive nervous fibres radiate in all directions towards the peripheral margin of the membrane, which is towards the anterior part of the eye.

The fibres are at first collected into fasciculi, which, by frequent interchange of fibres, form plexuses with much elongated meshes. In proceeding forwards, the meshes gradually become wider, and the fibres more dispersed. All this is not visible to the naked eye in man and most of the mammalia; but in the retina of the rabbit there are two broad fascicular bands, quite evident to the naked eye, from which small fasciculi proceed radiating, forming plexuses by interchanging of fibres and becoming fine. In the eye of man and most of the mammalia this minute structure is not discernible without the aid of the microscope.

Valentin concludes from analogy that the primitive fibres of the retina end in loops, but Hannover maintains from observation that such is not the case—that they, on the contrary, have free ends.

These ends, whatever may be their form, observers agree, are not, in the lower animals, at the bottom, but towards the anterior part of the retina. In the human eye, however, according to Michaëlis, there are some ends or fibrils in the region of the central spot of the retina.

In regard to the *stratum bacillosum* in this region of the retina, Michaëlis says that it is reduced to a simple granular layer. Pappenheim and others, however, on the contrary, maintain that it is distinct.

3. We have, thirdly, a layer of globules—the *stratum globulosum*. This stratum is composed of cells, with nuclei, much paler than those intermixed with the fibres of the preceding layer. This layer Henle thinks a sort of epithelium. The blood-vessels on the anterior surface form, with this stratum globulosum, the vascular layer of the retina.

As to the extension of the three strata of the retina forwards, it is to be observed that the *stratum bacillosum* cannot be distinctly traced beyond that region of the retina corresponding to the commencement of the ciliary zone, and the *stratum fibrillosum* does not extend any farther.

The *stratum globulosum* and the blood-vessels alone appear to be continued into the ciliary zone.

PARISIAN INTELLIGENCE.

(FROM OUR OWN CORRESPONDENT.)

Paris, March, 28, 1844.

On the Nature and Treatment of Acute and Chronic Hæmorrhoids. By M. Lisfranc, Surgeon of la Pitie Hospital.—In what tissues do hæmorrhoidal tumours develop themselves? This question, though very important for the prognosis, has received very different answers. Some authors say that they are formed by a varicose state of the hæmorrhoidal veins; others, that they are of an erectile nature; some, that they are an hypertrophy of the tissues consecutive to simple congestion; and, finally, others consider that they are caused by an hyperæmia of the parts, similar to what is observed in the uterus during menstruation. This last opinion was that of Montègre, who devoted the greater part of his medical career to the study of this disease, and to whom we are indebted for an excellent article in the *Dictionnaire des Sciences Medicales.*

Let us now examine these different opinions as to their result on the prognosis and treatment. Hæmorrhoidal tumours are seldom, if ever, formed exclusively of veins, though they are often surrounded by voluminous ones, which, in some instances, penetrate their tissue. It is a well known fact that, after the thirty-fifth year, the venous system of the rectum undergoes an extraordinary development, and this anatomico-physiological disposition, this abundance in the vascular system of the intestine, is of the highest importance in a practical point of view. The circulation in the vagina presents no similarity in this respect; the number of its vessels compared to those of the rectum is not even as 1·60. It is on this account that absorption of an injection is so active in the latter, whilst in the former it is almost null. I have allowed a liquid to remain upwards of two hours in the vagina, the patient being so placed as to prevent its flowing out; weighed before its introduction and after its escape, the difference was found to be not more than 1-100th part. It is, therefore, evident that, when a narcotic or any other decoction is introduced into the vagina, the absorption being excessively minute, their action is equally so; consequently, as the curative effect of an injection can only be obtained after its absorption, it is not in the vagina, but in the rectum, that it ought to be made; and when I recommend emollient ones to be made in the former, it is more in a hygienical than in a therapeutical point of view. But is the hæmorrhoidal tissue of an erectile nature? I do not think so; because no one has yet remarked that erectile tumours in other parts of the body are susceptible, every one, two, or three months, of increasing, in the space of twenty-four hours, one-half, three-quarters, and even seven-eighths of their original size. But it may be objected that this does not prove that hæmorrhoids are not formed by an erectile tissue, or that this tissue may not become the seat of a periodical hyperemia. To this objection, more specious than real, I will answer; very frequently hæmorrhoidal tumours, after persisting seven, eight, or fifteen days, disappear completely without leaving the slightest trace; now, who ever saw erectile tissue thus affected in any part?—who ever saw it appear and disappear periodically every two months?—who ever saw an erectile tumour disappear spontaneously, as has been observed in hæmorrhoids?—no one. Hæmorrhoidal tumours are composed of a sort of fibrous tissue, in which only a few vessels are to be found when there is no congestion; and when this exists, however violent it may be, these vessels are never so numerous as in erectile tumours. On upwards of one thousand bodies, from which I removed the rectum, and in the numerous operations I have performed, I never as yet have met with a real erectile tumour in this region. This fact renders the prognosis less dangerous, and an operation not so indispensable. It may, therefore, be concluded—1°, that though, without a doubt, veins more or less voluminous may be found in hæmorrhoidal tumours, still these last are not formed of varicose veins; 2°, that their composition differs from that of erectile tumours.

What is the best method of treatment? In some cases, though the tumours are very small, the congestion of blood may be considerable, or the pain and hæmorrhage so intense as to weaken the patient. When the swellings are inflamed, or rather the seat of congestion (for the former does not always exist), what are the most appropriate remedies? A very important distinction must here be made, viz.: whether the accidents are periodical or permanent, or nearly so.

Accidents periodical: When not too intense, they ought not to be checked; for such a mode of proceeding may become the cause of congestion in different viscera, especially the brain, when the patient is predisposed to apoplexy. In general, they must not be suppressed; if, however, the pain is intolerable, or the hæmorrhage so considerable as to give rise to serious accidents, ought we to apply leeches to the anus? Certainly, in some cases, we succeed in giving ease to the patient, but in the greater number the congestion is increased. What is far more advantageous is, to draw about twelve or sixteen ounces of blood from the arm, and if the patient is not too weak, or if he be predisposed to apoplexy, a day or two after a derivative venesection of four or six ounces. At the same time, tepid baths; and, if possible, small enemata (four ounces), to which a few drops of laudanum must be added; mild and diluent drinks, and an appropriate regimen. On no account ought a poultice to be applied, as they invariably increase the congestion. When the hæmorrhoids are protruded, they must be reduced as speedily as possible; for their increase of size may cause strangulation and gangrene to take place, by which very serious accidents may be produced if the rectum is affected to a considerable extent. Their reduction is advantageous in other respects; the hæmorrhoids being thus preserved from the contact of the atmospheric air, and from external violences; moreover, the circulation being easier, the congestion is less intense. But how is this reduction to be performed? It has been recommended to grease the hand previously; evidently the precept was not given by a practitioner, these tumours being themselves so slippery as to render it necessary to wipe them perfectly dry with a towel. In other respects, the rules laid down in similar operations ought to be followed; thus the parts which have been protruded the last must be reduced the first, &c. If the patient experience violent tenesmus, you must endeavour to draw his attention to other objects, and scold him if necessary, to cause him to cease his efforts. The reduction obtained, a bandage must be applied, in order to prevent their protruding again. A few hours after, the patient generally feels greatly relieved; but sometimes diarrhœa comes on, which may cause the tumour to protrude again, and necessitate reduction to be performed a second time, and appropriate remedies to be administered against the intestinal flux.

Let us now examine the best mode of treatment for chronic hæmorrhoids. They cause little or no pain; if they protrude when the bowels are acted upon, the patient easily reduces them himself; they offer no ulcerations nor indurations. In these cases most surgeons perform extirpation, without reflecting on the danger which may follow this operation; for it must not be forgotten that it sometimes gives rise to very serious accidents. I never operate on similar occasions; and am convinced that a surgeon who cures without having recourse to the knife is far more useful than the most brilliant operator. I strive to diminish the size of the hæmorrhoidal tumours without employing the bistoury. A mild diet, gentle exercise, large or small venesections, as needed, produce generally an amelioration; when these fail, I direct on the parts affected a shower-bath of Bareges water, or pure water, at the temperature of 68° F., and an injection into the interior of the rectum. By this method of treatment, if I do not succeed in obtaining a radical cure, at least I soothe the patient's sufferings. If you have not the means of administering a shower-bath, and the hæmorrhoids are protruded, by passing slightly over their surface the nitras argenti, not so as to cauterize, but merely to excite them, you will often succeed in obtaining their reduction; after which, in general, they do not re-appear. When the hæmorrhoidal tumours are slightly ulcerated, I cauterize them with the nitrate of silver or the acid nitrate of mercury. If the ulcerations are inveterate, and accompanied by induration of the surrounding parts, an operation is necessary; but that generally employed, viz.: to seize the tumour with *Musieux pincers*, and to cut it off, may give rise to serious and even fatal hæmorrhage. The method I would advise in such cases does not present this danger, and is thus performed:—Two semi-lunar incisions, united by their extremities, must first be made on the tumour; this is then seized, so as to prevent the parts retracting as divided; the hæmorrhoid is next extirpated, not at once, as formerly, but by small incisions, so as to permit me to tie or twist the vessels as they are cut; finally, when it is nearly removed, I seize the pedicle between the forefinger and thumb, to be certain that no artery exists in its interior, and finish the operation slowly and carefully. A consecutive accident, very serious when it takes place, is *coarctatio recti.* In several cases Dupuytren was obliged to perform a second operation, in order to restore to the intestine its natural size, though he had employed all the necessary precautions to prevent this accident. During the first two or three days we must not introduce anything into the rectum; but as soon as the fears concerning the development of traumatic inflammation are over, we must have recourse to tents of large dimensions, and make the patient wear them constantly for at least three weeks, after which, for two or three months, he must introduce a large gum-elastic sound into the intestine every evening.

Prize offered by the Societé Medico-Pratique, Paris.—Give a *resumé* of the mode of development, the causes, and the pathology of *acute meningitis and encephalitis.* Describe, with the utmost care, the precursory and the accompanying symptoms by which the diagnosis, the seat, the nature, and the extent of the lesions of the brain and its membranes, or the prognosis, may be established. Indicate the best mode of treatment to be employed. Thus semeiological researches and therapeutical exactitude are the points which the society wish to be particularly attended

to. A gold medal, werth £12, will be awarded to the author of the best memoir. Manuscripts must be addressed, franked, before the 1st of January, 1845, to M. Lagasquié, Secretaire-General, place de l'Estrapade, No. 30, Paris.

On the Administration of Nitras Potassæ in different Diseases.—Dr. H. Desportes, M.A.M., &c., has just published a memoir on this subject, which may be considered as the completion of his article *Nitre*, in his "*Conspectus des Pharmacopies.*" The paper is the more interesting, on account of the recrudescence which has lately taken place in behalf of this substance. It was in 1814 that the author, after having read the remarks published by Gregory, employed nitre for the first time, though he did not adopt the doses recommended by that eminent practitioner, as well as by Nisbet (six drachms to one ounce in twenty-four hours), nor those of the Italian school (one to two ounces), because at the dose of an ounce it is poisonous. He begins with one drachm, two drachms, or three drachms, in two pounds of thin gruel, or infusion of the flowers of the malva sylvestris, tilia Europea, sweetened so as to mask the salt flavour of the remedy. The second day, the dose, if it is supported, must be increased to half an ounce, and afterwards to five or six drachms, which last in the generality of cases is the maximum. In administering it the following precautions must be observed: dissolve the salt as wanted, so as not to allow it to remain long in the liquid before taken; not to administer it in a syrupy mixture, it being borne then with difficulty by the stomach; allow no other drink, or any acid substance, to be taken at the same time, as this substance seems to be more efficacious when employed alone than when employed conjointly with other substances which act more or less on the system. The diseases in which this substance was administered are;—*phlegmon*, dose three drachms first, afterwards four drachms;—*acute pneumonia* (not very intense) and *catarrhus:* the cough was not increased, as remarked by Desbois de Rochefort;—*rheumatismus, arthritis, podagra:* the dose here given is from three drachms to half an ounce, though it was the following phrase of W. Nisbet which suggested it—"Especially thin gruel with nitre, so that six drachms or one ounce of the latter may be used in the twenty-four hours;"—*hæmoptysis:* it must not be mixed with a very sweet mucilaginous tisanne, as this increases the cough;—*molimen hæmorrhagicum:* whenever there exist symptoms indicative of a sanguineous congestion of some of the internal organs, this substance may be given in strong doses with much advantage;—*inflammation of different parts in a scrofulous subject*, even when followed by suppuration: dose, half a drachm, increased to one or two drachms;—*inflammatory dropsy and œdema, swollen ganglions, or tumors developed near an organ affected with cancer:* the following case is a proof. A patient labouring under cancer in utero, complicated with two ovoid tumours in the left fossa iliaca, of the size of a pigeon's egg, mobile, and at times the seat of lancinating pains. Towards the end of November, 1843, nitre was given, and on the 8th Jan., 1844, the tumours were no longer to be felt. As to the best time to administer this substance: the sooner the better, it being quite unnecessary to wait until the inflammation has somewhat subsided. The general phenomena observed in sixty-one cases were—diminution of the heat of the body; pulse and beating of the heart less frequent, and weaker; increase of the urinary secretion. Others are less constant, such as nausea; borborygmus; colics; frequent stools, at first feculent, then serous, and finally mucous; epigastralgia, more or less intense, with a red and dry condition of the tongue. In some cases none of these symptoms occur, the digestive organs remaining in their normal state. It may, therefore, be said, with some restrictions however, that its action is to a certain degree analogous to that obtained by venesection. The various symptoms of the above-mentioned diseases do not disappear with equal rapidity; thus the heat and the swelling generally yield after thirty-six or forty-eight hours, but the pain persists much longer; and it is not extraordinary, in cases of arthrodynia, to see other articulations become painful, but not swollen. The fact of the disparition of the pain the last, proves that nitre acts much slower and with less power on the phlegmasiæ of the nervous system, and seems to show that the opinion, which places the seat of podagra and rheumatismus in the ramusculi of the nervous system, is correct. Other important remarks may here be made; 1°, young men, and even adults, when suffering from acute rheumatism or gout, are often affected with epistaxis; but the blood is of a darker colour, not so warm, and more aqueous. It is to be hoped that some observer, accustomed to microscopical researches, will examine such blood, in order to discover the changes to which it has been subjected. 2° Are the shivering fits observed in such cases to be attributed to the disease, or to the action of the remedy, as the Italian school affirm? It is impossible in the present state of medical knowledge to say which opinion is exact. 3° In general, when the patient is under the influence of this substance given in large doses, the urine is remarkable by its limpidity, its transparence, and especially by its pale sea-green colour; its constituent parts remain to be decided by chemical analysis. 4° The abundant warm sweats which take place are caused by the disorder, not by the remedy. 5° Another important question remains to be solved, viz.: the mode in which nitre produces resolution of the local affection and of the general symptoms. It is not by the intestinal secretions, because, when the digestive organs are irritated, so as to give rise to copious evacuations, the curative effect of the nitre does not take place. Neither is it by the urinary secretion, because the amelioration takes place generally in the space of one or two days, whereas the increased flow of urine does not come on before three or four days.

Academy of Sciences. Sitting of the 25th of March. Baron Ch. Dupin in the chair. Books received. Philosophical Transactions of the Royal Society, London, 1843, Part. II.; Astronomical Observations of the University of Cambridge, by the Rev. Jas. Challis, M.A., Plumian Professor of Astronomy and Experimental Philosophy in the University of Cambridge, &c. &c., vol. XIII., 1840 and 1841.

Monograph on the Mexican Orchideæ. Memoir read by M. Richard, M.A.S., professor of botany at the School of Medicine, in his name and in that of M. H. Galeotti, naturalist and member of the Mexican Institute, &c. The family of the orchideæ has of late been the object of important researches, for whilst Linnæus, in his *genera plantanum* (1743) described nine families, and Antoine Laurent de Jussien (1789) thirteen, Mr. Endlecker, in his genera (1836 and 1840), mentions not less than 342. Such an augmentation in the number of families proved that a similar one exists among the species, which may be reckoned at 3,000, whilst Linnæus reckoned only 100. This result is principally owing to the researches of Mr. Lindley, published in the "Botanical Register," and in his genera and species of orchideous plants; a work which ought to be perused with attention by all who occupy themselves in studying the peculiar characters of these plants.

In Mexico they are to be met with wherever there is sufficient moisture for their growth, and in this respect the country may be divided into, 1°, *Warm region.* Temperature from 68° to 77° F., extending from the coast to 3280 feet above the level of the sea. Among the various plants met with in the ravines of this region are, the Schomburgkia tibicens; the Oncidium with cylindrical leaves; the Mormodes pardina; the chysis aurea; the cystopodium; the Habenarea spathacea nob; the H. lactiflora nob; H. Gonthieva oblongifolia nob; H. spiranthus saccatus nob; numerous plants of the genus Epidendrum, viz.: Ep. Stanhopia aromatica and staccata; Ep. maxillaria aromatica; Ep. ancipiticaillon nob; Ep. rigidum, &c.; the pleurophallis microphylla nob; the oncidium sphacelatum and stramonium; the Cælia Bouerana; the Galeottiana grandiflora nob; the ponera striata. 2° *Temperate region*, from 2,952 feet to 5,904 and 6,560 feet above the level of the sea, are found; first, the numerous species of Stanhopia; the Brassavola glauca; the cyrto-chilum maculatum; the Epidendrum radiatum; Parkinsonianum, &c; the Cypripedium Irapæanum; the Habenaria spathacea nob; the corallorheza Mexicana nob; the spiranthe aurantiaca, saccata and violacea nob; the blesia coccinea. Somewhat higher (temperature being from 59° to 62·60° F.), all the beautiful species of Stanhopia, whose flowers are about 7·874 inches in diameter; the Trichopilia tortilis and T. galeottiana nob; the Isochelus lacti-bracteatus nob; I. crassoflorus nob, and I. evelyna capetata; maxillaria deppii; the densa hematochelum nob; the Epidendrum lendenianum nob; E. glaucum, polypulbon, Candollii, discolor nob; noeturnum and rhynchophorum nob; the oncydium ornithorhynchum and incurvum; the odotoglossum hastatum, maculatum, and Lindleyi nob; the stelis mirantha; the pleurothelus microphylla and spathula nob; the physoscphon ochraceum; the Dichea squarrosa and echinocarpa; the Galeoglossum Prescottioides nob; the cranichis glandulosa nobilis; the physuria brachyceras nob. 3° *Region of the sarsaparilla or jalap*, from 5,904 to 7,216 feet above the level of the sea, are found the Epidendrum viscidum; lactiflorum nob; ligulatum, ledifolium nob, and lineatum nob; the Barkeyria, Lindleyana, and Skinnerii nob. This region on the western side differs somewhat from the preceding; the only orchideæ met with in both are the Epidendrum cochleatum and radiatum; the others are the Bletia coccinea and seemda campanulata; the spiranthes aurantiaca; the habenaria lactiflora, and galeottianum; the Epidendrum viscidum; the malaxis myeerus nob; the mexillaria cucullata and variabilis; the physosephon carynatus; the Isochilus lynearis; the Bletia reflexa; the Schomburgkia Galeottiana nob; the lætia grandiflora; the Epidendrum pulchellum nob; ramosum, ledifolium nob; the gongora galeottiana nob; the lælia pedunecularis; the Bletia purpurata nob; the Stanhopea; the malaxis galeottiana nob; the spiranthes pubens and orchioides; the Habenaria adenantha nob; brevilabiata nob; chlorantha nob; and phalanthera propinqua nob. 4° *Region of the cactus.* The only orchideæ to be met with are some species of the lælia and spiranthes. In these regions the mean temperature is never below 60—80° F. 5° *Cold regions* may be subdivided into three others. A, *inferior*, from 7,644 to 8,956 feet above the level of the sea, are found the spiranthes chloreaformis nob and pubens nob; the lælia furfuracea and albida; the polystachya cerea; the Isochilus linearis; the Epidendrum vitellinum. B, *middle* (terra fria of the inhabitants), from 8,956 to 10,824 or 11,480 feet above the level of the sea, mean temperature from 50° to 59° F. oriental side. The Epidendrum crubescence; the plenrothallis aurea nob; lælia macrostachya; the cerpaphillum spicatum; the Epidendrum guttatum nob; the malaxis myeerus nob; the crallorrhiza bulbosa nob; the Epidendrum vigatum and varicosum; the Epidendrum arboreseens and ledifolium nob; the Govenia capitata et superba; the spiranthes galeottiana; the cattleya citrena; the Epidendrum ligulatum, arbusculum and prunosum nob; the sesyenchufolium nob; the odontoglossum cærulescens nob and galeottianum nob; the oncydium graminifolium; the allamania punicea. Most of these are to be met with from 8,300 to 9,284 feet above the level of the sea. On the western side, the odonto glossum membranaceum; the lælia albilla and furfuracea; the Epidendrum crubescens; gullatum nob; costatum nob; pulchellum nob; lubulatifolium nob; the pleurothallis mesophylla nob; the spiranthes pubens nob; the oncidium macropterum nob and rariflorum nob. In the forests of Michoacan, the spiranthes cinnabarina nob; the Habenaria aculiflora nob; the malaxis Galeottina nob; alamenia punica, and most of the species described by La Llave and Lexarga; somewhat higher the govenia superba; the corallorheza Mexicanus, and the pleurothallis violacea. C, *Superior*, from 11,480 feet to the extreme limit in which the phanerogamiæ grow. The last orchideæ to be met with are the Habenaria prasina nob; the platanthera nubigina nob; the spiranthes ochracea nob; the malaxis gracilis nob; the platanthera longifolia nob; the odontoglossum nebulosum and the Cuttleya citrina are met with at 10,496 feet above the level of the sea; the odontoglossum membranaceum, the oncidium graminifolium, and the Epidendrum virgatum and varicosum disappear at 9,840 feet above the level. Finally, none exist from 12,464 to 12,892 feet above the level of the sea. Thus it seems that in

the eolder regions of Mexico the orchideæ are almost as abundant and as beautiful as in the temperate.

On Ioduret of Potassium in Mercurial Tremor and Saturnine Disorders.—Messrs. Nathalis Guillot, M.D., physician to the Hospital *de la Vieillesse (Hommes)*, and L. U. Melseus, addressed a joint letter, in which they state that they administered the ioduret alone, allowing the patient to follow his ordinary diet—that the dose is from one drachm to one drachm and a half in twenty-four hours—that from six and a half ounces to ten ounces were sufficient to obtain a eure, radical in many cases.

Dr. F. A. Durand, of Lunel, addressed a memoir on the electric qualities of the blood.

Academy of Medieine, sitting of the 26th March.—M. Ferrus in the chair. Dr. Robert writes to request his name might be placed on the list of candidates for the vacant seat in the section of operative medicine, and Dr. Mige to request the Academy to change his title of correspondent to that of *Assoeié Libre*. The president informed the Academy that the six years stipulated by M. d'Argenteuil, in his will, will not be ended before the 21st September, 1844, consequently memoirs will be received up to that period; and if the authors of those already sent in wish to make any additions, they will be given back on demand. M. Nacquart proposed annulling the nomination of the commission for this prize, and naming a new one when the concours are closed, it not being proper that the names of the members composing the eommission should be known before-hand. Adopted. (Vide *Medical Times*, Vol. IX., No. 222, p. 162.)

The discussion on fibrous tumours of the mammæ resumed.—*Professor Roux:* Since the commencement of this discussion, and after hearing the opinions emitted by the different speakers, I feel eonvinced that our honourable colleague has modified his opinions, and that he is not so positive as when he read his memoir, and this may be inferred from several phrases in his subsequent speeches. But what I purpose answering to-day are the opinions announced, in two previous sittings, by Messrs. Gerdy and Hervey de Chegoin. Notwithstanding the talent of the former, I do not think his speech tended in the least to elucidate the question, but, on the contrary, it raised further doubts. He stated that though there existed benign tumours in the breast, still he considered the name of *fibrous* tumours not exact, and proposed instead that of *eellulo-fibrous*, complicating the question by changing the name; and that the diagnosis of these tumours was not so difficult as supposed; on the contrary, they were easily distinguished by certain symptoms which he exposed. This I eannot admit, as I do not think it possible to diagnosticate *a priori* the precise nature of a tumour, it being only by anatomical examination that it can be decided. Scirrhus may offer all the eharacters of a benign tumour, and *vice versâ;* in some cases it is impossible to assert that it is solid, or that it contains a liquid. [Here Professor Roux quoted several observations from his practice, in which cysts were taken for solid tumours.] Fifteen years ago there were few surgeons who had not operated for sarcocele on patients affected with hydrocele. I was once called to a person residing at Ghent, supposed to be suffering from sarcocele, but, on examining the tumour, I found it to be simply a hydrocele. That scirrhus is no more a eancer than phlegmon an abscess: the bare mentioning of such an opinion is sufficient to refute it;—that the operation is not always necessary, as the disease is not so dangerous as to become fatal, and because the least operation may be productive of serious accidents. This I readily admit; for how often do we see venesection give rise to phlebitis; the sulphas quininæ and other remedies not supported? A simple foot-bath produced, in a case I witnessed, gangrene of the extremities in a child, and yet we daily have recourse to these and other operations, not only to save life, but likewise to relieve the patient of an infirmity or a deformity, and to prevent the development, at a future day, of serious accidents. On this account, as it is impossible to say whether a tumour in the breast will or will not degenerate, the sooner it is removed the better. I have at the present moment a patient who consulted me on account of a tumour in the fossa iliaca, deep-seated, hard, mobile, renitent, easily limited, evidently not in the peritoneal cavity, though probably touching it, and who asked me whether it was not a fibrous tumour. I advised him, ere anything was done, to take other advice, and see the learned author of the memoir under discussion. M. Hervey de Chegoin goes still further, for he says that recent cancers are more liable to relapse than old standing ones—that cancer is always produced by a general, not local, eause—that the hopes of obtaining a radical cure are greater when the cancer has lasted a long time. But let me ask what is to be understood by old standing cancer, and at what period ought it to be considered as arrived at a fit time to be operated on, and whether it can be denied that cancer is sometimes produced by an external cause? Were the opinions of our colleague adopted they would be productive of very serious accidents, and change a very simple operation by delay into a dangerous one. The parts on which operations are generally performed for cancer are—eye, nose, breast, tongue, lips, and testicle. Now, ought we to wait when the eye is affected with encephaloides, until it becomes old, when we know the extraordinary tendency of this disorder to invade the neighbouring parts, not remaining, as in sarcocele, perfectly isolated; or ought we to wait until the eancer of the tongue has affected the whole organ, rendering thus the operation more dangerous and more difficult? Evidently not. I therefore repeat, the sooner you operate the better. These orders of facts probably caused M. H. de C. to form the opinions emitted by him; because old standing cancers, when removed, did not relapse; but would this have taken place if performed at an earlier period? I think not; because recent cancer often relapses; true, but had the operation not have been performed, would not they have caused death? and because cancer sometimes disappears spontaneously; this I never saw except when gangrene had affected it.—*M. Husson:* Though I am aware of the importance of the present discussion, still, as it prevents all other affairs being attended to, I propose closing it immediately. —*Professor Velpeau* thinks that the orators inscribed who have not yet spoken, or have been heard only once, and who are already on the list, ought not to be prevented from speaking.—*M. Desportes* asks to be heard, his opinions being new, and, in his opinion, important.—The Academy consulted, and decided that the discussion should be closed immediately, reserving to Professor C. the right of replying.—*Professor Cruveilhier:* The opinions announced by me in my memoir being the result of long study and deep reflection, I cannot receive the congratulations addressed to me by several honourable colleagues, on account of the concessions they supposed I was disposed to make; on the contrary, I maintain all I advanced in my memoir, and which I will here repeat. 1° *Fibrous tumours of the mammæ never degenerate*; they may undergo a *ramollisement*, become osseous, cartilaginous, penetrated with liquids, but never degenerate. Boyle relates a case of cancer containing a fibrous tumour in the centre unchanged; and M. Nelaton, in a recent work, relates a similar case. 2° *The mammæ may be the seat of fibrous tumours.*—This no one has denied. 3° *Fibrous tumours are very frequent.*—It is only by a statistical table (as yet there is none) that this question can be decided. 4° *Fibrous tumours may be distinguished by certain signs.*—The diagnosis, in the opinion of most of the orators heard, is impossible; this I cannot admit, and though I do not think it always possible, still it is so in the generality of cases; the reason of this difficulty is because their pathological anatomy is so little known. 5° *The extirpation optional.*—It has been said that the operation ought to be performed as early as possible, to prevent accidents; but as fibrous tumours never degenerate, it is not necessary; and, in truth, it is not on this account that surgeons operate, but because the diagnosis is impossible. As to the tumour presented by M. Amussat, I do not think it is a wen, but an erectile tumour; and as to the patient of whom Professor Roux spoke, I consider the swelling to be an *osteo-chondyle* arising from the internal surface of the pelvis.—*M. Bousquet* requests that the speeches of those who are inscribed might be inserted in the bulletin.—*M. Segalas* added, only those given in immediately. This proposition, after some further remarks from Messrs. Velpeau, Gerdy, Delens, and notwithstanding the opposition of M. Lisfranc, was adopted.

GARLAND DE BEAUMONT, D.M.A., B.L., and S.
Honorary Physician to the Spanish Embassy.

TO THOMAS WAKLEY, ESQ., M.P.

SIR,—As all medical men have a personal interest at stake at this important period, it becomes both a right and duty to freely canvass everything which bears upon the subject. I shall, therefore, make a few observations upon your speech delivered at the Crown and Anchor on Monday last, March 25. It was a most impotent reply to the charges against you, of neglect of parliamentary duty, contained in my letter of the preceding week.

You ask—"Have we yet, as a professional body, a roof over our heads, a place that we can call our own, and wherein we can discuss the affairs of the profession? Out of the nineteen institutions in England, Ireland, and Scotland, granting degrees, diplomas, and licenses, there is not one the governing authority of which you can meet on equal terms." Let *me* ask—Why have you been so remiss as not to have convened or suggested such a convention of medical members since thirteen years ago? Was it want of power?—or want of will?—or both? and how, Sir, can the foolish and ill-judged broil of 1831 (four years before you became M.P.) be adduced, as you adduced it to the meeting, as a proof of your efforts to bring about medical reform? Had you, or could you, have spoken of your real efforts in the House, in *that* there would have been some sense. As it now stands, it is a weak attempt to extenuate your neglect of duty.

Do not unhandsomely say that the ill success is attributable to the apathy of the profession; for, during your long hybernation in the House, in the session 1841 there were, I believe, at least two hundred petitions presented with about five thousand signatures; and this, too, without your calling a single meeting, or even suggesting one. This *present* movement originated with a suggestion in the columns of your rival journal, which, owing to its merits, has superseded the "Lancet." The "Lancet" was dying from asphyxia; something must be done to rally it; there must be some excitement devised; another bubble must be blown; and by engrossing, through the instrumentality of your *local* influence, the committee—and converting it into another "Lancet" job, and turning out those who opposed your dictates and censured your conduct, something might be done!

Had you done your duty since 1835, we should not now have you confessing in 1844 "that we have not a college for the redress of our grievances," a governing representative body, or "a roof of our own." You have attempted nothing, and consequently done nothing—save talk about the one faculty—and so created in many of the members of the House a sense of abhorrence against medical reform.

You say—"Ought any individual member of the House of Commons to be subjected to complaints *because he has not submitted a measure to the legislature on his own responsibility?* If I had presented such a Bill, it would have been said that I had done so only for the purpose of promoting my own *popularity* with the profession—my own interests rather than the success of the cause of which I had avowed myself the advocate; but I have preferred risking for a time a portion of the good opinion of the profession rather than place the interests of my brethren in jeopardy." This is rank nonsense; why you should be afraid of "promoting your popularity," if popularity were to be obtained upon just and honorable grounds, I cannot conceive; such a reward proves generally an *incentive* with individuals to honorable undertakings; but *the M.P. for Finsbury* will not do *right*, if right has the misfortune to be "popular!" Again, if you never intended to submit "a measure to the legislature on your own responsibility," why have you *talked* about it, and why have you formally given

notice of a One Faculty Bill in the House, August 10, 1841.

You know, moreover, that the "great majority of the profession *are* agreed," and that the adoption of the representative principle, not only in the college, but in all the corporations, is the first and only grand step to counteract "medical misgovernment." No person conceives (as you seem to imply) that "if this were granted to the College of Surgeons, all would be right;" but giving the representative form of government to our institutions would certainly lead to ulterior results, which would infallibly "get all right."

You say, "We said that after introducing election rights into municipal corporations, you cannot deny it to men well educated as ourselves. They respond, 'We don't quite understand your profession's sentiments, but, as you demand it, we will grant you a charter, and confer the power to the council of granting elective power to all the members.'"

What, Mr. Wakley!—you having been nearly ten years in the House, and the members of Parliament still kept in such utter ignorance in regard to medical matters! A stronger case you could not possibly make out against yourself.

You well know that the time for introducing "a Bill" of your own or of the profession is now clean gone by; your dereliction of duty has lost that chance to the profession.

No Bill will now succeed in opposition to Sir James Graham's, considering the majority that the present ministers can command in the House.

The only thing that can now be done is to introduce any necessary amendments into his Bill. But how can we suggest those amendments to you, or to any other M.P., without knowing what the Bill is? Sir James Graham has promised us time to consider the Bill; but I much doubt if there will be a sufficiency of time afforded us, if it is to be carried this session, as it will now be introduced some uncertain length of time "after Easter."

You know its details; and the only information we can extract from you respecting it is, that it will destroy the Apothecaries' Company. Why not have come honestly and readily forwards, and informed the profession of them, so as to have digested the necessary amendments? By keeping us hoodwinked, is it proper conduct towards those to whom you owe everything, and whose servant you profess to be?

You can throw medical reform prostrate by talking about another Bill at this juncture, and you can thereby allow Sir James Graham's Bill to pass triumphantly through the House unaltered.

G. D. DERMOTT.

Charlotte-street School of Medicine.

PENCILLINGS OF EMINENT MEDICAL MEN.

PROFESSOR JEFFRAY, OF GLASGOW.

The buildings of the ancient University of Glasgow present in front a dull and sombre appearance. On entering its massy but low gateway, the first court preserves the appearance of antiquity, and is chiefly devoted to the halls for the accommodation of the professors themselves, and the classes of theology. In the second court the buildings are of an irregular and mixed character, and are occupied by the classes of philosophy and the medical classes, with the exception of a large and elegant hall used as a chapel, and for the general meetings of the University. The third court is spacious, and nearly open on two sides, except by a light iron railing, through which the verdure, or it may be, the snow and trees of the college garden, are seen. This court is terminated on the east by the Hunterian Museum, a beautiful and classical structure, but under its present management more ornamental than useful, although its contents are in many departments extremely valuable.

> Full many a gem of purest ray serene,
> The dark unfathomed caves of ocean bear.

Let us suppose a student ardent in his hopes of rising high in the noble science of medicine, entering on a morning of the first Monday of November, the portals of this seat of learning: he is hurried along amid crowds of red-gowns, (the dress of the students of philosophy) and coats of all colours to the south east corner of the second court, towards the class-room of anatomy—the science which he has been urged to cultivate assiduously as the foundation of all his hopes. He ascends a roomy stair-case filled by youths from various climes, a few colonists, some English, many Irish, but more Scotch; some grave, but mostly laughing, joking, and recognising old acquaintances, and is ushered, or rather carried by the pressure, into a large and handsome theatre. At its door stands a stout greasy looking old gentleman, who is supposed to act the part of Cerberus, but who, in reality, gives himself very little trouble as to who goes in and comes out; he is more pleasantly employed exchanging jokes, or, if opportunity serves, a pinch of snuff with the former year students, who address him familiarly as John. Such of our readers as were educated at the Glasgow School will remember this old man with a somewhat sanguineous addition to his name. Old John is now in his grave—or, at least, was laid in it; whether he was permitted to remain in a place, whence he had been very obliging for a long period in rescuing others, may be doubtful.

Our neophite has now got jostled into a seat; and when the confused Babel of tongues—friend calling to friend across the room, Jack, Tom, or Harry, has in some degree subsided,—he gazes with delight and admiration on the lofty and well-planned amphitheatre, mixed, perhaps, with some degree of awe on casting his eyes on what may be termed the stage. The table in front is covered with skulls, and other relics of humanity, while on the shelves behind are ranged bottles filled with anatomical preparations of various kinds, some of them uncouth enough,—and should our student be a reader of Scottish poetry, he may be reminded of Burns' lines:

> Coffins stood there like open presses,
> That shawed the dead in the last dresses.

Nor will this feeling be diminished when, on glancing his eye towards the cupola, he observes dangling mid air five skeletons, which he is given to understand are those of murderers, whom, although the judge condemned them to be hanged until they were dead, the professor of anatomy has taken the liberty of suspending in perpetuity. The worthy John above mentioned was in his day an authority on these subjects, and used to give the history of every one of them with the minuteness of the Newgate Calendar; "that one, however," he would quaintly say, pointing to one smaller than the rest, "is not a murderer, but a poor Chinese body that we took the loan of." Our student, however, has been warned of this, and little moved, congratulates himself on the excellent preparations made for his instruction.

But there is a sudden hush in the room, the college bell ceases to sound, and it is time we should introduce to our student and the reader Dr. James Jeffray, professor of anatomy, physiology, and surgery. A side door is opened and there enters, with slow and stately step, as fine a specimen of the old gentlemen as could well be any where found. The snows of age have descended upon his head, but his countenance is ruddy and healthful, his attitude erect, and his gait firm. He is in full dress, with his academic gown, and holds in his hand a small portfolio. He advances deliberately, as if with measured step, up to the table, and bows formally but gracefully to his audience, who receive him with cheers. He is attended by a pale gentlemanlike young man, looking as grave as he can, Dr. Thomas Marshall, his nephew and demonstrator, who takes his place near him.

Dr. Jeffray having adjusted himself in his seat, and put on his spectacles, opens a portfolio and exhibits papers dim with age, and which have evidently been his long cherished companions on such occasions for many years.

He reads in a slow monotonous voice, and seems determined not to over-exert his lungs by speaking loud. The consequence is, that of the large audience, not one half hear him distinctly, they begin to talk to each other, and thus prevent those who might hear from doing so. Some who have got near the chair, and do hear, complain that they do not understand; and others who do profess to understand, almost insinuate that it is of little consequence whether they do or not. Those next the door begin to slip out, and the rest yawn till the college clock strikes the hour for deliverance. Our student finds himself disheartened, but renews his courage by hoping that every day will not be like this. At all events he came there to take a degree, and must hand over his three guineas for the ticket, if not for the lectures, and the doorkeeper, who never minds the door, must also have his *solatium*. Having thus got his lecture out, and his fee in, the learned gentleman mounts his carriage, and drives to his country house, far away from the fœtid air of dissecting rooms, and thanks God that the hard work and the fresh air together, will give him an appetite for his dinner. Next day it is much the same, but the professional gown is not called into requisition. When the introductory matter is over, and the bones come to be described, it is a discourse of dry bones indeed. As a demonstrator, Dr. Jeffray was quite inefficient—the dullness of his manner caused weariness and drowsiness, and its confusion rendered drowsiness of little consequence.

Most of his physiological disquisitions are altogether antiquated, although many of them display considerable research and ingenuity. He must surely have exerted more energy, and exhibited more diligence in the early part of his career, but no one seems to remember the time when.

Dr. Jeffray has held this very important and lucrative office for upwards of half a century, and has, perhaps, given out more *tickets* of anatomy, than any lecturer now living. Before the general peace, his classes were necessarily numerous, and at that time, and until lately, every student required two courses of anatomy.

The manner of his appointment is lost in the mists of antiquity. He was originally a private practitioner in Paisley, whence he emerged to assist the late Dr. Hamilton in his old days, and it was probably by that gentleman's friendship, aided by some political influence, and the young lecturer's own appearance and manner, that he found himself at an early age in possession of so valuable an appointment. This seems to have been the summit of his ambition, and finding himself in a comfortable state of independence, he does not seem, through his long life, to have ever attempted to make any improvements in the important science he was appointed to teach, nor even to introduce into his scheme of instructions the numerous improvements of his contemporaries, for during this period the progress of anatomical science was rapid. The only work we are aware of, that he ever gave to the press, is a small volume on the Heart, published about ten years ago, and which is not likely to survive him.

(To be continued.)

TO CORRESPONDENTS.

To give our readers as much scientific matter as possible, and to succeed in discharging ourselves of some of our arrears of correspondence, *we appear (for the last time) without a cover. By this arrangement, though we lose the pleasure of giving for* this *week our ornamental frontispiece, our readers gain six columns of reading matter. The advertisement page being struck off, the index and title-pages can be at once transferred to Vol. IX., and the first number of the new volume will be found without a particle of extraneous matter to unfit it for binding. Gentlemen who would keep the numbers clean, and yet have the constant convenience of as easily referring to them as to a volume, will do well to order of a bookseller one of the* Medical Times *portfolios. The prices are 3s. 9d. and 5s.*

Dr. Curtis *has been anticipated by the apostle of the school, who, we think, has exhausted the subject. "The disciples" act in marvellous "unity," though after an "intermittent" type. Dr. Laycock got us a score of communications; Dr. Copland promises to be scarcely less successful. This notice must suffice for all. The publisher takes charge of the order.*

Jus *writes us an indignant letter, calling upon the committee at the Crown and Anchor to dissociate themselves from Mr. Wakley, and devote themselves to a course of action that may win some confidence on the part of the profession.*

Two lectures will be delivered on tests for arsenic by Dr. M. Rosenthal; the first on the 12*th, and the second on the* 19*th of April inst., in the London Mechanics' Institution. We recommend medical jurists to avail themselves of the opportunity afforded.*

A ci-devant Author *is thanked for his letter, which, though witty, we cannot insert without authentication. We are sorry to hear of such foolish antipathy in a medical bookseller, and, if we get our correspondent's name, will not hesitate to lay the matter before the profession.*

Medical Protection Society.—*We give the following with the sole remark, that if there had been a decent report in the journal so purchased, the objection of our correspondent would not be so telling:—"The committee of the pseudo-called Medical Protection Society, or, more properly speaking, Mr. Wakley, intends sending to each member of both Houses of Parliament a copy of the* Lancet, *which is to be paid for out of the subscription funds of the above society, at cost price, viz.: 4d. each copy. This is certainly a strange and unusual way for Mr. Wakley to puff off his medical periodical. Had he (as he pretends to have) the real interest of the society at heart, apart from all selfish and disinterested motives, why could he not send a mere report of the meeting, which might be printed for a penny or so, and thus save the society some £1 or £5, and each member of Parliament the trouble of wading through the tedious pages of his work? But it is easy to see Mr. Wakley's motive. He cares no more for the profession at large, than he does for the maintenance of a character of strict and impartial integrity; and in forwarding his paper to every member of either House, he regards merely its popularity and his own individual importance.*—Argus."

Remonstrance to the College.—*Mr. Davis, of Manorhamilton, has favoured us with the following letter:—"Your unwearied advocacy of the rights of medical men, and the consistent opposition you have given to the new charter of the Royal College of Surgeons of England, claims the peculiar gratitude of every member of that College. I have read with much satisfaction the outline of a remonstrance against that charter in your last number; it is one which, I feel confident, every member would be pleased to have an opportunity of attaching his name to. Could we not adopt the plan which the Conservatives of this country did at the time they abandoned the great Protestant meeting at Belfast, namely, to have a number of these remonstrances printed and sent to members of the College in different parts of the country (say one to each county), who would obtain the signatures of his brethren in his own neighbourhood, and then forward it to the next town for a similar purpose. The expense attending this plan would, I dare say, be trifling; but whether it would be preferable to holding a meeting in each county, to protest against the late innovations, I leave you to suggest.*—Thomas Davis, M.R.C.S."

A Surgeon *will see that he was anticipated. The motives and conduct of our correspondent were both what they should have been.*

Dr. Atkinson's *request has been attended to.*

H. W. W.—*The price list given was a list of prices of drugs in bond duty unpaid. The duties may be known by reference to Number* 235. *We never recommend one wholesale druggist in preference to another. Such a policy would be to make a mischievous use of the powers of the press, and turn it into a heavy curse to the tradesman overlooked. The wholesale druggist must, of course, have some profit after paying duty, &c.*

Mr. Sproule's *cases are in type, and will appear next week.*

The Report of the Canterbury Dispensary, Mr. Braid's communication, and several other papers, have been received.

A Looker-on *writes to us in angry accents because we asserted that there were as many as* 500 *present at the late meeting. He is quite certain that there were not more than between* 300 *and* 400. *The gentleman who was present for us, tells us that he not only sought and got the opinions of others, but that he counted those present with great care. Twenty benches were partially occupied, and giving sixteen to each, they made out about* 300. *At the sides there were about fifty more, and about as many on the platform, making the meeting very close on* 500. *We do not dislike our Correspondent's charge. The journal that betrays the partisan about* facts, *betrays its duties. We wish our readers to know that we will tolerate no mis-statement, even in our own favour. We were charged with under-rating those present at the first meeting; we are now charged with over-rating those present at the second. On both occasions then if we have erred, we have erred against our own predilections—the right side.*

"Anti-Wakley," *declined. We are as disgusted with the subject as our readers must be tired. Nothing but necessity shall make us again soil our pages with the "name."*

TO OUR READERS.

The new volume of the Medical Times *this day commences, when the first of a valuable Course of Lectures on Clinical Surgery, by Sir Benjamin Brodie, appears. Contributions have moreover been promised by the celebrated MM. Dumas, Cruveilhier, Amussat, Flandin, Danger, G. J. Guthrie, F.R.S., Robert Fergusson, F.R.S., Benjamin Phillips, F.R.S., Wharton Jones, F.R.S., Charles Clay, M.D., George Pilcher, Esq., Samuel Lane, Esq., Rutherford Alcock, Esq., Henry Hancock, Esq., and by several other eminent British and Continental Savans.*

The peculiar and distinguishing feature of the Medical Times *is its* complete Abstract of everything worth mention in the Foreign and British Journals. *This will be preserved in all its fulness and integrity, by the occasional addition of* 24 *closely-printed Quarto Columns to the* 72 *Quarto Columns usually published,* and this without additional expense; *and as each number of the new volume will come out in a handsome separable cover, enabling the Journal to be bound free of advertisements, the Profession will thus have, for about a Guinea annually, a handsome work of Two Volumes, containing the newest and most valuable scientific information, and extending to* 4000 *closely-printed Columns,* or about 40 ordinary Octavo Volumes.

The other matters published in the Medical Times *consist of Clinical Lectures by Schönlein, of Berlin, the first of which Course appeared March* 2; *Lectures in Medicine by Dr. C. J. B. Williams, F.R.S.; Lectures on the Eye, by T. Wharton Jones, F.R.S.; Papers by Raspail; Ophthalmic Lectures by Mr. Guthrie; Hospital Reports (Weekly); Reviews of all New Books; Pencillings of Eminent Medical Men; Weekly Correspondence from Paris; Weekly Gossip; Editorial Comments; Original Communications; Wholesale Drug List (once a Month); News, &c. &c. &c.*

This is an opportune moment to begin subscriptions.

THE MEDICAL TIMES.

Saturday, April 6, 1844.

Do quod adest; opto quod abest.—Buchanan.

From a very general feeling that the most contested question of Sir James Graham's new Bill, will be its annihilation of the Apothecaries Company as an examining and licensing body, a great anxiety has arisen as to the nature of the provisions of the Apothecaries' Act of 1815, and we propose this week laying them shortly before our readers.

The Act is described as "for better regulating the practice of Apothecaries throughout England and Wales," and obtained the royal sanction on the 12th July, 1815. The first clause recites the Charter of James the First to the Apothecaries, and confirms it, subject to such alterations as the Act may subsequently make. The second and third have reference to the visitations of all shops of professed Apothecaries—examining their wares, confiscating them if pronounced noxious, and fining the owner five pounds for the first, ten for the second, and twenty for the third or subsequent offence. The Apothecaries examining their drugs must, by the fourth clause, have been ten years in practice. By the fifth, any Apothecary compounding medicines NEGLIGENTLY, fraudulently, or unfaithfully, from a physician's recipe, is made liable to fines of five pounds for the first, ten for the second, and loss of certificate for the third offence. The sixth, seventh, and eighth clauses have reference to the constitution of the Company, as Master, Wardens, and Assistants, and validity of their public acts.—9. The Master, Wardens, and Assistants are to choose twelve apothecaries of at least ten years' standing, as Examiners. —10. The Chairman is to give a casting vote. —11. They are to swear, on appointment, to "act fairly, faithfully, and impartially, without favour, affection, prejudice, or malice."—12. The Examiners are elected but for one year, but are re-eligible.—13 Provides for deaths.

By clause 14, none are allowed to practice as Apothecaries except those who have the Company's license, and the nominal age of receiving the license is twenty-one.—15. Testimonials of study may be required. A notice of intention of seeking examination is to be given to the Company's secretary by the candidate; young men wishing to act as apothecaries' assistants, must either have served five years' apprenticeship, or undergo a special examination to test their fitness; and five Examiners, apothecaries, may be appointed in any county or town beyond thirty miles of London, for the purpose. The certificates of Apothecaries are to be charged 6*l.* 6*s.* for the country, 10*l.* 10*s.* for London; of assistants, 2*l.* 2*s.*—20. All NOT ACTUALLY PRACTISING on the 1st of August, 1815, or found practising as Apothecaries subsequently, without certificates, are to forfeit twenty pounds. Assistants so offending, to forfeit five pounds. This is so important a clause that we give it verbatim:—

XX. And be it further enacted, That if any Person (except such as are then actually practising as such) shall, after the said First Day of *August*, One thousand eight hundred and fifteen, act or practise as an Apothecary in any Part of *England or Wales*, without having obtained such Certificate as aforesaid, every Person so offending shall for every such Offence forfeit and pay the Sum of Twenty Pounds; and if any Person (except such as are then acting as such, and excepting Persons who have actually served an Apprenticeship as aforesaid,) shall, after the said First Day of *August* One thousand eight hundred and fifteen, act as an Assistant to any Apothecary to compound and dispense Medicines, without having obtained such Certificate as aforesaid, every Person so offending shall for every such Offence forfeit and pay the Sum of Five Pounds.

21, 22, 23, 24, 25. To recover charges at law, due qualification must be shewn. Rejected candidates may apply again. Yearly lists of licentiates are to be published. Monies got by certificates or fines to be spent *a la discretion.*—26, 27, Give the way to prosecute offenders—and 28, which is one of the most important in the Act, runs thus:—

XXVIII. Provided always, and be it further enacted, That nothing in this Act contained shall extend or be construed to extend to prejudice or in any Way to affect the Trade or Business of a Chymist and Druggist in the buying, preparing, compounding, dispensing and vending Drugs, Medicines, and Medicinable Compounds, wholesale and retail; but all Persons

using or exercising the said Trade or Business, or who shall or may hereafter use or exercise the same, shall and may use, exercise, and carry on the same Trade or Business in such Manner, and as fully and amply, to all Intents and Purposes, as the same Trade or Business was used, exercised, or carried on by Chymists and Druggists before the passing of this Act.

The 29th clause saves the rights, whatever they may be, of the two Universities, and the London Colleges of Physicians and Surgeons; and the 30th limits all actions to a period of six months after the fact complained of, and restricts the laying of the action any where but in the countys where the matter questioned is alleged to have occurred.

On July 6, 1825, another Act was passed by the Legislature, called the 6 Geo. 4, c. 133, "to amend and explain" the one we have now so briefly abstracted. Its principal effect was to make "Assistants" of the Company eligible as Examiners, to relieve all Army and Navy Surgeons, or Surgeons in the Service of the East India Company, not Licentiates, from the penalties to which they were subjected by the preceding statute—to make the Apprentices of Surgeons eligible to be examined—and to constitute the common seal of the Society as proof of the authenticity of the certificate. It was only, however, a temporary act; and, expiring in 1826, has never been renewed.

REVIEWS.

Introduction to the Study and Practice of Midwifery. By Wm. Campbell, R.N., &c. &c. and Alex. Campbell, B.A., Trin. Coll., Dublin, and B.M., Oxon.—Second Edition, Edinburgh.

It would appear to be a mere matter of course to set up as public lecturer, and write a general system of the branch of medical science one has undertaken to teach. We are positively inundated with *systems* in every department of medicine; like the sisters, in Ovid, all alike in the general, all varying in the minuter features: and, as the rule seems to be established, we must for the future reconcile ourselves to having as many books as lecturers. Formerly, a new system made an era in the department which it illustrated. Such were the works of a Hunter, a Cullen, and a Denman. But, now, a few pages of original matter—which, if ingeniously used, might be stretched into a decent pamphlet—form the basis of an extensive and general treatise. The authors of our day make the most of Sir Robert Peel's precept about cheap and dear markets. They make the most of their wares, it must be admitted. We do not offer these remarks in any disparagement to the authors before us. They are as fully entitled to adopt the common privilege as less talented men; and we must own that they have shewn more originality, and made their work rise higher in the scale of utility, than the average run of their contemporaries. Nay, the book has this peculiar additional merit—that of being one of the cheapest volumes issued from the press for some time. In looking over its pages we have been happy also to find much more to commend than to condemn, which is saying no small thing in favour of any work in these times. The style of writing is plain, and applies very easily to the understanding of either student or practitioner, and we perceive it is intended for both. With our customary reliance in the good sense of the authors whom we review,—and, in this instance, if we can judge from the book, our reliance is not ill-founded,—we proceed to point out a few items on which we differ in opinion with the writers, while we shall, at the same time, as honestly direct the public eye to the many points of utility or excellence on which we are in perfect accord with them.

The authors state that diagrams are very necessary in works on operative surgery, "to refresh the memory of those who are rarely called upon to operate." (This may be true, but heaven help those to be operated on who have to depend on such assistance.) But, say the authors, an obstetric practitioner is very differently placed. From *his* attendance on a course of lectures properly illustrated, and from having industriously devoted his time for a suitable period "his duties become so familiar to him, from their simplicity, or from the frequency of his opportunities, that he rarely, if ever, thinks it necessary to consult plates or diagrams." Now, we have reason to believe this to be a *not very correct doctrine*. We do not conceive that it follows, that a student, attending well-illustrated lectures, and having industriously devoted his *time*, should be perfect in his judgment and practice. If it were so, mal-practice would not be so prevalent. We can call to mind two gentlemen, very praiseworthy as students; yet one mistook the swollen labia pudendi of the mother for the breech presentation of the child; and the other had to invite our aid, because he could not pass the catheter. On our arrival (in this last case), we found he had inclined the instrument every way but the right one, to enter the bladder, although he had the full benefit of an indelicate exposure of the parts, and a pair of blazing mould candles. In our opinion, elementary works cannot be too plain, or too well illustrated by proper plates. It may add to the expense, and so far become a consideration; but a work on Midwifery, without them, wants half its utility. Were plates, indeed, so useless as the authors would lead us to suppose, we should censure their use in the book before us, or claim at least that, if produced, they should be really useful, applicable to practical purposes: and not mere illustrations of some theoretical position. The arrangement of the work is much the same with that of many others on the same subject. The first part contains the anatomical and physiological description of the parts concerned in generation and parturition, to each of which are appended many very judicious and excellent observations on medical jurisprudence. These are very faithfully and candidly given, and deserve the attention of every person engaged in the practice of midwifery. A short quotation or two will fully prove our assertion. In speaking on subjects connected with pregnancy and delivery, they state:—

It is not many years since the mental misery inflicted on a highly respectable female, in the upper classes of society, by the groundless suspicion cast upon her character, was the cause of her death; and this, too, by one who ought to have been better informed.

And, again, speaking of the pathology of the gravid state, and the difficulty of ascertaining pregnancy, they say:—

Instances are not wanting, of even veteran accoucheurs, having given decisions on this head, which were only remarkable for their error and fatal tendency, and which exposed their authors to the sarcasms of their professional brethren, or to the severe and merited censure of the party concerned. How often has pregnancy been confounded with ascites, and the patient been doomed to submit to an operation which might involve her own life, and that of the fœtus in utero? How often, on the other hand, have females, who were in reality affected with ascites, been pronounced pregnant, to the outrage of their feelings, and injury of their moral character? And, what is infinitely more painful, are there not examples recorded, where the last sentence of the law has been suffered to take effect on pregnant females, owing to the ignorance of those appointed to determine their situation; and thus infants have fallen victims to punishment, who were not sharers in guilt; and even the abdomen of the living female has been laid open, to emancipate the infant, and no fœtus found, &c.

The second division of the work contains all that is connected with Parturition. The third part:—the Puerpural state, diseases of the unimpregnated state, and the signs and pathology of the impregnated uterus; in which the authors appear to considerable advantage. The fourth and last division of the work is devoted to the consideration of the diseases of infancy and childhood, and we were glad to perceive this part so fully and admirably cared for. In fact, the whole work is the least book-making speculation of its class; there are no unnecessary, prolix, arguments used for mere amplification, and every point is described in the shortest manner possible, consistent with its importance. We proceed to note a few of the more interesting heads, to each of which we shall append a few brief remarks.

Physiology of Menstruation.—In opposition to the theory that the catamenia are the result of uterine stimulation, arising from the descent of the Graafian vesicles, they state, "first, that the Graafian vesicles, or their contents, may be carried into the uterus any time on the excitement of the passions, whereas the catamenia are periodical; 2nd, that in prostitutes, where it is presumed the Graafian vesicles would be exhausted, the menses continue to flow as long as in other females; and 3rdly, that in matrons the catamenia continue long after they have ceased to be productive." Now, on this last head, the authors only prove that menstruation may be produced in the absence of stimulus from Graafian vesicles: there are, however, other modes of stimulating the uterine structure to the production of catamenia, for proof of which we need only refer to the three examples given by the authors. Nay, if we are not very much mistaken, a foreign body, introduced into the uterus, has produced menstruation. Indeed, we have frequently observed extensive menstrual discharges arising, as we considered, from the irritation of a pessary, communicating the stimulus from the os uteri to the body of the uterus. Hence, we infer that menstruation may, and most likely does, arise from uterine stimulus; but it does not follow that that stimulant shall be the Graafian vesicle.

Duration of Pregnancy.—The authors maintain the possibility of pregnancy being protracted even two calendar months beyond the usual period. Now, though we might admit a *few days*, for we are not prepared to allow the positive specifications of time laid down by Dr. Blundell, yet we confess we cannot here go with our authors. We think the four cases quoted by them in proof, far from sufficiently clear in their favour.

Embryology and Zoology.—As this part of the work is the least practically useful, we shall not enter minutely into it, but merely observe that, as long as microscopic observers look through the same eye-piece and come to different conclusions, shewing how much depends on the descriptive powers and imagination of the individuals, we must be allowed to suspend our judgment on the subject of their differences.

Puerperal Fever.—In reference to this subject, we well recollect the great outcry raised, about 1822, against the senior author of the work before us, for his obstinacy in refusing to acknowledge the principle of contagion in this peculiar disease. It has often been said that "experience makes fools wise," but in this

instance it failed to convince even men of acknowledged ability. In vain death after death occurred, in vain the depletion by the lancet was challenged as hastening the fatality—the authors still maintained their opinion firmly; and even, in the publication before us, whilst they tell us of the unfortunate circumstance of having the same coat on, of not washing hands particularly clean, &c., they yet say *it is not contagious!* They even acknowledge that it "may be engendered by the transference of morbid matter, or some other principle, from a diseased to a sound body, either in consequence of a practitioner having assisted at a dissection, &c., and going immediately thereafter to attend a female in labour."—and yet say it is not contagious! If not, what is it? We have always acknowledged a great similarity between typhus and puerperal fever—always felt inwardly convinced of a contagious principle in both—always convinced that the treatment of either may be widely different according to the previous circumstances, employment, age, &c., of the party. The same controversy exists as to the propriety of bleeding in both of these fevers. Some say—bleed: others, that if you do, the patient will die. In the majority of cases, the latter opinion is the right one. If the physical powers of the system have been previously depreciated by age, employment, disease, or poverty (and the vast majority of such cases of fever arise from these previous states), if you bleed, the chances are ten to one that you kill the patient. On the other hand, in either of these fevers attacking a young constitution, not previously subject to the depreciating powers of the above-mentioned causes, judicious bleeding will probably be beneficial.

Inversion of the Uterus.—In the treatment of this accident (which is described as rare) the authors incline to the practice of Drs. Merriman and Radford,* viz., to detach the placenta before reducing the uterus to its normal position. This, in our opinion, is the right way of proceeding. We cannot see in what the plan of Drs. Burns and Ramsbotham is to be preferred. Dread of hæmorrhage is no reason, for Dr. Radford's cases fully illustrate the safety of removing the placenta: indeed, how can it be a reason? The pressure of the part (normally the os uteri) would act as a ligature at the time, and prevent the hæmorrhage. The extra difficulty of reducing the uterus, with the placenta attached, is so much greater, that we wonder that Dr. Burns' plan should be advocated.

Version or Turning of the Fœtus.—In this chapter of the work the authors speak with great caution. While speaking of preferring Dr. Radford's test of experience in *inversio uteri*, they might have added, that his use of the peculiar long forceps, as a substitute in many cases for turning, is a matter deserving of consideration.

Ovarian Dropsy.—As this subject is one that has of late been brought prominently before the profession, and has excited considerable interest from the boldness of the practice introduced for its cure; we were anxious to know the view the authors took of this important subject. It is with pleasure we observe that it is one of great manliness and candour. They are free from that narrow-minded prejudice that has of late characterised some of the young and theoretical writers of anonymous articles, laying down, *ex cathedra*, condemnations of matters in which they have not an iota of practical or sound information. Their opinions, like the beauty of the veiled prophet, are only believed in because the possessors live in favourable seclusion; and, even as it is, such subjects as the present are laughed at by all save those who are too ignorant or too lazy to read and judge for themselves. Any review from a bookseller's shop, in a bookseller's journal is, *primâ facie*, a bad one. They remind one of the response to Miss Lucy Porter, enquiring of Dr. Johnson if she might take the opinion of reviewers in purchasing books, "Infallibly, my dear; provided you buy all they condemn, and never any thing they praise." After the Continental operators, Lizars was the first to shew, *in Scotland*, that the operation for extirpation of diseased ovaria was one that ought to be (under certain circumstances) practised; and subsequent occurrences have shewn with what virulence a portion of the profession almost hunted him down, for daring to travel one step farther than his contemporaries. As a consequence, the operation was disused for a time, until our correspondent, Dr. Clay, of Manchester, started it in England; and we have no doubt that, from the numerous cases that have fallen, or are falling, under his care, he will shew to the world that Ovariotomy is as admissible as many other of our valued operations. Already, we understand, he has operated sixteen times. Some of his cases have been published through our pages, and the rest, we understand, will shortly be laid before the profession. When a larger field of experience is laid open, the diagnosis made clearer by practical research, when the average duration of life in cases of ovarian disease, after tapping, is better estimated, we have no doubt that the operation will stand higher in favour than it does at present. At all events, it is far too important an innovation in surgery, too momentous in its happy results to humanity, if it should prove as successful as its friends hope for it, to be lightly given up because it has not received the favour of a journal or two, known for their miserably unscientific acerbities, and as standing out before Europe in the rear-guard of science—the stale repertories of every old and absurd scientific prejudice.

The following quotation from our authors will serve to prove that we are not alone in our opinion of extirpation of diseased ovaria:—

"When the disease gains ground, in despite of the plan which has now been detailed, we have next to consider the propriety of extirpation. On this point much contrariety of opinion has existed; but it is important to bear in mind, that this practice is opposed principally by those whose information has been derived from reading; while such of our brethren as have dispassionately considered the subject, and witnessed the performance of the operation, maintain, that under particular circumstances it is deserving of being adopted. I witnessed the section of the abdominal parietes in five out of six instances, in which it was performed, and three of this number recovered; and of those who were unfortunate, one was an habitual drunkard, and the second an opium eater. These, therefore, should not, and would not have been operated on, had their habits been known, as they were not proper subjects for operation; so that, fairly speaking, there was but one unsuccessful case in the six. And if the British periodical press be consulted, it will be seen, that of the whole number who have since been operated on, more than three to one have recovered. Wherefore, in cases favourable for adopting this line of practice, and in which relief is urgently called for, it seems to me, that the extirpation of the diseased ovary, is as justifiable as the removal of a portion of the upper or lower jaw, or the amputation at the hip joint, operations which no surgeon hesitates to undertake. Nor is it more unnatural than the abstraction of water from the brain, which has been resorted to by some of the most judicious men in the profession. Though it may thus appear, that I advocate the expedient in question, I wish to be distinctly understood as considering it fraught with danger; it should not be attempted without consultation with men of experience, nor without accordance in their opinion that the tumour is ovarian, that it is increasing in size, and that its connexions are neither numerous nor intimate with surrounding parts. We must particularly determine, before this mode of relief can be contemplated, the point at which the tumour was first felt, and its present degree of mobility. If very moveable, the constitution sound, the habit spare, and the mind resolute, we may be sanguine of success. Ascites, from what I have witnessed, is not a discouraging circumstance, if the general health, in other respects, be good. But the operation should not be attempted in a woman of unsound constitution, nor in one whose habits have undermined the system.

Laceration of the Perinæum.—We had hoped that the profession stood in a better position than to render it necessary to commence this article in the following words:—"This is one of the most frequent accidents in the puerperal state." If it really is, we are sorry for it; the schoolmaster is not yet sufficiently abroad, and we fear the authors will be required (in another edition) to introduce a plate (*opposed to the principle as they may be*) to point out the locality of the perinæum to the uninformed. Decidedly the case *ought* not to be of frequent occurrence, but one of great rarity. We do not deny the possibility of such a case in the practice of even the most careful; but to be of frequent occurrence, is tantamount to malpractice. Some of the simplest rules of obstetrics are often neglected in proportion to their simplicity; and we fear laceration of the perinæum is one of these.

Speaking of the long forceps, the authors very properly observe that "they are most dangerous instruments in the hands of the ignorant." Into such hands they should never find their way. It would have been but justice if the authors had added that, in proper hands they are, comparatively speaking, very safe and exeellently useful instruments.*

It is, of course, impossible to notice even a tithe of what is deserving in the work before us, and we cannot do better than recommend those of our readers who are unprovided with such a work, or who seek farther information, to procure the book for themselves. The perusal, as a whole, has given us considerable pleasure. Its descriptive parts are minute without prolixity; its medico-legal observations extremely well written; and its "practice," both in reference to parturition and the diseases of women and children, the best we have seen laid down for some years, notwithstanding the few faults we have noticed. We have no hesitation in recommending it as a safe student's guide, and a valuable practitioner's companion.

Prize Essay on the natural objects of Medical Science. By P. H. Williams, M.D., Edin.

This was one of the four theses for doctorship, which in 1843 were honoured by the Edinburgh gold medal, and after a careful perusal, we think we are not disparaging Dr. Williams' less fortunate competitors, when we attribute to the arbitrators a very judicious selection.

The important part of the Essay, because the part the most practical and original, is an attempt to establish the now popular opinion, that the decomposition of vegetable and animal matters is respectively the cause of intermittent or remittent fever. Holding this theory, he, of course, attributes the beneficial effects of quinine, arsenic, and the more successful remedies customarily applied, to their *antiseptic*

* Vide *Radford's Practical Essays*, &c.

* Vide *Dr. Radford's Practical Essays.*

or eliminatory action. We recommend the little work to notice. The author writes judiciously, reasons in general safely and comprehensively, and gives promise that he will some day make medical science his debtor.

ON FIBROUS TUMOURS OF THE MAMMÆ.

By J. CRUVEILHIER,

Professor of Pathological Anatomy to the Faculty of Medicine, Paris, Member of the Royal Academy of Medicine, Paris, Officer of the Legion of Honour, &c.

[This memoir, which we owe to the kindness of the author, has been the subject of an animated discussion at the Academy of Medicine, Paris, and has created the most extraordinary interest throughout the profession in France.]

I purpose in the following memoir drawing the attention of the Academy to an anatomo-pathological and clinical question, which, in my opinion, has not hitherto been sufficiently studied. I mean fibrous tumours of the mammæ, an affection extremely frequent, and which is daily taken by practitioners for scirrhus, or hard cancer of these organs, and as such extirpated.

This memoir was written in order to point out the anatomical and clinical characters of fibrous tumours of the mammæ; to shew how they differ from the scirrhus or hard cancers of these organs; and to prove, 1°, that their extirpation is not always necessary, but is, to a certain degree, optional, for they never degenerate; 2°, that when extirpated they never return, at least never like confirmed cancer; 3°, that a fibrous tumour is a local affection, an organic production, entirely independent of a general diathesis, acting either as cause or effect.

It is to be hoped that the discussion of this memoir in the Academy (which I earnestly solicit for the advancement of science and the good of mankind) will throw some light on so important a point of pathology, which is mentioned neither by Boyer in his *Traité des Maladies Chirurgicales*, nor by Sir A. Cooper in his memoir on the diseases of the breast, and which is merely indicated in the more recent treatises on diseases of the mammæ.

But in order to solve the question, it is necessary to define the manner in which it ought to be viewed; consequently I will, before describing the fibrous tumours of the mammæ, offer a few considerations on fibrous tumours in general.

Fibrous Tumours in General.—Of all the numerous organic productions which develope themselves in the midst of our tissues, one which offers the most characteristic signs, is that known under the name of *fibrous tumours*, or *fibrous productions*.

Before the anatomo-pathological researches which signalized the commencement of the present era, they were comprised under the denominations, somewhat vague, of tumours, scirrhus, cancer, polypi, &c. Bayle was the first author who gave an accurate description of the fibrous tumours of the uterus, and the remarkable researches of modern days may be considered as the development of his ideas, and their practical application.

But, following the example given by Bichat, who said that each tissue had its own peculiar lesion, Bayle propagated an error in his memoir, when he stated that fibrous tumours were only to be met with in the uterus. Doubtless it is in this organ that the most favourable conditions for the production and development of this disease are to be met with, but it is likewise to be found in every organ in which fibrous tissue exists, and may be divided into two classes; 1°, *Engrafted fibrous tumours*, or those which are attached to the surface of a membrane like a plant: fibrous polypi of the nose; those which arise from the periosteum, such as fibrous tumours of the dura mater; fibrous, cartilaginous, and osseous tumours, which are produced by the periosteum, which may be comprised under the generic term of *osteo-chondophytes*.—2°, *Non-engrafted fibrous tumours*, or those placed in the centre of different organs, such as fibrous tumours of the uterus, the ovaria, the mammæ, the testes.

These preliminaries pointed out, we will next pass in review the characters common to fibrous tumours.—1°, *Character founded on the seat of the disorder.* Fibrous tumours develope themselves generally in the midst of a fibrous tissue.

2°.—*Character founded on shape or size.* The shape is generally spheroidal; their surface even or *mammelonnée* (mammillatus) or deeply furrowed, owing to their being composed of lobules. Their size varies from that of a millet seed or cherry stone to that of the head of an adult, and larger, some having been met with weighing 45lbs.

3°.—*Character founded on the mode in which they are united to the organ in which they are situated.*—With the exception of the engrafted fibrous tumours, which seem to be the result of a sort of vegetation on, or extension of, the tissue of the organ itself, these organic productions are united to the parts in which they develope themselves, by a loose cellular tissue, so that *enucleation* (*enucleatio*) may be performed with the finger, a blunt probe, or by gently pulling, and does not need the assistance of the knife; in this respect they may be said to resemble a cyst (with which they are frequently confounded) in being completely separated from the surrounding parts.

4° *Character founded on their texture.*—Fibrous tumours offer a density which can only be compared to that of cartilage, or the tissue of the uterus when empty; and were it possible to admit the existence of the fibro-cartilaginous tissue described by Bichat, it would be to it that it ought to be likened. Effectively, they are formed of linear fibres of an albugineous nature, closely united, and crossing each other in different directions, and often divided into several clusters of fibres, knotted together so as to make separate lobes or lobules.

Fibrous tumours contain veins which originate in their substance, by very small radiculæ, and whose trunks are to be found in the surface of the swelling, or between the lobules when these last exist. These veins anastomose with those of the organ, in which the tumour has developed itself. No artery has been seen in these organic productions, and an injection made into the arteries of the surrounding parts never penetrates into their interior; finally no lymphatic vessel, nor nerve, has as yet been discovered in them. Considered, therefore, as to their texture, the only organic element they possess, is a fibrous tissue, nourished by veins. Life in these tumours is very obscure, and is supported by the venous blood, agitated by an extremely feeble oscillatory motion. Organisation and life is, therefore, reduced to its simplest expression.

5° *Character founded on the mode of development* (*evolutio*).—Fibrous tumours present from their apparition the same characters as when completely developed, let their size be that of a cherry-stone, or of the head of an adult. Numerous observations have led me to the conclusion, that if some fibrous tumours become cartilaginous or osseous, a certain number were so from the first.

6° *Characters founded on the consecutive pathological symptoms.*—I include under this head A, the consecutive lesions produced by fibrous tumours in the surrounding tissues; B, the consecutive changes which take place in the tumours themselves.

A. *Consecutive lesions of the surrounding tissues.*—Fibrous tumours are troublesome merely from their size and their weight; they are true foreign bodies, quite harmless, a species of parasite, whose vitality is very limited; and which cause, in the tissue in which they are developed, but a few inevitable modifications of nutrition and circulation.

B. *Consecutive changes which take place in the tumours themselves.*—These changes are but few in number. The tumours may increase in size indefinitely, or remain stationary; several facts authorise the conclusion that they are susceptible of decrease, of a species of atrophy. Again, they may become osseous, by phosphate of lime being deposited in their interior; or the seat of an œdema, which dissolves their component elements, and renders their lobules more apparent. In this last case the tumour is often saturated with a liquid very analogous, at least in appearance, to synovia. They never degenerate into cancer, and I consider myself right in asserting (this character being, in my opinion, of the highest practical importance) that there is incompatibility between a fibrous tumour and cancerous degenerescence.

These are the general characters of fibrous tumours; and now let us examine if they are applicable to certain organic productions to be met with in the mammæ, and in order to solve this question, I will quote a great number of clinical, and some few anatomo-pathological, facts. But first it is necessary to state, that of all the organs of the human body, the mamma is that which offers in its structure the greatest proportions of fibrous tissue; that besides the adipose tissue, two other elements form essential portions of the texture of these organs. A frame or ground-work of a fibrous nature, and granulations or glandular lumps. These granulations can be studied only on females who die while pregnant, and still better, immediately after delivery, or while giving suck; except under these circumstances, the mammary granulations are but slightly developed, and this is owing to the absence of secretion in the organ: after the cessation of the catamenial flux, and especially in very old females, they seem to disappear entirely, and the fibrous tissue alone remains. It is then evident that the mammæ possess to a considerable extent the necessary conditions for the development of fibrous tumours.

Symptoms.—Fibrous tumours of the mammæ present themselves to our observation under the form of small spheroidal swellings, varying in size from that of a millet-seed or cherry-stone, to that of an egg and upwards; surface sometimes smooth, at others uneven; in general very hard, and sometimes like a stone; almost always subcutaneous, still in some cases they are developed in the midst of the tissue of the mammæ; easily circumscribed; quite distinct from the mammary gland, to which they are attached by a very loose cellular tissue; as mobile as a lymphatic gland, and like it, rolling under the finger which touches it, from which symptom the denomination *gland*, under which it is commonly known, is derived. To resume, spheroidal form, perfectly limited; mobile; independent of the tissue of the organ in which it is developed; these are the signs by which these tumours are to be recognised; and these are the characters which I assigned to fibrous tumours in their generalities.

From these symptoms, every practitioner will readily recognise a disease of the mammæ, for which he has repeatedly been consulted. But hitherto, the fibrous tumours of the breast were distinguished, neither practically nor anatomically, from the other lesions of these organs, and especially from scirrhus; the consequence was, that they were confounded one with another, and submitted, consequently, to the same treatment. For fibrous tumours, as for scirrhus, authors thus express themselves: The tumours of the mammæ, known under the denomination of *glands*, may remain stationary, or nearly so, for a considerable length of time; but towards the age of 40, 45, or 50, they almost always increase with rapidity, encroach on the neighbouring parts, infect the whole system, and give rise to all the symptoms of inveterate cancer.

The conclusion to which such an opinion must of necessity lead us, is immediate extirpation, as the degeneration was less to be feared when the tumour was extirpated in an early stage, than when permitted to remain a considerable length of time in the part. Immediate extirpation of all the tumours of the mammæ was the only rational mode of treatment; it must not, however, be supposed that in the opinion of the practitioners who gave such advice, it was established beyond a doubt that the tumours were susceptible of degenerating, and that consequently, their extirpation was absolutely necessary; but, unable to form a positive diagnosis between the tumours which were cancerous, and those which were not susceptible of degeneration, they preferred operating ten times uselessly, rather than omit doing it once where extirpation was necessary.

This anatomo-pathological study of the lesions of the mammæ is still more indispensable; for, have we not seen a cyst, an œdematous hardening of these organs, taken for cancerous tumours, and often operated on as such.

This was the mode of treatment adopted by me fifteen years ago. I delayed advising the operation just long enough to prepare the patient, in general, I will add, very docile and resigned, as soon as the terrible word *cancer* is pronounced. But some doubts having arisen in my mind as to the precise nature of these tumours, I hesitated to advise their extirpation. These doubts arose from having observed; 1° several patients on whom the tumours were mobile, circumscribed, not painful, nor adherent to the surrounding parts; the persons affected being young girls scarcely pubescent, and women enjoying perfect health; 2° the existence of several in the same, or in both mammæ, simultaneously. On reflection, I asked myself: Ought these small tumours, often discovered by mere chance, to be considered as the first stage of cancer? These doubts became stronger and stronger when I observed that these tumours, in several females who would not consent to have the operation performed, and in others with whom I had advised delaying it, neither increased in size nor degenerated, though many years had elapsed since I first examined them, and though some of the patients became pregnant, and suckled their children, and others were no longer after the manner of women. Again, the fact that many cases, when the tumours were extirpated with the bistoury, did not relapse, may be mentioned as a clinical proof of their harmlessness, and that their nature is completely foreign to cancerous degeneration, circumstances very frequent after the extirpation of true cancers of the breast. In order to prove the truth of this assertion, anatomo-pathological facts were still wanting; but no considerable time elapsed before opportunities presented themselves to me of observing several cases, and establishing the fact beyond a doubt. On examining attentively many of those tumours extirpated by different practitioners as scirrhus, and cancer in the first stage, I remarked that a certain number offered manifestly the same characters (form, density, texture) as the fibrous tumours of the uterus, and not at all those of a cancer. By this anatomical examination of fibrous tumours of the mammæ, I was enabled to verify a remarkable pathological fact, viz., that a certain number which at first sight appeared solid, were hollow; and on cutting them in two, each half was easily turned inside out, so that its external surface became internal, and vice versâ. The outer surface was covered with globular vegetations and fibrous granulations, sometimes isolated, sometimes ramified as polypi. These vegetations or fibrous globules, perfectly similar in every respect, were separate from, or adherent, by means of short fibrous prolongations, to each other. In the case just described, these vegetations, or knots, or fibrous swellings in juxtaposition only, form a cavity without walls.

Other differences sometimes present themselves; for instance, I have observed in the centre of these fibrous bodies, a cavity full of viscous liquid, very analogous to synovia. Again, I have seen several cases in which these tumours had become œdematous, and increasing rapidly in size had on that account been extirpated. These œdematous fibrous tumours of the mammæ are exactly like those of the uterus; their substance was penetrated by a viscous liquid analogous to synovia, and here and there were to be found small cavities, without any lining membrane, not cysts, and which contained a fluid.

The following case, as complete as possible, may be taken as a type of what is to be met with in patients affected with fibrous tumours of the mammæ.

Mrs. C——, aged 44, strong constitution, rather lusty, healthy and blooming, whom I met frequently in society, consulted me about fifteen years ago on account of three very firm tumours in the left breast—two of the size of a hen's egg, and one in the right of the size of a turkey's egg. These tumours could be easily limited, were of a stony or ligneous hardness, mobile, and quite separate from the gland; symptoms which I consider characteristic of *fibrous tumours of the mammæ*. Another important fact which must not be omitted, is, that they commenced with puberty. The patient, who had become of late much stouter, thought that she perceived an augmentation in the volume of the tumours, and as the epoch for the cessation of the catamenial flux drew near, she became fearful of accidents, and desired something to be done. My opinion was,—that there was no danger; that these tumours were not of a cancerous but fibrous nature, and consequently would not degenerate; that it would be time enough to operate when from their size they incommoded the patient; that if they were not extirpated, nothing ought to be done. Unfortunately, my advice was not followed. A practitioner thought he could succeed in obtaining their resolution by reiterated applications of leeches, tepid baths, and an extremely debilitating regimen. But this mode of treatment, this species of Valsalva method by leeching, caused the patient to grow considerably thinner, without producing the least effect on the tumours. After following this treatment with perseverance during eight months, the patient in this weakened state was affected with an erratic erysipelas, which invaded successively the whole body and gave rise to an erysipelatous phlegmon, which ended fatally. Called in consultation a few days previous to that event, I was requested to attend the autopsy, the result of which was:—All the internal organs healthy; the three tumours in the left breast still mobile, limited, easily separated, not only from the adipose tissue that remained, but likewise from the mammary gland to which they were united by a loose cellular tissue; two of these tumours were of the size of a hen's egg, the third of a walnut; their surface was smooth, mammillary; their tissue extremely dense and offered all the characteristic signs of fibrous tissue. No liquid escaped on pressure, however strong,—no cancerous fluid. On dissection, they were found to be composed of a multitude of granulations closely pressed against each other, sometimes adherent, at other times free of adherence; the mamma was partly atrophied. Finally, a fourth very small fibrous tumour existed, perfectly isolated from the surrounding parts. The right mammary gland had nearly disappeared; in its stead I found a large fibrous tumour divided into lobules, which were subdivided into granulations. Pus had accumulated between the pectoralis major and the swelling; besides this, a collection of pus existed between the lobules of the tumour.

These are the clinical and anatomo-pathological facts to which I desire drawing the attention of the Academy, and by which I consider myself authorized to conclude.

1° That the mammæ are exposed to the development of the organic production known under the name of *fibrous tumours*.

2° That fibrous tumours of the mammæ, one of the most common lesions to which these organs are exposed, may be distinguished by certain signs from chronic induration consecutive to chronic inflammation, and from cancerous tumours; as in both these disorders the tumour is not separated from the mammary gland, in whose tissue they develope themselves, and from which they offer no line of demarcation. Fibrous tumours, on the contrary, are quite separate from that gland, and roll under pressure of the finger in the same way as a cyst, or a lymphatic gland.

3° That fibrous tumours never degenerate into cancer; consequently their extirpation is not requisite on account of the changes which may take place in their tissue, and by which the life of the patient may be endangered. Fibrous tumours form a lesion entirely local; their extirpation is therefore to a certain degree optional, and ought never to be performed, except when from their size, or their weight, they inconvenience the patient.

4° That when extirpated, they never relapse, in the mode in which a cancer does; although other fibrous tumours may develope themselves in a breast from which one has already been extirpated.

INTERMITTENT FEVER, FOLLOWING LOCAL INJURY, CURED BY QUININE.—Mr. Stafford narrates the case of a gentleman, who dislocated the tarsal bones. Reduction was effected, but the injury was followed by excessive pain, which, after a time, became intermittent, coming on every evening about eight, lasting five or six hours, and then gradually abating. It was cured by quinine.

HOSPITAL REPORTS.

ST. BARTHOLEMEW'S HOSPITAL.

Acute Rheumatism, with Affection of the Heart.—Harriet Guy, æt. 16, a barmaid, of tall stature, fair complexion, countenance pale; was admitted into Mary's ward, St. Bartholomew's Hospital, under Dr. Roupell, January 25, 1844. On the morning of admission she complained of pain in the left side, which was increased by a full inspiration, pain in the back, in both shoulders, knees, and ancles; the latter were slightly swollen. She had slight cough, but without expectoration, she likewise complained of great thirst, loss of appetite, and general debility; the skin was bedewed with copious perspiration; the tongue was furred; pulse 100, and fuller than natural; the bowels costive, urine high coloured, depositing a deep red sediment upon standing for a short time; the catamenia had ceased for the last six months. Upon auscultation a bruit was heard with the first sound of the heart.

History.—She stated she had never enjoyed very good health, and that five months ago she had a similar attack of illness, from which she has never entirely recovered. She had suffered from palpitation of the heart, accompanied with pain in the chest, on making any unusual exertion, for two months past; six days before admission she caught cold, which was followed by rigors, thirst, loss of appetite, and pains in the joints. She was ordered pulv. ipecac., co. gr. viij. horâ somni sumend. and haust. sennæ co. cras mane. with milk diet.

Jan. 26.—Rather better. Continue the powder every night, and to have broth diet, not liking milk.

28.—Not so well, passed a very restless night; complains this morning of much pain in the left shoulder, which she is unable to move; the left ancle is likewise more painful, and appears red and swollen.

℞. Pulv. ipecac. co. gr. x. h. s. s.
Haust. senna co. eras mane.

29.—Much better this morning; has less pain in the shoulder; slept but little last night; the skin is moist and warm, tongue rather dry and loaded, pulse natural, abundant deposit in the urine. Continue the pulv. ipecac. co. omni nocte.

30.—Not so well; complains of pain in the right shoulder, which she is unable to move; the pulse is soft and compressible, skin moist, tongue not quite so dry, bowels open.

31.—Much better in all respects; continue the powder.

Feb. 2.—Going on favourably, slept pretty well last night, has very little pain in the joints.

6.—Going on well, pains entirely gone; to have half meat diet.

10.—Progressing rapidly, but complains of pain in the back; catamenia have not yet made their appearance. To discontinue the powder, and to have a warm-bath to-night.

12.—Continues much the same.
Semicupium hâc nocte.

16.—Not quite so well; thinks she has taken cold; complains now of pain in the side. To have a mustard cataplasm to the side.

17.—Pain in the side relieved.

29.—Still complains of pain in the back, and at the lower part of the abdomen.
Semicupium bis hebdom.
Pil ferri comp. gr. x. ter die sumend.

29.—Feels herself quite well, but catamenia still absent; continue the bath and pills.

March 4.—She was discharged to day quite well.

Disease of the Heart—Death from Apoplexy.—Charles Payne, æt. 38, a footman, of middle height, rather attenuated condition of body, and of dark complexion, was admitted into St. Luke's ward, St. Bartholomew's Hospital, under Dr. Roupell, March 7, 1844. The countenance was rather pale and anxious, lips exsanguine. He complained of great weakness, shortness of breath and palpitation of the heart, on any exertion; the appetite was very indifferent, the tongue was dry; bowels much relaxed; pulse 146, small but regular. Upon auscultation the action of the heart was found much accelerated. The sounds of the heart were heard over the whole extent of the chest, but no

bruit was detected with either. He stated that seventeen years ago, he suffered from a severe attack of rheumatic fever, which confined him to his bed for two months; he returned to work about three months after, in his accustomed good health, suffering every now and then from chronic rheumatism, which affected the larger joints, but had never been obliged to keep his bed in consequence of it; three months before admission, while suffering from an attack of rheumatism, he was attacked with pain in the region of the heart, which was accompanied with palpitation of the heart, and uneasiness of the chest. For this attack of illness, he was under the care of a medical man, who bled him largely, and used other depletive measures, to such an extent that from being a strong, stout man, he became extremely thin and attenuated; the pain was relieved, but the palpitation of the heart continued. He returned to his place, the duties of which he continued to discharge to the day before admission.

March 8.—He passed a very comfortable night, and partook of breakfast this morning with a good appetite, but while reaching out of bed to pick up something, he was suddenly seized with an apoplectic attack, and died in less than three quarters of an hour.

Post-Mortem.—The body was examined eight hours after death. On removing the calvarium, the convolutions of the brain appeared broad, very flat and dry on the surface, the blood-vessels between them were compressed, and nearly empty; the cerebral substance generally was firm and healthy, the whole brain seemed large; the ventricles contained each about half an ounce of clear pellucid fluid; all the walls of the ventricles were healthy. In the substance of the right cerebral hemisphere, outside the lateral ventricle, was a large cavity, with softened and broken walls, containing a black soft coagulum of blood, which weighed *four ounces, five scruples*, together with about two ounces of blood-stained fluid. At the lower part of the cavity was a small, spotted, red elevation, from which the blood appeared to have flowed; also by this elevation, and just beneath it, was a small aneurism of the trunk of the middle cerebral artery; the aneurism was situated about two and a half inches from the origin of the artery; it lay embedded between the cerebral convolutions, into the substance of which it had burst. No blood was effused into the adjacent pia mater; the rest of the brain was healthy.

The heart was generally enlarged, but especially on its left side; the valves of the right side were healthy, those of the left were thick and opaque; they had likewise many small warty vegetations attached to their ventricular surfaces, and on the opposite surfaces deposits of fatty, with very small quantities of earthy, matter. The lungs were healthy, and so appeared also, the viscera of the abdomen.

WESTMINSTER HOSPITAL.*

Lacerated Wound of the Scalp, and Erysipelas.—John Ives, ætat 55, a labourer, was admitted into Percy ward, Feb. 28, at a quarter to 8 A.M. under Mr. Lynn. He is a tall, stout, and powerfully-built man, of the sanguineous temperament. A short time previously to admission, he fell from a height of nine feet on a heap of flints, his head striking against the ground, by which the scalp was severely lacerated, and considerable hæmorrhage ensued. When he was brought to the hospital, the pulse was low and fluttering, scarcely perceptible, and the man apparently stunned: the wound extended across rather obliquely, but nearly in the direction of the coronal suture, from temple to temple, and there was a smaller semilunar wound about an inch posterior to this, measuring about two inches in length. In both, the integuments were very much lacerated and bruised, the pericranium being in parts torn from the bone: the back flap, which had been thus formed, fell down, and hung so far back as, at first view, to give an appearance as if two or three inches of the scalp had been torn away; but it could be readily approximated to the anterior flap, which remained stationary. The right temporal artery, and one or two branches, were divided, and furnished the hæmorrhage already alluded to; these required a ligature. The head having been shaved, the divided parts were brought together with strips of adhesive plaster, and small quantities of brandy were administered from time to time, to excite re-action.

11, A.M.—Re-action is now commencing; the pulse rising, and he feels better. He was ordered to take two aperient pills directly, and a wine-glassful of Sir A. Carlisle's mixture three times a day.—*Cold lotions to the head—low diet.*

March 1.—Re-action was so great yesterday, that it was considered advisable to extract blood to the amount of sixteen ounces: he has passed a bad night, and suffered from pain in the head this morning, which has now gone off: he still experiences a pain in the back of the neck. The pulse is full, and of moderate strength, 100; bowels open by medicine; tongue rather furred.—*Cont. lotiones frigid. et omnia medicamenta.*

2. Slept occasionally during the night; has not any pain in the head, but feels very heavy and stupid. The scalp is very much tumefied and puffy, especially about the wounds, which do not appear inclined to unite, but rather to heal by granulation. On applying pressure on the integuments towards the wounds, a very free discharge of apparently healthy pus takes place; pulse full, and bounding, 100; bowels freely open. Was ordered to be bled to sixteen ounces, and to continue the purging mixture, and the application of the cold lotions.

3. Passed a bad night; was restless and disturbed. The face and integuments of the head appear somewhat tumefied, and he complains of headache, and a feeling of heaviness. Tongue furred, bowels freely open; considerable discharge.—*Cont. mist.*

4. He has again passed a wretched night, almost without sleep; a severe attack of erysipelas has shewn itself on the scalp, right side of the face and neck, all which parts are considerably swelled, and covered with a blush of erysipelatous redness; considerable tumefaction of the eyelids, nearly closing up the eye; eyes suffused and injected, conjunctiva rather of a yellowish colour, pupils contracted; scalp puffy to the touch; discharge great, especially by pressing on the integuments around, under which it is evidently burrowing; odor fœtid, and subacid; pulse frequent and small, 120; tongue streaked with dirty brown fur in the centre, edges clean; bowels very much open; no headache, and is not at all delirious, being, on the contrary, perfectly collected.—℞ Conf. aromat. ʒij, mist. camphoræ f.ℨviij, liq. ammoniæ acetatis f.ℨij. M. Fiat mistura, capiat cochlearia larga dua ter die. The erysipelatous inflammation to be freely covered with flour, the cold lotions to be omitted, and a poultice to be applied over the scalp.

5. Has had a better night; is free from pain, and quite sensible; the tumefaction is diminished, pulse improving, bowels moderately open, erysipelas much as yesterday; discharge free, but fœtid.

6.—He was much disturbed last night by a patient in the same ward, who is very irritable and noisy, from pain. The discharge continues of an unhealthy character, and unpleasant odor, and makes a way for itself under the scalp in all directions. The pulse is small and hurried; bowels moderately open. To have fish diet; yeast poultice to the head, and to continue the mixture.

7. Another bad night, owing to the same cause. Erysipelatous blush not so intense, and the swelling diminished. He can open the right eye a little now.—*Pergat.*

8. Continues improving, although his nights are still most wretched, the same cause continuing: tongue cleaner, inflammation lessening, bowels gently open; pulse quick, small, and hurried, 120; very great discharge, but now of a healthy character. Part of the bruised integument has sloughed.—*Bread and water poultice to the scalp—Cont. mist. arom.*

9. Had a better night, the patient who disturbed him previously being dead; symptoms improving.—℞ Quinæ sulph. gr. xij. Inf. Rosæ comp. f.ℨviij. Acid. sulph. dil. f.ʒss. M. fiat mist. capiat cyathum vinosum bis in die.—*Mutton chop.*

11. The sloughs are beginning to separate, and healthy granulations are springing up. Pulse increasing in power. On the right side of the wound, the bone is black and dead, and will exfoliate; and there is an abscess forming at the right angle of the jaw; the erysipelas and swelling have disappeared.—*Cont. omnia—port-wine, three ounces daily.*

12. The sloughs having now nearly entirely come away, the extent of separation between the anterior and posterior flaps may be ascertained; it amounts to an inch and a half, and the whole scalp, more especially the back part, is infiltrated with pus, which oozes out very freely on the slightest pressure. It appears to be collected in considerable quantity, just above the left ear. Tongue furred; pulse 90. The edges of the wound were drawn nearer together by straps of adhesive plaster, carried from behind forwards.—*Cont.*

13. The abscess at the angle of the jaw was opened to-day, and a considerable quantity of pus evacuated.—*Six ounces of port-wine daily.*

15. The wound is more extensive, and of greater width, on the right side than on the left, but it is also much healthier: on the right, there being the small, florid, red granulations on the surface of the wound; while, on the left, it is covered with small sloughs. Discharge possesses an unpleasant odour; bowels open; tongue still rather furred; pulse moderate and regular, about 80.—*Simple dressing applied to the scalp, and a bandage round the head, some turns of it being brought over it, to support the back part of the scalp; to continue the wine and quina, to have full diet, and beef-tea, double strength.*

16. Is not so well as he was yesterday; has passed a bad night, and there is a degree of anxiety in his countenance which he has not had hitherto: pulse small and weak. Mr. Lynn made a depending opening in the scalp, in the centre of the collection alluded to in the report for the 12th, in order to have a free exit for the pus, and to prevent its collection.—*Cont. medic.*

17. Another bad night; discharge from the opening made yesterday very great, but it still collects under the scalp, and consequently the house surgeon made another incision in the back part of the scalp.

18. If anything, somewhat improved; to have an anodyne at night.

21. Good night; discharge diminished; and is altogether better.—*Rep. omnia.*

25. His health has been gradually improving for the last few days; he passes better nights, the pulse is stronger, and the edges of the wound are approximating, while their surfaces are granulating kindly. Discharge lessened, and healthy in appearance.

28. Florid granulations are rising over nearly the whole extent of the wounds, except where the dead scale of bone is, part of which appears to have been thrown off. He looks and feels much improved; the pulse is increasing in strength; he sleeps well, and his appetite is good.

April 5. An erysipelatous blush has attacked the left ear, which is inflamed and swollen, but is not the seat of any pain. He is to give up the quina, wine, &c., and the strapping is not to be applied. *To have two tablespoonsful of saline mixture three times a day.*

6. The erysipelas appearing inclined to spread on the face, where it has effected a lodgement, he has been removed to Mark's ward. *To continue the saline mixture.*

7. The erysipelas is going off, and inflammation of the left eye commencing, but not of any consequence apparently, merely affecting the conjunctiva.

8. Eye improved.—*Cont.*

17. The eye soon got well; the granulations are large, pale, and flabby, rising considerably above the surface of the wound; the nitras argenti was applied, and the C. M. P. used, as a dressing to the part.

22.—Granulations improved in character; to be repressed with dry lint, and a retaining bandage.

May 19. Another small scale of bone has ex-

---

* The prize-case books of a former dresser of this hospital having been placed at our disposal, we purpose selecting some of the more interesting cases for publication.

foliated; the wound is very much contracted in the antero-posterior direction.

June 5. Is nearly well.

20. A scab covering part of the wound has been removed, and shewed the parts unsound underneath. The discharge is rather unpleasant. Dressed with dry lint.

30. A piece of strapping merely applied.

July 2. Dismissed cured.

WHAT ARE THE THEORIES OF LIEBIG? AND WHAT IS THEIR VALUE?

BY THE CELEBRATED DR. FRANZ SIMON.

Translated for "The Medical Times," by SIGISMUND SUTRO, M.D., formerly pupil to TIEDEMANN, GMELIN, and BUCHNER.

It is well known that in the work "Organic Chemistry in its Application to Physiology and Pathology," Liebig very ingeniously endeavoured to explain the most important processes of the living animal organism, to reduce them to mere chemical actions, and to present the results of his acute ratiocinations in a form so plausible as to be well calculated to remove any doubts of his accuracy. In the first part (page 1-105), he treats of the chemical process of RESPIRATION and NUTRITION; a plain exposition of his views on which we now proceed to give. The oxygen inhaled by man combines with carbon and hydrogen, and is exhaled as carbonic acid and water. The necessary carbon and hydrogen are furnished to the organism by food, the requisite quantity of which is in direct proportion to that of the inhaled oxygen.* The more perfect and active the respiratory organs are, the greater will, consequently, be the required quantity of carbon; but temperature, and the density of the inhaled air, exert their influence likewise. More oxygen is consumed in low, than in high countries: more in northern, than in southern ones. Thus, the fruits of the southern countries do not contain above twelve per cent. of carbon, whilst the lard and tar of the polar regions contain about eighty per cent. The source of *animal caloric* lies in the mutual action between oxygen on the one side, and carbon and hydrogen on the other; it is independent of the surrounding temperature. Under different climates, the temperature of man is the same, but the loss of caloric is different; hence, our *greater want of food in winter, and hence the fact that warm clothes partially substitute victuals.* The consumption of more carbon and hydrogen than is disengaged in the form of carbonic acid and water, is injurious to health; and thus, diseases of the digestive organs of a northern inhabitant are easily removed by his going to the south, where less food is required for his maintenance.

The circumstance that fat (hydruret of carbon, i. e., a compound of hydrogen and carbon) disappears the *first* in cases of starvation, and its absence at the same time in the fœces and urine, prove that *hydrogen furnishes as important a source of caloric for the body as carbon.* The herbivorous animals exhale as great a volume of carbonic acid, as of inhaled oxygen; but with the carnivorous animals, which consume much fat for their food, the volume of the inhaled oxygen is larger than that of the exhaled carbonic acid. Victuals serve as a safeguard against the incessant invasion, by the atmospheric oxygen, on our organism; and thus, when they are withheld, as in persons starving, not only fat, but all other soluble parts disappear; the muscles are found thin, brittle, and deprived of their contractile power; and lastly, portions of the brain oxydate, and in consequence, madness and death follow. With the use of water, hunger is to be borne much longer than without it. That the combustion of carbon and hydrogen is the only source of animal heat is proved by calculations, for the heat produced is found to be great enough to explain the constant temperature of the body, and the loss by evaporation.

* According to Liebig, thirteen ounces and a half of carbon are required daily for an adult; a quantity which is considered too high by other physiologists.

To consider the generated heat as an effect of the nervous system, while supposing no change of matter, is, in truth, creating a function out of nothing. To imagine the contraction of muscles as the source of heat is equally inadmissible; for the motions cannot be accomplished without a certain consumption of force, and this force is only imparted to the organs of motion by change of matter.

Before maturity in man, the vegetative system prevails over the nervous one; more food is taken up than is apparently necessary for consumption; the increase of volume is accomplished by the blood, and only those substances are to be considered as real food which can be turned into blood. The most important constituents of blood are fibrine and albumine. They contain nitrogen in abundance, and in addition phosphorus and sulphur, the principal inorganic parts of bones. The molecules of the blood are also formed of fibrine and albumine. In both substances, like elements are contained in like proportions, they are only differently combined; both may become muscular fibres during the course of nutrition, and these dissolved, may again be turned into blood, without either the addition of a new, or the removal of an old, element. All constituents of the organs of the animal body contain nitrogen, carbon, hydrogen, and oxygen, but the two last are never in such a proportion as to form water. The quantity of azote never amounts to less than seventeen per cent., and must be introduced into the system through the medium of victuals, since the body does not possess the power of producing of itself a chemical element. With the carnivorous animals, the process of nutrition assumes the simplest form, because they take substances for their food which are identical with their flesh and blood. It is different with the herbivorous animals, but even these take, in like manner, out of the plants, the fibrine, albumine, and caseïne,—substances which are identical with the animal fibrine, albumine, and caseïne. The plants produce in their organism, in some measure, animal blood; for the carnivorous, in consuming the flesh and blood of the herbivorous, animals, only consume substances which were elaborated first in the plants. But the herbivorous animals cannot exist without a certain quantity of non-azotic victuals, as sugar, amylum, gum; even the nutrition of a very young carnivorous animal is confined to victuals consisting of sugar, butter, and caseïne; the carbon and hydrogen of the butter cannot be employed for the formation of blood, for we know that caseïne contains *that* quantity of carbon which is requisite for sanguification.

Feed a serpent with a bird, and only the bones and feathers of the animal will be evacuated; all the rest disappears in the serpent's body. The only true excrement will be urate of ammonia, which contains one equivalent of azote to two of carbon (as in bicarbonate of ammonia). Now, as muscular fibre, blood, and the membranes, contain one equivalent of azote to eight of carbon, six equivalents of carbon must have been eliminated in another form. The excrements of lions and tigers are scanty, and only contain traces of carbonaceous matters. The urine of these animals contains urea, in which the proportion of azote and carbon is = 1 : 1, as in the neutral carbonate of ammonia.

But those quantities of carbon, azote, and hydrogen, elicited from the body, do not proceed from the consumed victuals, though they agree with them in weight.

The victuals are first of all destined to be transformed into blood; out of the blood the different organs and tissues are fed, some parts of which, losing their vital property in consequence of their functions, abandon the other substance of the organs, and are removed through two filtering apparatus: the carbonaceous matters from the venous blood through the liver, and the azotic from the arterial blood through the kidneys.

All those parts of the bile which have not become insoluble during the nutritive process, return into the circulation with the nourishing parts of the food: a fact proved by the disappearance, in the intestines, of biliary matter which had been injected in the shape of clysters.

The victuals must be turned into blood, and the blood into flesh, before their carbon and hydrogen combine with oxygen; and only products of the transformation of living structures are consumed to generate animal heat. The molecules of blood, the bearers of oxygen, deliver the latter to the capillary system for the formation of carbonic acid and water. All that carbon and hydrogen which is not burned then, returns into the body in the form of bile.

It cannot be doubted that urine and bile are the products of the transformed structures. That opinion is unfounded which makes the transformed structures mere matter for evacuation. Though man secretes, in twenty-four hours, from seventeen to twenty-four ounces of bile, a large dog thirty-six ounces, a horse 592 ounces, still, comparatively, very small quantities of bile are to be found in the excrements, and as little soda, which we know to be combined with the secreted bile; it is returned into the circulation, in order to be consumed for the generation of animal heat. The sugar and fat of the milk with which the young carnivorous animal is fed, serve to keep out the invading oxygen, since the process of assimilation is so powerfully prominent, that the transformation of structures would not suffice for the production of animal heat. The like circumstance takes place in the herbivorous animals; amylum, sugar, and gum serve only to furnish their carbon for the formation of carbonic acid, and their hydrogen for the formation of water, in order to produce animal heat.

A horse can be maintained in a healthy state by the daily allowance of fifteen pounds of hay, and four pounds and a half of oats; consequently, it receives 4.45 ounces of azote, which correspond with about eight pounds of blood. With this azote it receives 14.45 ounces of carbon, six ounces and a half of which are evacuated by urine, so that only 7.95 ounces can be employed for respiration; but since a horse exhales 7.9 ounces of carbon daily, it follows that it must receive compensation for the surplus, and this it receives in the form of sugar, amylum, and gum.

The comparison of the urine of carnivorous and herbivorous animals, as regards its composition, shows a transformation of structures different in time, and different in form. The sulphuric and phosphoric acid in the urine of carnivorous animals is derived from the sulphur and phosphorus contained in the organs of their bodies. The urine of herbivorous animals shows alkaline reaction, in consequence of the carbonate of alkali containing only very small quantities of phosphates of alkalies. The phosphoric acid, engendered by the transformation of structures of herbivorous animals, undoubtedly returns into the organism. Great differences are also shown by the comparison of the process of assimilation in the herbivorous and carnivorous animals. The latter require a much smaller quantity of food than the former, because their skins possess no perspiratory pores, and consequently their body sustains a much smaller loss of heat. The organism of herbivorous animals possesses the power of transforming all food, which is not necessary for reproduction, into parts of the body; they therefore considerably increase in volume, if they are exposed to diminished exhalations, to want of exercise, and to an elevated temperature of the atmosphere. Want of exercise, and cooling air, is like a want of the supply of oxygen. Cattle and horses secrete, in *repose*, hippuric acid, in which the proportion of carbon is eighteen atoms; *in increased exercise and labour*, benzoic acid, in which the proportion of carbon will be fourteen atoms.

The sugar of milk, amylum, and gum, are the non-azotic victuals of the herbivorous animals; the fats are the non-azotic parts of their bodies. While the proportions of carbon and hydrogen are the same in the two, the quantities of oxygen contained in them are found to be different. Fat may, therefore, be formed by the oxygen proceeding from amylum, sugar, or gum. The victuals of the herbivorous animal do not contain those large masses of fat which are contained in their bodies; and, therefore, it is necessary to presume that oxygen is acquired from their food in some form or other.

The combinations of *proteïne* contain 36 equivalents of oxygen to 120 of carbon; the different kinds of sugar, gum, &c., 100 equivalents of oxygen to 120 of carbon; the fats, on the contrary, only contain 10 equivalents of oxygen to 120 of carbon.

Should the fats of the animal body, the carbon of which is derived from food, be formed out of non-azotic victuals, at least 90 equivalents of oxygen must proceed from them, and the process of the formation of fat becomes similar to that in the vegetable body, with the only difference, that instead of oxygen, carbonic acid and water are disengaged from the body. But if, in a normal state, as much carbon be secreted as taken up, the formation of fat is based upon an ill-proportioned quantity of carbon.

If we imagine that 18 equivalents of oxygen separate themselves from 2 equivalents of amylum, in order to form carbonic acid with 9 equivalents of carbon from the bile, as much heat must be produced as if 9 equivalents of carbon were to be burned in a direct way. This source of heat, in consequence of the formation of fat, could be called hypothetical, if carbon and hydrogen would separate themselves, in such a proportion, from amylum and sugar, as to form fat; but researches prove this not to be the fact. On the other hand, processes of transformation are known in fermentation and putrefaction, in which the elements of carbonic acid and water separate themselves from certain combinations, and in them, the decompositions are always accompanied by an evolution of heat, as if carbon and hydrogen had combined with oxygen. If 12 atoms of water are combined with 2 atoms of sugar, and 24 atoms of oxygen become disengaged, the *elements* of 6 atoms of alcohol remain; but the 24 atoms of disengaged oxygen are perfectly sufficient to burn a third atom of sugar completely, and in addition to carbonic acid, the 12 atoms of water will be obtained again, which were combined before with the sugar. It is well known that heat is evolved by the process of fermentation; and it can be proved that its quantity is large enough to communicate to the whole fluid mass a certain increase of heat during the whole time of fermentation, which may last for several days. If a disproportion arises between the quantity of carbon introduced by food, and that of inhaled oxygen, then formation of fat is observed; the oxygen separates itself from certain nutriments, and is eliminated from the body as carbonic acid or water. Hence, the fattening of fowls is favoured by tying their feet to prevent exercise, and by a moderately high temperature. Animals, in this regard, resemble plants, which possess, in a very high degree, the power of assimilating all nutritive substances. In some diseases, the substances containing amylum are not so transformed as to be serviceable to the process of respiration, or to be turned into fat. Thus, in diabates, amylum is only changed into sugar, and this latter is again eliminated, without further transformation.

The nutritive substances can be divided into two classes;—1. *Azotic or plastic* nutriments, or those which can be turned into blood: they are vegetable albumine, fibrine, and caseïne, flesh, blood. 2. *Non-azotic* nutriments or means of respiration: fat, amylum, gum, sugar, pectine, bassorine, wine, beer, and brandy. Though the animal body possesses the power to generate, out of the constituent parts of blood, the substance of the membranes, cells, nerves, the glutinous and cartilaginous tissues; yet the blood itself must be furnished to it, perfectly finished, even to its form. This seems to explain the reason why the gelatine of the bones and skin alone cannot serve for the nourishment and maintenance of the vital functions, since their composition is different from that of proteïne. The organs are not able to transform the elements of gelatine in such a manner as to form proteïne. The glutinous tissues of the animal body suffer, it is true, under the influence of oxygen and humidity, a constant change, in consequence of which some parts are expelled, and substituted by others; but this only takes place in a very limited way. Whilst in the starving and sick the fat disappears, and the muscular tissue re-assumes the form of blood, the tendons, the membranes, and the glutinous tissues in general, are little changed. But the glue which the dog takes with bones (the bony substance of which only is evacuated), and the gelatine, which man feeds on, are transformed in the body; and it is not at all improbable, that, in the organism, gelatine becomes again a cell, a membrane, or a constituent part of bone. Thus, in patients, the intensity of whose vital power is diminished in all parts of the body, the glutinous tissues become soluble, and exhibit a distinct influence on the state of the body, serving to economize force. It is likewise clear that the brittleness of the bones in herbivorous animals is the natural consequence of weakness in those parts of the organism, in which the combinations of proteïne are transformed into cellular tissue.

(To be continued.)

THE *NON*-"AGGREGATE MEETING" OF THE *NON*-"ORGANIZED SOCIETIES."

The second general meeting at the Crown and Anchor did not diminish in importance when compared, *as respects numbers*, with the first, which was held there a little time ago, upon the subject of medical grievances. We observed some of the junior members of the profession, as well as a proportion of those students who are now in the metropolis in the pursuit of their medical studies, and whose future interests, more than those of any other class in the profession, are involved in the present contest. A *few* of the old members of the College also coldly shewed themselves, as if to express their indignation upon the charter in very despite of their personal predilections or antipathies. If the getters-up of the movement belonged, not absolutely only, but avowedly, to the swell-mob, and were men having the most corrupt purposes in view, the circumstances of the profession would have obtained an appearance of considerable support, and more particularly from the country, where their avocations and positions are but little known. But when the characters of the men get abroad, we may despair, and justly so, of any unanimity, or respectable action for our good cause. The last meeting, certainly, if it was attended by no single practitioner of eminence, attracted a few gentlemen of respectability; but when these have found out the sort of personages with whom they are allied, they will of course drop off by degrees, until the hopeful fraternity that are left behind will consume upon the pile which they had raised for the most sinister purposes. Mr. Ancell, after certain ungracious insults offered to him by Messrs. Lynch and Simpson, accepted the chair, and we condole with that unfortunate gentleman for being in such an humble position as to be *obliged* to exhibit himself as the chairman of that meeting. If he does not hold the highest position in his class of the profession, he is yet a laborious and respectable man, who deserves to be associated with a class of men entirely different from his present colleagues. The venerable Mr. Carpue entertained the meeting with his appropriate anecdotes; and then Dr. Lynch amused, if he did not instruct his hearers, in a phraseology peculiar to himself. He said, with his customary originality, that "Medicine, like another of Apollo's daughters, loved retirement." Would that we could say as much for the *learned* little orator himself. If Medicine be as retiring as he says, he must surely be very little burdened with it. He then talked about Vathel and Blackstone, *apropos* to nothing, but forgot *Puffingdorf*, who was very *apropos* indeed. When he came to the list of subscriptions, he read, loudly, *Mr.* John Smith, *Esq.*, one pound, which greatly relieved the *monotony* of his giving but one side of the accounts! Of course, the mistake on double titles is easily tolerated. In kitchens, where bleeding ducks run about with their heads off, an ardent and aspiring mind cannot learn better! Poor Cooper, of *St. Pancras*, made a most pitiful appearance, in an attempt to force his follies, with all the effrontery imaginable, upon the notice of the assembly. This person, with his friend Rugg, whose vulgarisms have now become proverbial, were treated with scorn and contempt by almost every person present, until they were stricken back upon their seats for the remainder of the evening. "The pauper man," and "Skerrilus Rugg," ran round the meeting like wild-fire. The good taste which might be expected to pervade in an assembly of medical men would naturally account for this, and we trust that when such persons appear again before a body of gentlemen, that their assurance will obtain even a more signal punishment. After all, our friend, Mr. Wakley, was the lion of the evening—the Mr. Wakley of Clerkenwell-green notoriety, and more particularly of the hustings upon Islington-green, where some of his worthy associates, with their hands moving like drumsticks upon his shoulders, urged him on until he became so heated upon politics, that his then dear friends, the less-washed portion of Finsbury, thought the Hope Insurance policies less sure than his promises of gentlemanly retirement to them upon the spoils of his Robespierrean achievements. But the able gentleman, always gifted with the faculty of second-sight, soon tacked round in his political speculations, and became as gentle as the falling snow: like his worthy prototype, Bottom the weaver, (playing the lion!) he roared you as gently as any sucking dove; he roared you an 'twere a nightingale! His quietude in the House was so exemplary, that it convinced the incredulous Premier of a meekness of renegade-ism quite novel. The late *Wakley-an* appointment has been the reward of his obedience, and offers a good example to political aspirants by which to learn in time how to behave themselves. We need scarcely say that this *extraordinary* M.P., who has been so unchanged *socially* by his elevation, that he might be submerged in the mob tomorrow, without any one perceiving that he was ever not one of their order, was bound by the highest debt of gratitude to the general practitioners of England, for the devoted services which he received from them. *The debt was never paid:* NO, NOT EVEN AN INSTALMENT OF IT. When professional success was denied to him both as a surgeon and as a chemist, under the *various* attempts which he made to obtain it; it is now matter of public history that he was compelled to betake himself to an attic in an humble dwelling. With abundance of time for reflection, medical abuses struck him,—the despotic uses of the Apothecaries' Act created mal-contents everywhere; and as he himself did not escape from the Company's crushing influence, he was red hot for opposition work. The *Lancet* followed and met with general support, because it opened its doors to the well-grounded complaints of an humbled and degraded profession. As it is the multitude only who can give life and prosperity to any literary publication; he wrote for that multitude, who at that time were far less enlightened than now: and it was by their support that the *Lancet* outlived the wealth and influence which the members of the corrupt corporation brought to bear against its existence. The members of the profession having thus generously flocked round his *Journal*—he became happily secure from

that wandering and uncertain state of existence which must always attend upon a man who humbled by poverty and repeated failures, has the misfor une to be without friends or family connexions. From the attic, therefore, he moved into a mansion in Bedford-square, such as he never lived in before—set up his equipage, and came out all at once a man bewildered by the suddenness of the change. His ambition now knew no bounds, and the vacant coronership excited his cupidity. His contest with Mr. Baker was long and expensive, and attended with defeat. Several thousand pounds of debt weighed upon his shoulders; his acceptances were more numerous, and in less credit than his brother member's; and his house in Bedford-square, hourly stormed by importunities no man likes, was necessarily vacated for Greenford, where lying as a wounded man, his faithful friends, the general practitioners, tenderly nursed him until time and the proceeds of the *Lancet* refreshing him, he rose ripe and ready for action (mischief?) as ever. At length he quietly becomes member of Parliament for Finsbury, and coroner for Middlesex, without a contest. In both *situations he has forgotten to do one iota of service to the cause or interest of his old friend, the general practitioners!* His excuse at the last meeting was, that it was their own faults, for they ought to have kept up a continued agitation. But when experience had taught him the constitution of the house, did he then tell us what to do? No—he rather diverted our minds to indifferent subjects, until an additional chain had been put upon our necks—*the necks of his benefactors*—by the new charter. His *Lancet*, therefore, went down in the estimation of the profession, and now it remains in a dangerous state of syncope—unknown and undistinguished for anything but a loss of reputation, and for its treachery to the cause of Medical Reform. It now awaits but an essay of Mr. Cooper's surgical skill to hasten it to its final resting place. It is hoped a suitable spot can be found in St. *Pancreas*, as Mr. Rugg would say, where Mr. Wakley's friend, Dr. John Bond, may dig the grave into which its body is to be dropped, and over which Doctor Lynch (Rev?—for no one knows whether he is D.D. or M.D) will pronounce a funeral oration, emended from Bossuet. His clerk, Wm. Simpson, Hon. Sec., will give the responses, for he is known to be a capital echo. Like other funerals, the man who will sorrow least over the bereavement, will be he who is most closely connected with the loss,—Thomas Wakley. Like a miser's heir, he has in his coronership and lucrative influence with Government enough to console him for the sad departure of his lamented yellow-faced, usurious, now lecherous—now treacherous—always foul-mouthed, old friend—the *Lancet*.

If a squalid, half-starved, little thief steal a pocket-handkerchief, or attempt a few antics in getting over the palace-wall,—if a Walbrook official play the Medical Protection Society with his parishioners' accounts,—if the lovesick and giddy maiden "bolts" to Gretna Green, with her hungry lover,—if some workhouse Cooper, by some five hours extra sleep deliver a pauper from overseer tyranny,—if Prince Albert boast the acquisition of a few bantams to his aviary—or the Queen graciously take the arm of the Duke of Wellington, or gossip with the Ojibbeways—the press will teem with no brief narratives. Not so with the general affairs of medicine. Every body knows that the leading journals of London do not take that notice of them which they deserve, and which we hope yet to make them take. Now, how is it that a body of men, who exert so great an influence over the destinies of mankind by the application of the healing art to their infirmities. are so neglected? For this reason, we are like nobody's children: we have no one to own us. The public does not appreciate us in our aggregate capacity. The Colleges have become contemptible by our opposition, which they have so well earned: and we have become contemptible because we had no better man than a Wakley in our front. We want something which we yet have not, and which we are yet but promised. The *Lancet* has had its thousands, and done nothing: the Colleges have had their thousands, and have done nothing:—so much the worse. The thousands are now flying to us:—so much the better: for we pledge ourselves to the profession that they shall be applied to their advantage. Whatever there is in our body of knowledge, nerve, or honesty, which will work for the good cause, that we will search after, educe, and stimulate to vigorous action.

H. B.

TRANSACTIONS OF LEARNED SOCIETIES.

Royal Medical and Chirurgical Society, March 26.—Mr. Stanley, President in the Chair.—*Notes of a case of Vitiligo Infantilis*, by George Gregory, M. D., Physician to the Small-pox and Vaccination Hospitals.

The case was that of a child, thirteen months old. At the age of four months, the mother first noticed about its neck some smooth white shining elevations, which continued to spread. At present these tubercular elevations, varying in size from that of a pea to a small wafer, and of irregular form, occupy the neck, back, and a large portion of the abdomen. A few of these terminate by minute vesicles on the summit of the tubercle, and a small scab succeeds. The child is in good general health; is at present cutting its teeth, and the process of dentition goes on favourably. The author observes that it cannot be doubted but that the vitiliginous state of the surface is connected with the process of dentition. Like strophulus and other cutaneous diseases, it serves a very useful purpose in the infantile economy. The action of vessels, which is here harmlessly expended upon the surface, might, if transferred to an internal organ, lead to serious results. While dentition continues, he considers it would be impossible to put a sudden check to the disease, and unwise so to do, if it were possible.

After the paper had been read, the infant was introduced, and this very rare disease was shewn to the fellows present. A very beautiful and correct wax-model, illustrating the present appearance of the disease, was also exhibited.

Dr. Webster enquired if the case which had just been narrated was the only one of the kind which Dr. Gregory had seen? From Dr. Gregory's great experience in skin diseases, he was sure that if the complaint were at all of frequent occurrence, other examples must have presented themselves to him, and he was further desirous of learning what treatment was considered most serviceable? He (Dr. Webster) believed it to be a very rare malady.

Dr. Gregory, in reply, stated that this was the only case of the vitiliginous eruption that had ever fallen under his notice. He had of course read an account of it in Bateman's work, as others had done, but he had but a very confused notion of the disease, and when he first saw the case, he could hardly recognise it. With regard to the treatment, he hardly knew what to say, but acting on general principles, as in this case, it seemed so closely connected with the process of dentition, that he did not interfere with it, more especially as it appeared to be perfectly innocuous. As a mere *placebo*, as the child seemed rather weak, he had prescribed five grains of the carbonate of iron, and one grain of powdered rhubarb to be taken every day. He was anxious to know whether other members had seen such cases, and, if so, what was the result. Dr. Kerrison had mentioned to him since he had been in the room, that he had seen a similar disease about thirty-five years ago, in an adult. In that case there was not any constitutional disturbance, nor was there any particular treatment adopted. The patient was soon lost sight of.

Dr. Kerrison observed that he knew very little of the case in question, except that it had been shown to him as a curious instance of skin disease. The patient was a hair-dresser. The tubercles were more elevated than they appeared to be in the child, and there was not any inflammation at their base. He did not know the result of the case.

On dislocation of the astragalus, with the lower ends of the tibia and fibula inwards, illustrated by cases. By Henry Hancock, Esq., surgeon to the Charing Cross Hospital.

The object of this paper is to direct attention to an injury of comparatively rare occurrence—dislocation of the astragalus from the os calcis and scaphoides, the ancle joint remaining entire. The writer, after alluding to numerous authors who considered that such an accident could not occur, gives an account of the only cases (four in number) he has met with in works of various writers, viz: two in the last edition of Sir Astley Cooper's work on "Dislocations and Fractures," edited by Mr. B. Cooper, one related by Professor Harrison in the *Dublin Journal*, vol. xv, designated "Displacement of the foot outwards, with fracture of the fibula," and a fourth described by Dupuytren, in the *Leçons Orales*, vol. first, p. 225, as a "Fracture of the fibula, with dislocation of the foot inwards." Both these latter titles the author considers erroneous; for it is very doubtful whether in reality the astragalus with the lower ends of the tibia and fibula are not the parts displaced, and even if this be not the case, it is only a portion, and not the whole of the foot which is dislocated. The following cases are related by the author. John Middleditch, a strong healthy man, ætat. twenty-four, was admitted into the Charing Cross Hospital under the author's care, on the 5th of December, 1840, with an injury to the right ancle, he having fallen from the top of one of the vats in a brewery. Four days afterwards, when the swelling was reduced, it was found that the fibula was fractured about three inches above the ancle; the axis of the tibia, instead of falling on the centre of the foot, was thrown inwards and slightly forwards, giving the leg the appearance of being twisted in that direction. The position and direction of the foot were not materially altered, further than by its projecting considerably on its outer side, and by the toes turning slightly outwards, but its dorsum looked upwards as in the natural condition. Upon carrying the finger along the outer edge from the heel forwards, the anterior extremities of the os calcis, where it unites with the cuboid bone, could be felt distinctly, whilst above there was a considerable cavity, instead of the prominence formed by the astragalus and the external malleolus. By pressing the finger along the dorsum of the foot, a depression could also be distinguished behind the posterior margin of the scaphoid bone. On the inner side of the foot was a prominence corresponding to the internal malleolus, of which the inferior margin could be distinctly defined, and anteriorly and inferiorly, another projection more prominent, evidently caused by the *head of the astragalus, over which the skin was tense, thin, and vesicated.* The distance between the internal malleolus and prominence of the os calcis was somewhat greater than in the sound foot; and that between the lower end of the inner malleolus, and the sole of the foot diminished about one inch. The ancle-joint was still capable of flexion and extension, and there was very considerable motion in the centre of the foot, corresponding to the calcanao-cuboidal articulation, forming as it were, a double joint. It was concluded that the astragalus had been forced from without inwards off the upper articulating surfaces of the os calcis, carrying with it the lower end of the tibia, and most probably resting upon the smaller process of the os calcis. The various steps by which reduction was effected are next described. The integuments over the point of pressure sloughed, and separated on the third day after the reduction, leaving the anterior part of the astragalus exposed in its proper position, and this

was succeeded by considerable discharge for several days, in the course of which the internal calcaneo-scaphoid ligament sloughed and came away; the astragalus being now no longer restrained in that direction, gradually twisted round upon the os calcis, until at length a large portion of its head protruded through the opening in the integuments; this prevented the wound from closing, and as the bone could not be kept in its proper position, but had lost its articular cartilage, and was passing into a state of necrosis, the author subsequently, with a small saw, removed its head to the extent of about three quarters of an inch, after which the wound gradually healed, the parts became consolidated, and the man left the hospital cured in July, just seven months after the accident. Two months subsequently the following report was made:—He walks as well as he did before the accident, without a stick, or artificial support of any kind. The leg is larger than the opposite one, and there is some thickening around the ancle, but the motion of the joint is good, and the direction of the foot and situation of the malleoli natural. He is able to do his work, which at times is heavy, as well as ever he did, his leg being entirely free from pain. The particulars of the next case are taken from the surgical notes of the late Mr. Howship, and relate to a preparation in the possession of the Royal College of Surgeons. It appears from the position of the bones, that the same accident had occurred as that described in the former case, but that the dislocation had not been reduced. The author enters into a detailed account of the condition of the bones. He then concludes his paper with some observations on the treatment to be pursued in these accidents, giving the opinion of various writers on dislocation of the astralagus.

Mr. Stanley observed, that the first case mentioned by Mr. Hancock was a very interesting one, on several accounts. The reduction of the dislocation was effected at a very late period after the accident, and notwithstanding sloughing took place afterwards, and it became necessary to remove a portion of bone, the case did well. He thought the case involved several important points in surgery. He was particularly desirous to draw the attention of the Society to the reduction of the dislocation so long after the accident, because in a paper published last year by Mr. Turner, which had been apparently overlooked by Mr. Hancock, a large number of cases were brought forward, from which Mr. Turner drew the conclusion, that when attempts at reduction fail at the commencement of the case, it is the better plan not to repeat them. In Mr. Hancock's case, however, they had been repeated, and with success.

Mr. Lloyd could not say what treatment is adopted in such cases at most of the public institutions in town, but he could say, that many years ago, when he was one of the dressers to Mr. Abernethy, and afterwards when he was one of the house-surgeons, that the practice was to treat it at first as a dislocation, and if not successful in that, then the limb was put up in splints, and the case generally did well. A slight deformity generally resulted, but not so much as might be anticipated. In cases of compound fracture, Mr. Abernethy invariably endeavoured to save the limb, unless the case was a very bad one, and there was a great destruction of parts. He (Mr. Lloyd) could only recollect one case of compound dislocation submitted to this treatment which did not do well, and in which amputation was afterwards necessary. He could call to mind many cases, on the other hand, where the wounds were large and extensive, which recovered. He had recourse to the same plan of treatment himself, and he had thought it was the rule so to do generally throughout the profession; but he recollected a case, that of Mr. Wontner, the late governor of Newgate, to which the late Sir W. Blizard and Mr. Norris were called, and amputation was performed. He dissected the limb afterwards, and found the injury to be so exceedingly slight, that he felt assured that if it had not been the rule to amputate in all such cases, the operation would not have been performed.

Mr. Erichsen stated, that when he was house-surgeon to the University College Hospital, a man was admitted under the care of Mr. Liston, he having been thrown off his coach-box. The right foot was twisted outwards, the inner edge touching the ground. The external malleolus was broken; the astragalus and tibia were carried forwards and inwards, and the head of the astragalus was on the dorsum and inner side of the scaphoid bone. Reduction was readily effected, by bending the knee, so as to relax the large muscles, then extending the foot, and pressing the astragalus into its position, which it resumed with an audible snap. The limb was then put up in Macintyre's splints, and the case ultimately did well. The other limb was the subject of Pott's fracture. Mr. Erichsen concluded by alluding to the practice pursued in France, in some cases, by Velpeau and others, of dividing the tendo Achillis; it is said to have been performed successfully, and Mr. Erichsen supposed that it acted by removing muscular tension.

Mr. Shaw thought the author treated too lightly of the difficulty experienced in the reduction of the dislocated astragalus, when it is displaced, both from the tibia and fibula, and from the os calcis and scaphoides. Such an injury is quite different from the cases related in the paper, where the astragalus preserved its relations to the bones of the leg. Several years ago, during the temporary absence of his colleague, Mr. Arnott, under whose care the patient fell, he met with a case where the astragalus had been jerked between the lower heads of the tibia and fibula, and the os calcis and scaphoides, so as to be displaced forwards and inwards, and the anterior head and neck projected through the skin. After repeated unsuccessful attempts at reduction, he excised the bone. Owing to the narrow space between the posterior tibial artery and nerve, which were seen in the inside of the wound, and the anterior tibial artery, both of which vessels it was desirable to avoid wounding, he found considerable difficulty in freeing the displaced bone from its ligamentous connections. He, therefore, divided the bone with the saw, close to the skin, and with the bone scissors cut through the remaining parts, lodged between the anterior edge of the tibia and os calcis, so as to remove the whole with comparative ease. As regarded the wound, it healed favourably; the cure was prolonged by abscesses forming about the hip, and by caries of the sacrum, but the patient left the hospital, in six months, with an useful foot.

Mr. Hancock claimed the indulgence of the Society, while he trespassed on their time to reply to the observations that had been made. Mr. Stanley had observed, that he thought that he had overlooked Mr. Turner's paper, but he (Mr. Hancock) had not made any attempt at reduction during the early treatment of the case. He did not see the patient for the first forty-eight hours, and when the man did come under his notice, the swelling was too great for any manipulation to be practised. With reference to what had fallen from Mr. Lloyd, as to the necessity or propriety of amputation, his own remarks, he thought, were called for by the observations he had found in works treating of this accident. Certain laws were there laid down for regulating the application of amputation under certain circumstances. He thought Mr. Lloyd's observations would partly support the view he had taken, as he had narrated a case in which amputation was performed, when it was scarcely required. With respect to Mr. Shaw's observation, that he had passed over the question of reduction too lightly, he differed with him in opinion in that respect; in the case of Middleditch, he had especially pointed out, that in consequence of the destruction of the internal portion of the ligamentum teres, it was impossible to keep the bone reduced, and therefore a portion was necessarily removed.

Mr. Lloyd remarked that in the case where amputation was performed, the injury to the limb was very severe, not at all slight; and the limb was removed, on account of the excessive suppuration, and the man's constitution being a bad one.

Mr. Hancock said that he alluded to the case of the Governor of Newgate, whose limb Mr. Lloyd dissected.

Mr. Lloyd admitted that in that case the injury was slight. He himself had not anything to do with its treatment. The limb was sent to him for dissection by the surgeon in attendance.

Mr. Quain enquired when this amputation of Mr. Wontner's limb took place? Was it last year, or the year before?

Mr. Lloyd replied, about fifteen years since.

Mr. Quain protested against applying the practice of fifteen years since, and the statements of the older writers as quoted by Mr. Hancock, as a test of the present practice of surgery.

Mr. Lloyd thought that his object in bringing forward this case had been misunderstood by Mr. Quain. He desired merely to shew what had been the practice of older surgeons—that in cases of this injury they performed amputation, and that Mr. Abernethy had emancipated himself from the thraldom of such laws (Cheers.)

Mr. Hancock referred Mr. Quain to the opinions on this subject published last year by his colleague, Mr. S. Cooper.

Mr. Davis, of Hampstead, narrated a case of this kind of injury, which Mr. Abernethy attended conjointly with him, twenty-seven years ago, and in that instance an useful limb was preserved. The patient, who had only a slight limp from his accident, lived twenty years afterwards.

Case of obstruction in the intestinal canal, terminating favorably on the ninth day, by spontaneous vomiting, and evacuation of the contents of the intestine, by Sir GEORGE LEFEVRE, M.D., Fellow of the Royal College of Physicians.—The subject of the present case was a little girl, twelve years of age, of a very delicate constitution, strongly marked scrophulous disposition, and with very feeble digestive powers, so that she was unable at all times to digest fruit or vegetables. She had been attacked by an epidemic autumnal cholera, which prevailed amongst children in the town where she was residing, and which yielded to the usual mode of treatment. Soon after the termination of this, she was attacked by a disease of an opposite nature, and became obstinately constipated, whilst the stomach rejected every thing that was taken into it. Purgatives in every shape had been employed, but without effect.; leeches had been applied to the abdomen, which had been fomented freely. Such was the history of the case which Sir George Lefevre received from the two medical men in attendance previously to his seeing her, which he did for the first time on the 27th of August, in the afternoon. She was much flushed in the face, had an anxious countenance, a small, quick, compressible pulse, a cold moist surface, the extremities being colder than natural. She suffered from distention of the abdomen, without complaining of much pain, and she vomited continually a green bilious-looking fluid. As no inflammation was apparent, and as more depletion was not under the existing circumstances indicated, soothing measures were employed. The vomiting was the most annoying symptom from its frequency, rather than from any distress which it occasioned, for this dark-green fluid was thrown up without much effort. A small blister was applied to the pit of the stomach, and small doses of prussic acid administered in almond milk. This treatment seemed to check the vomiting for many hours successively; she passed a tranquil night, but no relief to the bowels had been obtained, and the abdomen was much more swollen. Croton oil was given internally, and in clyster during the day, and, as warm applications did not seem to produce any effect, bladders filled with ice, were applied all over the belly. The patient was restless and uneasy, continually changing her place in bed, but this arose from distention, rather than from any acute pain. About midnight of the 28th, she complained of twisting and severe pain in the bowels, of a colicky nature; there was also more pain upon pressure than previously, and, as opiates were administered without benefit, the author directed the application of a dozen leeches, which afforded immediate relief to the distressing symptoms. His patient got some sleep, and was free from pain when awake. The author, being obliged to return to London, did not see her again until the afternoon of the following day, when he learned from the physician in attendance, that she had passed the day on which he left her pretty well, but that at midnight the same symptoms recurred, as on the previous night, and notwithstanding her state of great exhaustion,

he had again applied leeches with benefit. He also informed Sir George Lefevre that the vomiting had returned, and that the matter brought up was evidently from the ileum, and the seat of the stricture seemed to be about the caput cœci. There was no question, upon minute examination, that the matter vomited up, proceeded from the small intestines. The distention was very great, respiration was much impeded, and the little patient suffered severely. A long elastic tube was introduced into the rectum, and was carried into the colon, into which water was forced by a pumping syringe. The operation was productive of great distress to the patient, and was ineffectual as to relief. The night was restless, and the following day the little sufferer seemed much exhausted. The face was colourless, the countenance anxious, the body covered with a cold clammy sweat, and she expressed herself, as if about to die. The bed-room having a southern aspect, and the weather being sultry, she was removed into a cooler room, into which she was carried in a person's arms. As she was much fatigued by the operation, she had a glass of Madeira wine, which she drank with pleasure, but she had hardly swallowed it, when she made signs for the bason, lifted herself up in bed, and threw up a dark green fluid to the amount of three pints. She experienced immediate relief, and breathed more freely, and the upper part of the body became more loose and compressible. Some more wine was given her, which remained on her stomach. She had no more nausea. Constant friction was maintained over the abdomen, and injections of vinegar and water were repeated every hour. The first was returned without being accompanied by any solid matter, but it had a fœtid smell. The second was accompanied by pieces of flocculent matter of a membranous appearance, and the fluid returned was horribly fœtid, like putrid water in which flesh had been macerated. She was now enabled to compress the abdominal muscles, and make an effort to go to stool, which the previous great distension, paralysing the action of the muscles, had prevented her doing. Much of this membranous matter came away after each injection. The smell was most offensive. About four hours after the spontaneous vomiting, she asked to go to the chair, when the bowels gave way, and a large quantity of solid excrement was voided. She passed several more stools in the course of the evening, and then slept tranquilly. The following morning she had a dose of castor-oil, which produced its desired effect, without creating nausea, and the author left her convalescent. He learned subsequently, from his colleagues, that she had a good deal of constitutional fever for four or five days. She recovered in a short time, and her digestive powers are now better than previously to her illness. The obstruction was relieved only on the ninth day of the disease.

WESTMINSTER MEDICAL SOCIETY, March 30.—Mr. Fisher, President, in the Chair.—*Case of Syreniform Monster.*

Mr. Dunn exhibited a preparation of the osseous system of the lower part of a monstrosity, which has been described by Dr. Otto, of Breslau, under the name of *monstrum humanum syreniforme.*

It was the mother's fourth accouchement. On all former occasions, she had given birth to fine, healthy, well-formed children. The presentation was natural, and the labour an easy one. The child cried, though feebly, on entering the world, and died in the course of an hour afterwards. The head and chest were well formed, and the only irregularities in the upper extremities were a congenital dislocation at the wrist of the right hand, and the attachment of a diminutive thumb by mere common integument. Instead, however, of lower extremities, the child from the region of the navel tapered gradually downwards to a point, with a slight concavity forwards, having the osseous part covered with muscles, and the common integuments, like the other parts of the body. When the extreme point was pressed upon, the child was thrown into a kind of convulsive agitation. There were not any genitals in front, nor any anus behind. It was that form of monstrosity which Dr. A. G. Otto, in his celebrated work which contains the description of six hundred monsters in the Museum of Breslau, published in 1841, has styled *monstrum humanum sireniforme.*

Through the kindness of Mr. Bowman, of King College, Mr. Dunn had an opportunity of looking through Dr. Otto's work, but there is not one description which agrees in any particular with the present case.

At the *post mortem* examination, the viscera of the chest presented nothing abnormal. The lungs were collapsed. In the abdomen the liver was large, stomach and bowels natural, but the colon, or perhaps rectum, terminated in a large cul de sac, distended with meconium.

The kidneys presented a very abnormal condition. The left was twice the size of the right, and both were composed of sacculi or vesicles, differing in size from a pea to a walnut, and filled with a serous fluid, but not communicating with each other. They appeared to be the lobulated kidneys changed into vesicles, in consequence of the absence of ureters.

The viscera of the pelvis were entirely wanting, there was no bladder, nor were there any organs of generation.

The Osseous System.—With the exception of a partial union of the second with the third lumbar vertebra, all the bones above the pelvis were natural. The deformity of the bones of the pelvis and lower limbs was accompanied with a singular twisting or rotation of each side outwards, by which the sacrum and coccyx were thrust backwards, and curved in such a direction that the os coccygis touched the lumbar spine — the ischial bones approximated, and blended behind the pelvis—the pubic bones were very small, and the acetabula were blended into a single cavity, slightly concave, and partially sub-divided by a vertical ridge, situated in the median line behind the symphysis pubis. The iliac bones were of natural size, but their abdominal surface was convex, from the bending backwards of the crista and articulated spines. The lower orifice of the pelvis only existed behind the coalescence of the ischial spines and tuberosities, and would have been exceedingly narrow, but for the backward course of the sacrum, which allowed it to be a third of an inch from front to back, and three-quarters of an inch across. The thyroid foramina were only large enough to admit a crow quill; they were close together, in consequence of the coalesence of the pubic and ischial bones from the symphysis to the ischial spines. The obturator muscles did not exist. There was only one femur, which was, however, evidently the representative of two. The head terminated its upper extremity; looked forward and upwards; had two faces occupying the double acetabulum; no cervix femoris behind; *a single trochanter major in the middle line*, receiving the insertions of the glutæi from the contiguous surface of the ilia. In front two minor trochanters directed outwards, very near together, and receiving the tendons of the psoæ and iliaci interni muscles. Flexion and extension were the only motions of the hip; the shaft of the femur was thin in the middle. Below were four condyles, united laterally, *and having their trochanter surfaces directed backwards and outwards*, instead of forwards; two patellæ occupied their surfaces, and were therefore on the posterior aspect of the limb; the extensor muscles were inserted into them; the tibia had a double tuberosity on the posterior aspect of the head receiving the ligamenta patellarum. It terminated in a point, an inch below the knee. Thus the lower extremities partook of the outward twist of the pelvic bones.

Mr. Dunn also mentioned that the fluid in the vesicles or sacculi of the kidneys had been analysed, and was found to contain albumen, but not any urea. The placenta itself was not in a healthy state; one-half appeared to be very thin, the other on the contrary very thick, and the two halves were separated by a membranous division. This monstrosity was the first offspring the lady had borne after her second marriage, and the occurrence of this malformation was attributed by her to the fact that a young child of hers, while she was in an early stage of pregnancy,—between the second and third month,—had met a man in the street who had lost his lower limbs, and was dragging himself about on a wooden board. This made a great impression on the child, and for several days he was continually speaking of it, so much so as to render his mother uncomfortable, and fix her thoughts upon the same object. Her health however had been very good during her pregnancy, more so perhaps than on any previous occasion, nor did she expect to be delivered of a monstrosity.

Mr. Hird alluded to the observations made by Geoffroy de Saint Hilaire in his great work on monstrosities, in which he referred the great majority of cases to an arrest of development. The present case however he conceived was not produced by that cause, but might rather be termed a freak of nature.

Mr. Snow agreed with Mr. Hird that the doctrine of arrest of development did not explain all the cases that occurred. Mr. Dunn's case was one of fusion of parts, and he thought that the fright of the mother was a mere coincidence: it had occurred at a period of pregnancy too late to exercise any influence. The limbs were too far advanced for fusion to have been thus produced.

Dr. Chowne regarded the absence of the pelvic viscera as the principal cause of the osseous malformation, and he believed that the different parts of the body take their form and shape, from those with which they are in contact. He had seen the liver a mere shapeless mass, in a case where the abdominal parietes were wanting. All were familiar with cases where the abdominal parietes and the anterior part of the bladder were absent, the posterior wall of that viscus falling through, and adhering to the edge of the opening in the abdomen. This case was similar to it in many points, but in addition, there was also an absence of the prostate gland, and of the bulb of the urethra. The pelvic viscera being wanting, the pelvis would become very contracted and conical, the sacrum would be thrown very much forwards, and the anus be brought close to the scrotum. In the case before the society the pelvis was complete as to its parts, but not as to its shape. The acetabula, instead of keeping apart in their proper places, had met together, and constituted a malformation, there being a double femur, although it looked like a single one, and two corresponding patellæ. The malformation must have taken place very early indeed, in all probability in the first month.

Mr. Hird objected that the bladder in the fœtus is not a pelvic viscus, and the organs of generation are very little developed, and he therefore could not think that these viscera could give the necessary form to the bones of the pelvis. He also alluded to cases where the rectum is entirely absent, and yet the pelvis is perfect in shape.

Dr. Chowne did not look upon the rectum as either a large or capacious viscus in the pelvis of the child. It is a disputed point whether the bladder is an abdominal or pelvic viscus, but there can be no doubt that when, in a distended state, it occupies a place in the pelvis. Although the bladder, rectum, and genital organs are small in the fœtus, yet are they capable of filling a considerable space in its pelvis, which is a small one.

Dr. Reid felt great doubt as to the explanation offered by Dr. Chowne, but he would adopt it, in preference to that of the mother. His great objection however was to the early period at which the malformation must have occurred. Dr. Reid then made some remarks opposing the doctrine of the mother's imagination influencing the formation of marks, and deformities in her offspring. Every year added to his conviction, that the maternal imagination had no agency in their production.

Dr. Chowne alluded to a preparation in the museum of Guy's hospital, the particulars of the case having been brought before the society some years since. The fœtus was the offspring of a female, who had been much delighted with Grimaldi's performance at the theatre, so much so that she was constantly talking of it. In due course of time, she produced a *perfect Grimaldi*, not stained certainly with paint, but marked with the squares, and other lines as that pantomimist was himself marked. Dr. Chowne had examined the preparation which he found was an illustration

of a peculiar disease of the skin. The occurrence was a singular coincidence.

Some further discussion ensued among the members on this subject, and the general impression seemed to be that these malformations, &c., were in no respect caused by frightful or other objects influencing the imagination of the mother.

Medico-Botanical Society, March 14.—Mr. Ralph, Professor of Botany, in the chair.

Dr. Cooke, the professor of toxicology, delivered a lecture on the diagnostic symptoms produced by poisonous plants.

Of the different classes into which poisons are divided, vegetables form nearly the whole of two, and one entire order of the third. Hence the importance of studying the symptoms consequent upon their ingestion in poisonous doses.

In the irritant poisons, vegetables form one order which contains elaterium, colocynth, euphorbium, croton, staves acre, mezereon, scammony, gamboge, savine, lobelia inflata, &c. The general symptoms produced by them are heat of stomach and fauces, vomiting and purging, and pain in the stomach and bowels increased on pressure, quick respiration, vertigo, syncope, cold sweats, convulsions, and death.

The morbid appearances indicate severe gastro-enteritis. The chief diagnostic symptoms are:—

Elaterium, profuse watery purging.

Colocynth, excessive purging, priapism and retention of urine.

Euphorbium, gangrene of the stomach.

Croton oil, severe purging and general cyanosis, as in cholera.

Staves acre, giddiness, rigidity, convulsions following in rapid succession.

Savine, inflammation of the rectum, and, by sympathy, of the uterus.

Lobelia inflata, violent vomiting, rupture of muscular fibre of stomach, convulsions and delirium.

The class of narcotics. This includes numerous plants; the chief are opium, hyoscyamus, lactuca virosa, lactuca sativa, solanum dulcamara, and hydrocyanic acid.

The symptoms produced by all are fulness in the head, intoxication, loss of voluntary motion, almost paralysis, often convulsions and coma. The post mortem appearances are those produced by congestive apoplexy. The chief diagnostic symptoms are:—

Opium, at first constriction of the pupil, and in the sedative stage dilation; convulsions are rare in adults, but common in children. The attendant symptoms are those of pulmonary apoplexy.

Hyoscyamus.—Active delirium in which the patients often dance and sing from excitement. This is followed by stupor, and, throughout, the pupil is dilated, and the bowels purged.

Hydrocyanic acid is a direct sedative to the heart and nervous system. It is known by the rapidity of its symptoms, difficult respiration, paralysis, and by the smell of the acid in the breath.

The others have not been sufficiently investigated to enable us to form positive diagnostic marks.

The class of narcotic acrids have a double action on the system, one local,—the other general on the nervous system. This class has been much more minutely examined and arranged than the others.

The chief are stramonium, belladonna, tobacco, the umbelliferæ, cicuta, especially conium, the ranunculaceæ, black hellebore, veratrum album, digitalis, nux vomica, and cocculus indicus. Of these, stramonium intoxicates, brings on savage delirium, and convulsions, followed by paralysis, often dilatation, but not immobility, of the pupil, often stellated petechiæ.

Belladonna is known by dilatation of the pupil, weakness, giddiness, syncope, merry delirium, aphonia, and incessant twitching of the fingers.

Tobacco causes a short stage of excitement followed by nausea, syncope, dilated pupils, stupor, and stertor.

Umbelliferæ. The most virulent are conium, æthusa cynapium, cicuta virosa, and oenanthe crocata. Of these oenanthe crocata is the most virulent, the next is cicuta virosa. The symptoms are giddiness, heat of fauces, vomiting, sometimes spasms, and then stupor. Although general diagnoses have been attempted, there are no fixed symptoms, from want of a sufficient number of observations.

Ranunculaceæ. The chief are monkshood, the hellebores and staves acre. They are known by burning of the fauces, tingling of the jaws, salivation, vomiting, purging, and trismus.

Digitalis is known by the prostration of pulse, faintness, palpitation, and extreme anxiety.

Nux vomica produces tetanic spasms.

SELECTIONS FROM CORRESPONDENCE.

Intermittence of Disease.—"New truths of a higher order, and of which the connexion is not seen with common and hackneyed doctrines, are sconted by all, and especially sneered at, denied, and abused by the base creatures who have just sense enough to see there is really something in them—who have just ambition enough to make them hate one who appears to know more than they do,—and who have just cunning or skill enough to bias minds yet weaker than their own. To crown suitably such procedure, the doctrines at first denied, are subsequently pilfered with all the little art of which such minds are capable."—*Alexander Walker.*——Sir—In your Journal of last week, Dr. Copland is reported to have made the following observations at a late meeting of the Westminster Medical Society—"That within his recollection the character of disease in London had changed very much. In 1820, and for several years afterwards as far as 1826 or 1827, disease presented more of the inflammatory character; at least patients bore depletion better. It had since then gradually changed, and had assumed the *intermittent* or *remittent* type, especially in the outskirts. There is consequently less toleration of depletion, even in cases of disease of the chest." Allow me, Sir, to put Dr. Copland right on this subject; the type of disease has *not* changed, neither did patients bear blood-letting better formerly than now; but medical men have changed—they have changed their opinions of the nature of the one, and the value of the other. The type of disease change! Yes, when the types of life and death change! Intermittent fever, Mr. Editor, *ever has been*, and to all eternity, will be the type of all diseases; in London, out of London, in Europe, in Asia, in Africa, in America! And through your pages, I beg to tell Dr. Copland that, if he likes, I will show him letters from medical practitioners, which bear the post mark of every quarter of the globe, expressive of their obligations to me for my discovery of that great fact; many of them army and navy surgeons, and all of them too honest, too ingenuous, and too disinterested, to pretend that disease has changed its character, rather than themselves have changed their views of it! *Suum cuique.* The day is not distant when quacks only will resort to the lancet and the leech for any disease—diseases of the chest included. Has Dr. Copland never read the unity of disease!—has he never, in fact, *admitted the truth of the doctrine?* or like Dr. Holland, will he plead *non mi recordo?*

S. Dickson, M.D.

April 2,
28, Bolton Street.

Sterility Cured by Dr. Marshall Hall.—As but a recent reader of your invaluable journal, you will perhaps excuse me for offering a few observations upon the treatment of sterility by Dr. Marshall Hall, as given in your Periscope of the Week, ending on the 30th ultimo. Just fancy Dr. Marshall Hall, of Nottingham celebrity, *upon sterility!* the cure of which, under all circumstances, seems to be congenial with some of his principles. I am less surprised that, following the St. Simonian doctrines, he did not recommend a change of husbands in addition to his other remedies, than that the wanton vagaries of such men can be at all tolerated in the present day. One of his remedies for sterility, is to put a child on the nipple of a barren woman with a large breast. He might as well order a child to be put to a large white Norfolk turnip. I would suggest that the Doctor might perform the duty himself, should the child fail in producing the lactiferous secretion, and nothing would amuse me more than to see him in long clothes, *under watchful inspection*, tugging away with all his might. His other remedy, the cold douche, is perhaps more difficult of performance, according to modern ideas of decency, although practised by grooms upon the female animals under their charge, after being submitted to the male's influence. It is enough for me to say, Sir, that this subject so treated, must be disgusting to every decent man in the profession; and it would surprise me much to hear of any man, having an unproductive young wife, sending her to Marshall Hall for the benefit of his profound assistance. The beastly principles of such practice must be revolting to the delicacy of any well-bred woman, however anxious she might be to obtain a knowledge as to how her dormant fecundating principle might be brought into action. A weekly newspaper, in the beginning of last January, insinuated a perpetration of the most disgusting atrocities by an accoucheur-physician of the greatest eminence, upon a patient unhappily laboring under carcinoma uteri; and I very much fear that men of that class of practitioners in this metropolis have a depravity of feeling far surpassing anything which the public could dream of, and I should hope that the medical journals would not be behind-hand with the newspaper press in exposing such practices, whenever they are properly authenticated.

Machaon.

[Machaon enters a field of medical ethics very dangerous to tread over. *We* avoid it whenever the absence of the most over-ruling necessity offers us a decent excuse. Such subjects are not more painful to the peccant parties than to us; and when we have recourse to this kind of operative surgery, our readers may make certain that the case is one not to be safely left to the *vis medicatrix naturæ*, or to the ordinary appliances of medicine. We should perhaps add that our Correspondent who uses the *veterum libertas notandi*, is a most respectable general practitioner.—Ed.]

April 2, 1844.

Carbonate of Iron in Neuralgia.—In reading in your valuable journal of last week an account of the Meeting of the Medical Society of London, I was struck by some observations made by Mr. Pilcher upon the use of belladonna in certain cases of neuralgia of the face, stating that he tried it without having the beneficial effect he expected; but also stating, that where it failed he used quinine with the most satisfactory result. At this very time I have a young man, of otherwise good health, labouring under neuralgia of the face of a very painful nature. In his case I tried belladonna and quinine without the slightest amelioration of his painful affection. I commenced giving the sulphate of quinine in three grain doses, but increased it to ten grains thrice daily; before I commenced this treatment, I gave him some calomel and an aperient, having, as I before stated, no good effect. I gave him what seems to me a forgotten remedy, although, in his case, it had the happiest results; I mean the carbonate of iron prepared extemporaneously; he only took one bottle of the following mixture when he returned to me, saying all the pains had left him, and he is now quite well:—

℞ Sulph. ferri. gr. xv.
Carbon. potass, gr. xxv.
Aq. rosæ, ℥viiss.
Syrupi. Aurant. ℥ss. M. ft.
Mist. capt. coch. ij ampl. ter quotidie.

This is not the only case in which I have seen carb. of iron of use when quinine failed. I know it is an old remedy for this affection; but I fear in medicine, as in many other things, the old is too often forgotten for the new. I don't know whether this applies to practice at your side of the water, but such is often the case here. I relate this case not with any intent of crying down the use of quinine and belladonna in neuralgia, for I have seen and used both very often successfully, but for the purpose of adding my humble testimony that they are not uniformly successful, and that where they fail we have still a very valuable remedy at hand.

Jas. A. MacDonogh,
Surgeon, Swords Dispensary.

CHLORATE OF POTASS.

IN PHAGEDÆNIC ULCERATION OF THE MUCOUS MEMBRANES.

By GEORGE SAYLE, Esq., Southeny, Downham Market.

CASE I.

Selina Gingham, æt. 7, admitted into St. George's Hospital, under Mr. C. Hawkins, May 12th, 1843. The surface of the right cheek externally was a little swollen and stiff, when she spoke or moved; the muscles and the whole inner surfaces corresponding to the gums of both jaws, from the central incisors to the last molares, were ulcerated, and the ulcer covered with an ash-coloured slough. The gums were soft and spongy, dark coloured, and bled slightly. The teeth were dark, and concealed by portions of slough and foul secretion, which filled all the interstices; the edge of the tongue was in the same state of superficial ulceration and slough, as the lining of the cheek. The secretion was very fœtid, but the part did not seem to be very painful. Pulse weak, not accelerated. Face rather florid, not fallen away, and has lived tolerably well. First noticed five weeks ago.

Broth diet, beef-tea and arrow root.

℞ Chlor. calcis ℥j.
Aquæ ℥xx. M. ft. lotio.

℞ Hydrarg. c. cretâ g. iij.
Pulv. rhei. g. x. h. s. s.

℞ Potass chloratis ℈j.
Aquæ pimentæ ℥iss. ter die.

May 13th. The ulceration has slightly spread since her admission.

May 15th. Mouth very much better; ulcer much diminished in size; has healed everywhere except in a line along the cheek, between the jaws, and that is granulating.

Repr. hydrarg. c. cretâ c. rheo. h. s.

17th. A slight sore only now remains, opposite the large molar tooth.

19th. Tongue loaded. Small fresh vesicle on lower lip. Gums rather more swollen and bleeding.

Repr. pulv. aper.
Augr. dosis potass chlor. ad. ʒss. t. d. s.

21st. Sore which re-appeared on 18th again quite healed.

22nd. Mouth quite well. Gums less vascular and spongy. Omitte haust. Repr. pulv. aper.
Perstat in usu lotionis.

31st. Gone out cured.

CASE II.

—— Eggett, æt. 2½, was seized on the 11th February, 1844, with one of those chest affections, so peculiar to children at this season of the year, characterised by difficulty of breathing, fever, &c., for which he was ordered—

Calomel g. j.
P. antimon g. vj. M. ft. pulv. vj.
Sumat unam 4tis horis.

Feb. 13th. Much the same. Repr. pulv.

Feb. 14th. Rather more fever and restlessness. Bowels open; tongue foul.

℞ Mist. febrifug ℥ij. ʒij. secundâ horâ.
Repr. pulv.

Feb. 15th. Gums red and tender. Breathes better.

Omitte pulv.
Repr. mist. c. potassæ nitrat. g. xij.

18th. The two central incisors of lower jaw tumbled out yesterday, and an ash-coloured slough occupies their place. Profuse salivation. Was ordered a solution of chloride of soda to the mouth yesterday.

Perst. medicinæ.

Feb. 20th. Slough gradually extending both in surface and depth. Good deal of excitement. B. open; T. clean, Omitte medicinas.

℞ Quinæ disulph. g. viij.
Acid sulph. g. ij.
Aquæ ℥j. M. ft. mist.
Sumat coch. min. 4tis horis.

26th. Mouth appeared to improve until a day or two ago, since which time the slough has increased, and the remaining incisors have come away; continued the medicine without any apparent benefit until March 3rd. When was ordered—

Potassæ chloratis ʒj.
Tinct. cinchonæ co. ℥ss.
Aquæ ℥iss. M.
Sumat cochlear. min ij. 3tis vel. 4tis horis.
Omit the application to the mouth.

March 8th. Slough quite healed, and child's health much better.

March 12th. Quite well.

REMARKS.

The preceding cases present rather a curious phenomenon, a problem not easily solved, in each case; an ill-conditioned spreading ulcer (the last increasing under the usual mode of practice, and which probably would have terminated the child's life), disappearing very suddenly under the administration of the chlorate of potass. The success cannot be doubted; but in what manner it performs the cure, remains an enigma;—perhaps by restoring to the blood some of its salts or properties, a deficiency of which is requisite for an ulcerative process, as the secretions from the bowels and kidneys remain unaltered. It appears to act on all ulcerations of mucous membranes from whatsoever cause, as in Case 1 the exciting cause was probably deranged digestive functions, and certainly differing from the second, which must have been purely the result of an overdose of calomel, a circumstance always to be regretted, but, from some peculiar idiosyncracy, not always to be avoided. I was induced to combine it with bark for the tonic properties, on account of the debility, preferring it to quinine, fearing some chemical decomposition: the omission of the application to the ulcer, on commencing the chlorate, had no other object than to mark its full effects.

March 19th, 1844.

PERISCOPE OF THE WEEK.

LACERATION OF THE PERINŒUM DURING LABOUR.—Mr. Craig, after referring to the cases published in the *Lancet*, from the practice of M. Danyau, surgeon to the Maternité, Paris, where suture of the perinœum was practised in several instances, to remove the consequences of a rupture of that part during labour, expresses his surprise at the number of instances in which that operation was performed; and adds, arguing from his own experience, that laceration of the perinœum from childbearing, so as to require suture, is never necessary, if the ordinary means of prevention are used. In every case of the kind that he has seen, the injury was so slight, that by attention to cleanliness for a few days, the part healed up. The perinœum in its natural state, is quite yielding and distensible to a sufficient degree for the passage of the child, and it is only when in a morbid condition that this rigid state of resistance is present. As the perinœum, then, may assume the same forms of disease that occur in the other barriers to the passage of the child, so must the morbid state of resistance in the one be removed by the same means which are employed for the removal of the other, never forgetting, however, that the obstructing causes are often of a very different nature in different instances, and must be treated by the use of such means as are suited to each particular case. If the cause of delay arise from constipated bowels, their contents ought to be evacuated by a purge, or enemas; if from inflammation, or even congestion of the parts, bleeding, according to the severity and obstinacy of the symptoms, is indicated; and if from spasm and acute pain, opiates and clysters are the means to be employed. Mr. Craig observes that no case of rigidity of the perinœum, which has come under his care, has resisted the combined influence of these means. In the rigidity of the os and cervix uteri, he is also much opposed to the incisions recommended by Dr. Ashwell, who says that, after the use of free venesection and antimony without benefit, incision is the safest remedy. Mr. Craig remarks that his experience has taught him that the relaxed and nervous patient, with great sensibility and rigidity of the os and cervix uteri, will receive comparatively little advantage from bleeding and antimony; and that, unless the irritable and morbidly sensible state be removed by emollient clysters and opiates, according to the obstinacy of the case, the strictured state of the parts will not yield. The treatment by bleeding and antimony is clearly indicated in those cases where there is considerable vigour of body, accompanied with inflammatory action, with or without febrile symptoms; yet, in a number of such cases, the rigidity will not yield without the use of opiates, or until the continuance of the labor exhausts the patient.

*** We have heard that the local application of an ointment prepared with extract of belladonna and lard, introduced within the os uteri, and smeared over the part, will prove of material service in relaxing the rigid parts, and thus forwarding labour.

PERIOD OF INCUBATION OF SYPHILIS.—Ricord says, when indurated chancre exists, a true syphilitic diathesis is established, and accidental circumstances alone are necessary to bring about its manifestation. The interval, which separates indurated chancre from secondary symptoms, may truly be considered as an incubation, during which a ferment mixed with the blood (syphilis larvée, Baglivi), and circulating with it, modifies its composition in such a manner, as to render it, in some measure, unfit for proper nutrition on the one hand, and on the other—under the influence of circumstances which have no action on the healthy individual—to give rise to a series of symptoms which have received the collective name of secondary syphilis. This interval of incubation is shorter in the child and female than in the male adult. It lasts from three to four weeks to as many months in general, the average being six weeks. A sudden change in the external temperature, the excitement caused by alcoholic stimulants, or even local causes, or warm or cold baths, the action of a short pipe on the lips, neglect of cleanliness, diet of an exciting nature, the exercise of riding—such are the most frequent determining causes of the first outbreak of secondary symptoms.

PENETRATING WOUND OF THE CHEST.—A healthy man, 33 years of age, was admitted into Guy's Hospital, under the care of Mr. B. Cooper, with a penetrating wound of the chest, and considerable emphysema, caused by a mason's chisel, nearly seven inches of which had been buried in that cavity. The wound was about half an inch in length, between the sixth and seventh ribs, opposite the inferior extremity of the posterior border of the scapula. Dyspnœa was great; the pulse strong and full. He was bled at once to twenty ounces, and had calomel and antimony every three hours; the wound was not closed. The next day, the countenance was anxious, nostrils widely expanded; breathing hurried, but not performed with great difficulty; pain felt opposite the situation of the wound, and respiration heard on the affected side; had not coughed up any blood; pulse 70, compressible. Towards evening, the pulse becoming fuller and stronger, ten ounces of blood were abstracted. The next day he was bled twice, as the dyspnœa was urgent, and the pain increased on breathing. Relief was experienced on each occasion. The calomel and antimony were continued all this while. From that time he did not have a bad symptom; gradual improvement took place, and he was dismissed cured, a month after his admission into the hospital.

FISSURE OF THE ANUS.—A case of this disease is reported from the practice of Mr. Cooper, in which a cure was effected by incising the sphincter muscle. It was complicated with abscess near the anus. It consists in the presence of a narrow, elongated ulceration, running along one of the folds of the mucous membrane, near the orifice of the anus; the edges of the fissure are usually not callous, and it bears a very close resemblance to the cracks or slits which so frequently affect the hands or lips of some people during winter. The situation of the fissure is said to be various, and that it may occupy any point of the circumference of the anus, but more commonly the sides of it, either in front or behind. In Mr. Cooper's own experience, however, he has invariably found the fissure at the posterior part of the rectum, and generally in the mesial line; although, in one or two cases, it deviated slightly to one side or the other of the centre. The ulcer may involve merely the verge of the anus, or extend a considerable way up the

gut; while, in other cases, it is placed so far within the anus, as to be completely concealed from view. Its existence may, however, be detected by passing the finger into the rectum; acute pain is immediately produced by contact with the finger, the point of which sinks into a furrow, and indicates the exact site of the fissure. The symptom which generally first attracts the patient's notice, is pain during, and for some time after, the evacuation of the bowels. It is of a burning kind, increases gradually in severity, is most severe at the moment of defœcation, and often continues for a considerable time after each evacuation. During the intervals, the patient enjoys comparative ease; may occasionally feel some heat or lancinating pains about the anus, but these are nothing, when compared to the horrible sufferings produced by the passage of the fœces over the ulcerated surface, and through the sphincter, which is commonly more or less in a state of spasmodic contraction. The bowels are generally constipated. When the disease has existed for any length of time, the patient's health becomes seriously affected, and from the countenance, the existence of malignant disease might be suspected. The treatment of this distressing malady is very simple, and, as far as Mr. Cooper's experience has gone, constantly successful. It consists in passing the fore finger of the left hand up to the ulcer, and then directing along it a straight probe-pointed bistoury beyond the very extremity of the fissure, then turning its cutting edge towards the sore, and dividing the ulcerated surface, as well as the fibres of the sphincter muscle, which are connected to its sub-mucous aspect. This usually is sufficient; but if there is any reason to believe that suppuration has taken place in the cellular membrane, the incision should be continued, so as to divide the verge of the anus, and thus ensure a free exit for the matter. Fissure of the anus has been recently successfully treated in Paris by the internal exhibition of rhatany.

Malformation of the Heart.—Dr. Fletcher exhibited to the Birmingham Pathological Society a specimen of malformation of the heart, of which the following is a description. Right auricle; the foramen ovale was capable of being opened by a probe; right ventricle: the tricuspid valves healthy; across the cavity of this ventricle was a muscular partition, dividing it into two unequal parts, the larger next the auricle, the smaller communicating with the pulmonary artery: the partition seemed made up of carneæ columnæ, and was perforated by an opening capable of admitting the little finger, the edges being semi-cartilaginous: an opening, large enough to admit a goose-quill, communicated with the left ventricle, and the larger cavity of the right ventricle. The left auricle did not contain any morbid appearances. Left ventricle: mitral valves healthy; the opening from the right ventricle patent, before the origin of the sigmoid valves: two of these valves had ossific deposits in their substance. The aorta was slightly dilated, and there were patches of atheromatous deposit in it. The substance of the spleen was soft and gorged with blood: the peritoneal coat thickened, and there was a patch of calcareous deposit, about the size of two-crown pieces in it, forming part of its substance; the remaining abdominal viscera were healthy. The veins of the arachnoid were congested and full of blood; there was effusion of fibrinous serum between it and the pia mater; the brain was firm, and presented on section numerous bloody points. The man from whom the morbid specimen was taken, was about sixty-three years of age, an itinerant collector of rags, who after a walk of five or six miles, was found dead in bed. His wife said he had been rather asthmatic of late.

NEW MEDICAL MEN.

Royal College of Surgeons.—List of Gentlemen admitted Members, on Friday, March 29th, 1844.—N. B. Gill, H. Bellinghurst, T. Philbrick, T. Nott, N. Kennicott, G. F. Moreton, R. J. Scott, T. Cochrane, W. Hoare, H. Hillier, A. Mason, C. Roberts.

Apothecaries' Hall, 29th March, 1844.—Mr. Caleb Barrett

A SELECT PRACTICAL FORMULARY,

TRANSLATED FROM THE FRENCH OF M. FOY, PRINCIPAL PHARMACIEN OF THE HOSPITAL SAINT LOUIS, AT PARIS.

(Continued from Page 493.)

Gall-nuts: powder, ten to fifty grains in bolus or pills, Infusion: one to three drachms to a quart of boiling water. Tincture: half a drachm to two drachms. Gall-nuts possess very strongly marked astringent properties; combined with bitters to diminish the violence of its action on the stomach, some practitioners, in imitation of the Indians, have employed them with success in the treatment of intermittent fevers. They have also been administered with advantage, as an antidote to arsenic, in diarrhea, leucorrhea, softening of the neck of the uterus (see compound tincture of gall-nuts) towards the conclusion of the treatment of hemorrhages, and in mercurial salivation, after the flux and irritation of the salivary glands are diminished. Incorporated with lard or any other fatty body, powdered gall-nuts succeed tolerably well in the treatment of hernia in very young children.

Moss of Corsica: infusion, one to three drachms to a cupful of boiling water. Powder: one to three drachms mixed with a little water. Jelly: one to four ounces. Syrup: one to two ounces. Anthelmintic.

Moxa, Chinese (Larrey): one hundred parts of lycopodium, fifty parts of nitrate of potash, alcohol at 33 deg. or 36 deg., as much as may be necessary. Mixed together into a paste, which is afterwards to be formed into the shape of a large or small cone, and dried.

Mustard: the seeds of the black mustard possess very marked stimulant properties. Combined with cinchona, they are employed in the treatment of intermittent fevers, chlorosis, and dropsies. It is said that they have also been administered with success, in their entire state, in dyspepsia, and in some cases of obstinate constipation. Externally they are used daily as rubefacients. The flour of mustard is mixed with a sufficient quantity of warm water, to make it of the consistance of a thick paste: it is then applied directly to the inner part of the thighs or legs, or on the feet, according to the indications. This mixture, or sinapism as it is called, possesses more or less marked properties according to the presence or absence of the fixed oil which the seeds contain. It may be diluted with one-third, one fourth, or even one-half of linseed-meal, according to circumstances. Pediluvia, are also prepared with it, in the proportion of from one to four ounces, or even as much as a pound, added to a sufficient quantity of warm water.*** White mustard is especially suited to relieve derangement of the digestive functions. It is given, in such a case, after one or two macerations in water, in the dose of from two to three coffee spoonsful in the course of the day. The people, and especially those who sell it, look upon white mustard as an universal panacea. The active principle of mustard-seed resides it is said in the shell which covers the integument or epispermis. It is probable, however, that this substance acts only as a foreign body, irritating the mucous intestinal membrane, and that any other seed would produce the same effect.

Muriate, Soluble Ammoniaco-Mercurial: see salt of Alembroth.

Muriate of Barytes: see Chloruret of Barium.

Muriate of Lime: see Chloruret of Calcium.

Muriate of Gold: see Chloruret of Gold.

Muriate of Morphia and Codeine: a double salt, which in some cases may replace morphia and codeine, and which possesses the sedative and somniferous properties of opium.

Musk: powder, two to thirty, and eighty grains in bolus or pills. Etherial, or Alcoholic Tincture: twenty, thirty, and eighty drops in draughts, juleps, mixture, or by the endermic method, &c. A diffusible stimulant and antispasmodic, often employed in typhoid and ataxic fevers, in hooping cough, tetanus, hysteria, convulsions, tympanitis, &c.

Myrrh: powder, ten to sixty grains in bolus or pill—a tonic and stimulant, used in chlorosis, atonic affections of the digestive tube, chronic pulmonary catarrhs, &c.

Myrtle, common (leaves): an astringent plant, rarely used.

Naphtha (the essential oil): an anthelmintic, rarely employed; given in the dose of from ten to thirty drops in an appropriate menstruum.

Narceine: a substance obtained from opium, not possessing any influence on the animal economy.

Narcissus, Meadow (flowers); an antispasmodic, rarely employed.

Narcotine: a substance obtained from opium, possessing very energetic stimulant properties.

Nitrate, Acid, of Mercury: a solution prepared with one part of mercury and two parts of nitric acid, and used in cases of corroding dartrous ulcers, cancerous ulcers of the skin and of the neck of the uterus, to assist the granulating and cicatrizing of purulent cavities, &c. With this view, a pledget of lint is moistened, and applied several times to the diseased parts, after which the wound is dressed with dry lint. The acid nitrate of mercury has also been employed in injections, in the proportion of one part of the salt to five or six parts of an aqueous menstruum, in the treatment of lymphatic abscesses, and has been thrown into the canal of the urethra in cases of blenorrhagia; and has also been used as a collutory in gangrene of the mouth, &c.

Nitrate of Bismuth: powder, two to twelve grains in bolus or pills. An antispasmodic, employed in gastrodynia, gastralgia, diarrhea, simple or complicated gastritis, dyspepsia, &c.

Nitrate of the Peroxide of Iron: a salt prepared by treating two parts of iron filings with three parts of nitric acid, diluting the solution with twenty-seven parts of water, filtering, and afterwards adding one part of hydrochloric acid. Dr. Kerr has employed this preparation in atonic diarrhea, in the dose of from ten to twenty drops, two or three times a day, in half a glassful of cold water.

Nitrate of Potash (solution): as a diuretic, ten to thirty grains; as a stimulant and contra-stimulant, twenty, sixty, and one hundred and forty grains. In large doses nitrate of potash causes violent irritation of the gastro-intestinal mucous membrane, and produces nausea, vomiting, alvine evacuations, and other severe symptoms; in small doses, on the other hand, it is a very excellent diuretic, and is very frequently employed. It is also used as a refrigerant in the second period of acute inflammation of the urinary organs, in serous effusions, inflammatory fevers, certain cases of icterus, rheumatism, &c. In Italy it is exhibited as a contra-stimulant. It is there regarded as a sedative to the circulation, as a succedaneum to digitalis, and is consequently employed in cases of hemorrhage, inflammations, &c. It has been given successfully in several cases of metrorrhagia, in the dose of several drachms, (three drachms to an ounce) daily. Finally it has also been said to have been used with advantage in scurvy. (See Cameron's solution.) Combined with calomel, Dr. Burdach says that nitre prevents the salivation which generally follows the use of the proto-chloruret of mercury. Externally, it is sometimes used as a refrigerant in gargles or lotions.

Nitrate of Silver.—The nitrate of silver is the caustic which is most frequently employed. Its action being slow upon the skin, but very rapid upon open sores, and the thin, dry, greyish eschar, which it produces cause it to be employed externally to repress fungous granulations, to destroy strictures of the urethra, or nasal canal, to hasten cicatrization of ulcers of the cornea, of fistulous canals, obstinate ulcers, and indolent chancres: to excite menstruation, by its application to the neck of the womb, to cauterize the pustules of small-pox, according to the ectrotic method, a plan adopted not merely to cause the arrest of the disease, but to prevent the meningitis which is frequently a complication thereof. This cauterization ought to be practised on the first or second day: it is too late afterwards. The ectrotic method consists in opening each variolous pustule with a stylet previously dipped in a solution of nitrate of silver.*** Dissolved in distilled water in proportions varying from one to three grains to the ounce of liquid, (either rose, plantain, or simple distilled water), the nitrate of silver has been successfully employed in collyria, or as injection into the rectum, in typhoid fevers; into the vagina, or as a topical application by means of a sponge soaked in its solution, in mucous discharges or fluor albus. It is also used in chronic aphonia, in chronic, dry, or purulent ophthalmia, commencing blenorrhagias, chronic catarrhs of the bladder, &c. Erysipelas of the face has been arrested by touching a small part of the diseased surface with the solid nitrate of silver. Angina, glossitis, amygdalitis, the variolous pustules on the free edge of the eyelids or on the cornea, burns of the first degree, fissures of the anus, chilblains, ulcers of the nipples and of the cornea, have often yielded to slight and repeated applications of the nitrate of silver previously finely-pointed. The aqueous solution of this salt is also suited as a lotion in cases of zona, and superficial inflammation of the skin. Although this medicine is a very dangerous one, some practitioners exhibit it internally in very small doses (one grain combined with an inert powder, and divided into fifteen doses, one, two, or three of which are given during the day) in chorea, angina pectoris, epilepsy, chronic affections of the stomach, &c. In this last case, it is combined with belladonna, equal parts of each being generally administered, from one fifth to two-fifths of a grain. Nitrate of silver constitutes a part of the contents of the surgeons' pouch. It is placed between the blades of an instrument made of platina, called the caustic case; and is brought to a fine point at its free extremity, which must be moistened with a little water each time it is used. The caustic should be passed lightly one or more times over the part on which it is intended to act, and the eschar which is formed separates at the end of several days.

Nitrate of Soda: this salt, which is much less frequently employed than the nitrate of potash, has been used with success in Germany, by Dr. Meyer, in dysentery, in the dose of from four to eight drachms in an appropriate menstruum.

Nitro-muriatic Acid Bath (Lendrick of Dublin): thirty to forty gallons of water, an ounce and a half to two ounces of nitric acid, two ounces to three of hydrochloric acid. Mix for a warm bath, in which the patient is to remain from fifteen minutes to twenty. Used in hepatic disease, and whenever it is desired to aid the action of mercury in those diseases in which it is employed.

Nutmegs, Mace: powder, ten to thirty grains in bolus or pills: used as stimulants, and as condiments. The essential oil of nutmegs is employed externally in frictions in cases of paralysis.

Nux Pacana: the nux pacana of America contains a fixed oil, which possesses the properties of the ordinary nut-oil, and which M. Planche, a pharmacien, proposes to employ as an intermedium to extinguish mercury with rapidity.

Nux Vomica: powder, two to four grains, in bolus or pills. Alcoholic extract, one to four grains, as above. Tincture, five to thirty drops, in potion or julep. The special action of nux vomica on the spinal cord has caused it to be employed in cases of paralysis dependent on a morbid condition thereof. It has been also given in certain cases of amaurosis, contraction, and atrophy of the limbs, &c. Nux vomica, when roasted, has been recommended in cases of epilepsy. The alcoholic extract has been employed with success in a case of retention of urine and paralysis of the bladder, in prolapsus recti, dysentery, dyspepsia, pyrosis, and incontinence of urine.*** This medicine requires the greatest caution in its administration.

Nenuphar (Nymphæa): flowers, in infusion, one to two drachms to a quart of boiling water. Root, in decoction, two to four drachms to a quart of water. An antispasmodic and sedative possessing very little activity.

Oak Bark: powder, half a drachm to a drachm in bolus or pill. Decoction, two drachms to an ounce in a quart of water, astringent, and light febrifuge.*** The internal use of this substance cannot be long continued on account of the great quantity of tannin it contains, and which frequently produces very distressing cardialgia. Externally, it is employed surgically as an antiseptic, to powder unhealthy wounds.

(To be continued.)

A COURSE OF CLINICAL LECTURES ON SOME IMPORTANT POINTS OF SURGERY,

Delivered at St. George's Hospital, by Sir Benjamin C. Brodie, Bart.

Lecture II.

(Venous Inflammation continued.)

At our last meeting I began the subject of venous inflammation, and if I recollect rightly I explained some of the more remarkable circumstances which occur towards the termination of the disease—I allude to the inflammation showing itself in different parts of the body. Now by this I mean not merely those parts which are in the line of the inflamed vein, but in parts quite distinct from, and having no connexion with the original seat of the disease. Thus, a man may have inflammation of the arm, and presently he will be attacked with inflammation of both knees, and the cartilages will be entirely absorbed; or again, abscesses may form in any other part of the body. An interesting pathological question is, "where there is venous inflammation, why should there be these deposits of pus in different parts of the body?" It is the opinion of some persons that pus deposited in an inflamed vein is carried into the general circulation. M. Cruveilhier has made some experiments on this subject which seem to prove that pus may be formed in an inflamed vein without being absorbed. Mr. Arnott says that although pus may not be produced in the vein, still there is a diseased action going on, by which a secretion analagous to pus is formed which becomes mixed up with the blood. But neither of these declarations can be considered as established, and I do not think it is at all necessary that there should be a morbid secretion of pus to produce these symptoms. A man has an attack of fever without your supposing that there is an affection of any particular organ or region of the body, yet what is the result? In one man you will find ulceration taking place in the jejunum or ileum; in another there will be a determination of blood to the head, or he will have an attack of inflammation of the brain or lungs, and these results would lead us to suppose that where the system has been subjected to febrile action for a length of time, it acquires a disposition to produce local inflammation. A gentleman had a stricture many years, and several ineffectual attempts had been made to pass a catheter into his bladder; I however at last succeeded, but having drawn off his water he was immediately seized with a violent shivering, and after this had an attack of inflammation of the neck, and since that time the head has been permanently fixed and immobile. Now this you see arose merely from passing a catheter, and of course no part of it could have been absorbed. Again, a lady of nervous temperament had spasmodic contraction of the sphincter muscle, attended with great pain whenever she went to the closet; well, I divided the muscle on both sides, and she immediately fell into a state of complete syncope, from which, after a time she recovered, but only to relapse into the same state a second time, and this entirely from the influence produced upon the nervous system. These attacks continued for some time till ultimately she was seized with inflammation of the chest, from which she died. On then examining the body I first looked to the part where the operation had been performed, but in the hemorrhoidal veins nothing was to be seen; but I found inflammation of the peritoneum, and also effusion of lymph in the cavity of the chest; now in this case there was inflammation set up in a distant part of the body which could not be from the absorption of any diseased matter, in short it was produced entirely from the effect upon the nervous system. After injuries of the head we find these deposits in various parts of the body, and they occur more especially when there is suppuration going on between the dura mater and bone. One person will die of abscesses in the lungs, or of inflammation of the pleura, accompanied with effusion into the cavity of the chest. Then I have known cases where there has been fracture of the humerus or clavicle, and when the patient has died, the end of the bone has been found bathed in pus, and in these cases matter has been found between the dura mater and the bones. Some persons would have said perhaps there was in this case inflammation of the veins which you have overlooked, and purulent matter has got into the circulation, but this is not at all probable; because it is not pus always which is effused, sometimes it is merely serum, and sometimes again you will have this secondary deposition of matter set up where there is no suppurative inflammation at all. A man had an injury of the head, and the surgeon applied a caustic issue which produced a large slough, so that the bone was exposed; in a short time the man died: previous to his death, however, he had a set of curious symptoms, for which we could not account: such as swelling of the abdomen, and a puffiness about the body; and when examined after death, we found there had been considerable peritoneal inflammation. The head was also examined, and it was found that where the caustic had been applied, the bone was dead, and of course, the dura mater separated from it, and a little pus was found between them. 2ndly. A girl suffering from pain in the head, had a caustic issue applied; she died of inflammation of the lungs, and it was found that where the caustic had been applied, the bone was dead; there was slight sloughing of the part and effusion into the brain. 3rdly. A man was admitted into this hospital, who had been beaten about the head with sticks; he remained here till he died, and on examination, it was found that small particles of pus were deposited between the bone and dura mater; there was also a gelatinous matter mixed with these particles. Now, to say there was inflammation of the veins in all these cases, would be absurd. The view I am inclined to take of these cases is, that there is a certain disturbed state of the constitution induced, which has a tendency to end in the formation of pus; for you see that in persons who die from symptoms analagous to those we have just enumerated, there are always to be found in the extremities, what are called critical abscesses, depositions of pus in the cellular membrane. A gentleman had a violent cold, and was attacked with inflammation of the vena saphena, and died. The result here was rapid, and shows the importance of careful attention to the local disease, though still, as I said before, as a general rule, and in the majority of cases, this disease is not dangerous. The treatment must depend upon circumstances. But suppose you were called to a patient with symptoms, such as we mentioned in our last lecture (shivering, sallowness of complexion, brown tongue, and slight derangement of the mental functions), you would apply leeches in the course of the vein; retain the limb in the recumbent posture; keep the bowels open, and give moderate diet. But the principal remedy is mercury, in moderate doses, continued at stated intervals, till the gums are slightly affected. Calomel gr. ij, or hydrargyri bichloridi gr. $\frac{1}{8}$, bis in die, is, I think, the best mode of administering the remedy. Where there is much inflammation of the leg, and considerable swelling, you may relieve the patient considerably by puncturing the part with a common needle; the fluid will escape rapidly from the cellular membrane. Mind, I do not say this will cure the disease, but it will relieve it considerably. I am seeing a gentleman now who had, some years ago, an attack of venous inflammation, and the leg was so much swollen as to threaten the bursting of the skin. In this case I punctured it in the manner just described, and afterwards he did it himself, and always found considerable relief from it. This mode, of course, gives greatest relief when the serum is very thin; sometimes it will be a comfort to the patient to wear a bandage as a support to the parts, but it should be *flannel*, and never applied *tight* with the view of preventing the swelling. Once I saw a lady who had that form of swelled leg called phlegmasia dolens, the swelling being very large, and the skin tense; a bandage was applied, but she was soon attacked with pain in the hypogastrium, and a variety of symptoms which I cannot describe; the bandage was taken off; immediately the swelling returned, but the pain in the abdomen, and all the other symptoms just alluded to disappeared; and this occurred twice successively. In acute venous inflammation, it is generally a good practice to take blood, but this cannot be done in all cases. Sir E. Home tied the vena saphena in three cases, but they all died except one, who, being a very strong man, was bled very freely, and here the practice succeeded beautifully, and the venous inflammation almost entirely subsided. But sometimes this disease is attended with low symptoms, the pulse being weak and feeble, and there is great prostration of strength. In such a case as this, it is evident you could not take blood largely; you must, therefore, be content to apply leeches to the part. Warm fomentations seem to answer better than cold applications; but this may be regulated by the feelings of the patient. Occasional purging and low diet will, of course, be most proper. Very frequently this is a consecutive disease, as it may follow an attack of erysipelas. Of course, in this case, and when it comes after cellular inflammation, the patient will not bear depletion. It is a question with some whether or not mercury is beneficial in these cases. In those which I mentioned of Sir E. Home's, which occurred when I was house surgeon to this hospital, it would doubtless have been extremely beneficial, but the administration of the remedy at that time was not thought of. In those cases where there is great prostration of strength, I doubt the propriety of its use; but where this symptom is absent, it may be employed with advantage. It, however, requires a good deal of discrimination on the part of the surgeon to determine when it is, and when it is not, right to put the patient under the influence of mercury.

You will find, gentlemen, after venous inflammation, the limb is generally left swollen, and the veins are what is termed "varicose." Can anything be done here? will a bandage do good in these cases? To a certain extent it will; but let your patient walk about, and you will find that the collateral vessels will thus become dilated so as to make up for those which have been obliterated. In some cases the swelling will entirely disappear, whilst in others it will remain to a certain extent the remainder of the patient's life. I spoke of the disease in connexion with varicose veins as though it only occurred in the lower extremities, but I saw it in the fore-arm of a patient a very short time ago, produced, as I think, by bleeding. In cases where a secondary deposition of pus takes place, very few, I think, recover, as the deposition is scarcely ever confined to one part of the body; and if you let it out in one part, there is no method of preventing its recurrence in another.

When venous inflammation has gone on some time, it is quite beyond the reach of art. But you should always bear in mind the original cause of the disease, and also the patient's previous mode of life. Many of you will recollect the case of the man last year in whom I tied the external iliac artery; after the operation there was a quick, irritable pulse, with pain in the opposite shoulder; and these I attributed to the man being debarred his usual quantity of stimulus. After bleeding him once, and finding he was no better, I allowed him a quantity of gin daily, and if I had not done so, I think there would have been the secondary formation of matter, as in some other cases I have described. Those persons who drink large quantities of spirits are most liable to this deposition of matter, and, I think, it is owing in a great measure to their being deprived of their usual stimulus; and in these cases you will sometimes succeed in arresting the disease by allowing the patient a certain portion of that kind of stimulus to which he has been accustomed. The general rule for treating inflammations, is by depleting remedies;—but there is another plan. Suppose a man gets a piece of glass in his arm, you would of course, in the first instance, remove it if you could, just as in chancre you give mercury to remove the cause which produced it. On the very same principle, in those cases where you have low symptoms coming on in cases of venous inflammation, produced by the withdrawal of the usual quantity of stimulus, your first plan should be to restore to the patient at least a portion of that stimulus. Let me take this opportunity of observing, that mischief is not unfrequently produced by violent changes in the patient's diet. If a man who has been accustomed to drink gin, or other stimulus in large quantities, meets with an accident, and you take him off that

stimulus, you will have the injury going to a much greater extent than it would if you had not done so. And I am certain that I have been more successful in the treatment of persons who have been accustomed to drinking or high-living, by merely diminishing their quantity, than when I have had recourse to antiphlogistic treatment.

COURSE OF LECTURES ON THE THEORY AND PRACTICE OF MEDICINE.

Delivered by C. J. B. WILLIAMS, M.D., F.R.S., Professor of the Practice of Medicine, and of Clinical Medicine, at University College.

Sounds of the Heart —(Continued.)— We were, in the last lecture, noticing the phenomena of the heart's action, viewing them as evidences of the condition of the heart, and we then proceeded to the consideration of the sounds. The sounds produced by the action of the heart become indications of disease of that organ; we must, therefore, first of all consider the primary sound, and its modifications, as well as the causes which produce it, without entering into any lengthened detail on the subject. The second sound is more simple in its nature, and depends on the sudden tightening of the arterial valves; whereas, the action of the first sound is dependant on the tension of the muscular structure, as well as on a prolongation of this muscular contraction—a persistance of it for a short time. The loudness of this second sound depends, in a great measure, on the state of the valves, and the sudden manner in which they pass from the loose to the tight state,—from the perfectly flaccid condition in which they are during the systole, (when they are pushed backward against the arterial orifices,) to that state which they acquire during the diastole. It depends on the suddenness and energy of the recoil. This sound is more perfect when the heart acts with such power that it forces the blood out into the artery, in a complete and sudden manner. The heart, however, should not act too quickly, but give time for this transition from loose to tight, especially if the quantity of blood be considerable. On the contrary, if the pulsations are very frequent, or if they are very weak, the sound is indistinct; the blood drawn in at each diastole being but small, and the subsequent tightening of the valves inconsiderable; thus, on violent exercise, which brings the pulse up to 120, you scarcely hear the second sound at all. So again, if the arteries are drained by hæmorrhage, as in an animal bleeding to death, the tension is not sufficient to cause the sudden recoil of the valves back, and hence the sound is indistinct. The second sound is seated about the neighbourhood of the valves, and this is where it is heard in its highest degree. And in this respect, there is a difference between the loudest part of the first sound, and the loudest part of the second sound. The first sound is heard over the whole extent of the ventricles, perhaps rather more towards the apex, than it is towards the base. But, the second sound is heard loudest towards the sternum; this depends not only on the proximity of the valves to this part, but also on the conducting materials interposed between these valves and the walls of the chest. On full inspiration, we have the lung coming in between the heart and the thoracic parietes, and then the sound is not so loud here, as it is a little lower down. Now, although this sound is produced in two sets of valves, so that where it is stopped in one, it may be heard in the other, it takes place quite simultaneously in both. In a few instances, where you have a double first sound, you find a double second sound also; and this sometimes arises from disease of the arterial valves. When one set of valves is not susceptible of sudden tension, or where it may be a little more relaxed, or a little more rigid than the other, under these circumstances, the double sound seems to be produced; instead on one, there is perhaps a succession of sounds, or two succeding one another. Some conditions produce this temporarily. I believe it to be connected with the continued distension of one or the other of the sets of vessels; that is to say, the pulmonary vessels are distended, and there is a difficulty in the passage of the blood through the lungs, and the recoil on the pulmonary valves takes place before the recoil on the arterial valves. The inexperienced find some difficulty in distinguishing between the first and the second sound. Now, so long as the heart is acting regularly, the first sound may be easily recognised from the second sound. The first sound is that which commences the stroke, and the second sound that which terminates it. When the heart acts very rapidly, the character of the sounds is changed. Sometimes there is no interval, and in this case we are more puzzled. The first is a heavy prolonged sound, and the second a short sharp sound, represented by the two syllables *lum-dup*; but this difference ceases, in a great measure, and becomes indistinct when the action of the heart is very rapid. You may assist yourself in distinguishing between these two sounds, by feeling the impulse of the heart, with the hand applied in the usual position. Sometimes it is difficult to ascertain the presence of the impulse from disease or other causes. If you place one hand over the heart, the first sound which accompanies the systole is the heart-sound, and that which follows it is the valvular sound. The same thing does not apply to the arterial pulse, for here the interval is so great that, in many instances, the pulse corresponds with the second sound, because the blood takes some time in travelling from the heart to the artery.

Now, as to the auricular systole; does it ever produce a sound? Laënnec thought it did; but it was a matter of doubt, until some experiments were made which established the fact, and it is just possible that this auricular systole, in cases of disease, may contribute to produce the double first sound. The ventricular sound is the first; it commences in a loud degree, and gradually diminishes towards its termination; the commencement is usually flapping and distinct, but its prolongation is less so, depending on the force of the muscular contraction. Then comes the second sound: is it immediately after the first?—Is there no interval? If we listen to the heart when acting rapidly, we should be inclined to say no; but when it is acting slowly, we can very easily appreciate the interval between the first and the second sound, though it is very short. It may, therefore, be said, that the second sound takes place at the conclusion of the diastole, and occupies only 1-10th of the whole beat. Besides the natural sounds and their variations, arising from the different proportions of their elements, there are sometimes new sounds, produced by modifications in the motion of the blood. Almost all the sounds we have previously considered, are directly dependant on the solid walls of the heart. The blood naturally moves with so little resistance, or such an even amount of it, that there is no vibration or sound produced by its motion. It is a glutinous, unctuous sort of fluid, and passes on smoothly in the vessels: where there is much irregularity in the surfaces of the vessels, the blood moves more slowly. There is great irregularity in the surface of the heart, in some parts; as, for instance, near the aortic and auricular valves. But the blood passes over this irregularity, at the period of the diastole, when there is less force of motion, and when the heart is perfectly relaxed; but the moment that the heart is exercised to its greatest power, to expel the blood, directly the motion is rapid, and the impulse strong, then the parts are made as tense as possible, and you perceive the irregular portions of the ventricles become smooth. These are the circumstances that contribute to the soundless and noiseless motion of the blood in its natural condition. But if any obstacle occur to the course of the blood, while moving with rapidity, a resistance is presented to the current, and sound of a new character will be produced. You must not only have rapid action, but resistance given to that action; that resistance causes a vibration, and thus you have sound. Now, there are new sounds, modified sounds, resulting from the modifications in the motion of the blood, arising from some resistance. There are various other circumstances in which it may be produced; for example, if instead of what I have been mentioning, an obstruction occur at the orifice of the aorta, or if the mitral valves, in any way, present a check, the orifice is not calculated to permit the blood to pass through smoothly; or if the blood is forced backwards towards the ventricle, this motion is accompanied by various sounds; there is what is called a blowing, or bellows sound, produced. This, I may state as an established fact.

Now, on the subject of murmurs, I shall only take a practical view, and must refer you to my work for more minute particulars. These sounds are not only produced in the heart and the arteries, but also in the veins; in fact, wherever an obstacle is presented in the channels through which the blood passes, or where there is an irregularity in the motion of this liquid, there is apt to be a sound produced, and which is dependant, not merely on the obstacle, but also on the force of motion and quality of that liquid. The blood, in its natural condition, is viscid, and slow to vibrate; and that is one of the reasons why we so seldom, in the natural state, hear the sounds in its course. If it becomes, then, poor in quality, reduced in its quantity of albumen, and in the red particles, as in the case of anemia, it is more readily thrown into vibration, but even then not without some obstacle. The causes of the murmurs accompanying the heart-sounds, and the passage of the blood through the vessels, may be classed under the following heads; first, an irregularity or roughness in the arterial orifices; secondly, constriction or impediment in the auriculo-ventricular orifices, supposed to produce the sound accompanying the diastole, but of this I am not quite certain; thirdly, imperfect closure of the arterial valves, which produces a regurgitation; thus, where the arterial valves are partially broken down by disease, then, at the period of the diastole, the blood is pushed backwards into the ventricle, and the orifice not being adapted to the backward transmission of the blood, there is a sound produced,—this is the regurgitant aortic or pulmonary murmur; fourthly, imperfect closure of the auricular valves, the mitral particularly, producing a regurgitation through that valve. This accompanies the first sound, and is classed under the head of regurgitant-mitral murmur; fifthly, dilatation of the aorta or of the pulmonary artery, above their orifices, will give rise to a murmur; sixthly, partial constriction, or any irregularity occurring in the course of the artery, as a deposition of lymph, will cause a murmur, which accompanies the arterial pulse, and is propagated in the direction of the arterial current. Now, this sound is the same as that which may occur in a vein; but, inasmuch as the current in the vein is continuous, if any murmur is produced there, it would be a continuous murmur, merely modified by the variations in force of the venous current, which might exist from other causes. For, although the current in the veins is continuous, yet it is increased in quickness during forcible inspiration, particularly in the jugular veins, and then the murmur is also increased, and rendered louder; seventhly, a murmur may be produced by aneurismal dilatations of the arteries, where an artery suddenly opens into a sac, as in the case of a false aneurism; and sometimes it happens to be the case where the artery dilates into the true aneurismal tumour, even when the latter may be filled with coagula. Now this may be from the impulse of the current on the opposite side, or else there may be an orifice thrown into vibration, in the same way as with a narrowed orifice; eighthly, and lastly, murmurs are produced in cases of unnatural openings from the ventricles, or from the auricles into a cavity; also in aneurism by anastomosis, where an artery from some cause communicates with a neighbouring vein, and there is a gush of blood passing into the vein at each arterial beat. The same noises occur when any unnatural opening takes place through the ventricle into some other part, and in cases of perforation of the left ventricle, where the blood makes its way into the auricle; a regurgitation here takes place. The obstructive aortic murmur is heard at the period of the ventricular systole, contemporaneously with the impulse, and the first sound is lost, during the whole duration. The obstructive mitral murmur takes place at the same period as the regurgitant mitral sound, but the vibration is different. The regurgitant tricuspid sound,—if produced at all, at the same period. The arterial murmur, produced in

the course of the arteries, is not quite at the same instant, but after the cardiac impulse, and the murmur is heard after the first sound of the heart has ceased. There is also a difference in the character and position; it continues longer than the systole of the heart, and may also continue during the diastole. Sometimes the arterial tension still continues, and the artery is discharging its contents during the interval of the heart's motions. The venous murmur continues as long as the blood flows through the veins. There is a sort of swell in the vein at the period of the arterial pulse, and that is the reason why the venous murmur is varied.

Now, the situations of the murmurs are to be distinguished partly by the character itself of the murmur, partly by the position, and partly by the period. The situations and character of the murmur vary very much in different individuals. Generally speaking, the greater the rapidity and the irregularity, and the larger the resistance offered to the passage of the blood, the greater is the vibration. The strength of the murmur depends not only on the amount of resistance given, but on the amount of force of the current; its sound, which, under ordinary circumstances, is generally of a flapping nature, will under excitement of the heart's action, acquire a whizzing or sawing character. Again, some sounds are not only flapping, but whistling, or of an actually musical or cooing nature: this depends merely upon the continuousness of the vibration. The sound may be varied by certain causes; and a person, in whom usually the sound is musical, will, after exertion, present the flapping noise. This subject of the vibration of the murmurs I shall continue tomorrow.

CLINICAL LECTURES ON MEDICINE;

Delivered at the GREAT CHARITY HOSPITAL, Berlin, by Dr. SCHONLEIN, first Physician to the King of Prussia, founder of the Natural System of Medicine in Germany, and Professor of Pathology and Therapeutics in the University of Berlin.

Prepared from the German expressly for "The Medical Times."

Seventh Lecture.—Pleuropneumonia; Exudation into the left Sac of the Pleura; Ectopia of the Heart; Importance of Increasing the Secretions; Delirium Tremens; the Operation of Paracentesis Thoracis; Decrease of the Effusion.

July 28th, 1841—John Woltersdorf, an itinerant organ-player, forty-six years of age, has suffered for about five weeks with a cold; pain on the left side of the thorax. Coughing, with a viscid expectoration, is said to have been the first symptom, which, however, inconvenienced him less than the sensation of fulness in the pericardium, which was accompanied by constipation. A medical man ordered him in this stage of the malady, an emetic, with active purgatives; he, however, got worse; the cough became more painful; the poignant pain in the chest continued; and he sought relief at the hospital yesterday.

We here find a series of phenomena which place the nature of the malady beyond a doubt. On examining the chest, we see that the left half of the thorax is more distended than the right, a fact rendered still more decisive by mensuration. On the right side, the intercostal spaces are distinctly marked; on the left they are scarcely perceptible. Whilst the right side is expanded on respiration, the left is merely moved upwards and downwards. It is remarkable that the heart's pulsations are not appreciable on the left side of the sternum, although sufficiently distinct on the posterior and right. Ectopia of the heart is therefore clearly diagnosed. On more minutely examining the chest, a clear sonorous sound is audible on percussion, commencing at one and a half inch below the clavicle; thence downwards, however, we have only a very faint sound. Respiratory murmurs are heard in the upper region on using the stethoscope, but are entirely absent in the inferior parts; that which we have noticed behind is slightly sonorous; in the upper part of the interscapulary space a normal respiratory sound is heard, and also a respiratory *rale;* and thence downwards, for several inches round, we have an anomalous dry crepitation. Beyond this, the respiratory murmur is entirely wanting. The heart, on the stethoscopic examination, is found lying *behind*, and towards the right side of the sternum. The pulsations of the heart are certainly also heard at the left side, but the sound is evidently reflected thither, and is distinguished from the genuine sound by the circumstance, that the "impulsus" is not perceived together with the first pulsation of the heart.*

The diaphragm is considerably forced down, and the pit of the stomach therefore distended; and on pressure over the stomach, the patient complains of a sensation of oppression and annoyance. Respiration is less affected by these symptoms than one would suppose from the extent of the disease; this is, however, the characteristic feature that renders this affection so deceptive to the patient and the physician. There is general reaction, with fever; the pulse is small and weak, 100 per minute; the urinary secretions very limited, and of a dark colour; the skin at the extremities is rather cool, and covered with clammy perspirations; the tongue rather dry; constipation has existed for several days.

The diagnosis of the case is easy. A pleuropneumonia was evidently existing in the left part of the thorax, which has terminated by exudation of a fluid into the left pleural cavity, and considering the extent of faint sound emitted on percussion, the removal of the heart towards the right, and the forcing upwards and backwards of the left lung, the quantity of the exudation must be considerable. The upper lobe of the lung is uninjured, whilst the parenchyma at its base is in a state of inflammation. We have partially, therefore, to deal with a case of neglected pleuritis, and partially with a still existing inflammation in the lower lobe of the left lung. In saying this we at once indicate the treatment. The continued inflammation demands a decidedly antiphlogistic treatment; the pleuritic exudation asks for its removal. The only difficulty consists in what method we shall adopt for the latter object. By increasing the secretions; by the artificial removal—in short by paracentesis? In this case I find that things justified my attempting the former method for a day or two, as the symptoms were not so urgent as to threaten danger. We shall, therefore, apply cupping glasses to the patient's back, at the part where crepitation is audible, and frictions, on the left side, of ungt. mercurialis. potass. hydriod. and digitalis; and for internal use, ℞ infusi herb. digitalis (gr. xjj.) ℥jv. potass nit., potass acetat. aa ʒij. syrup mannæ ℥j. mix. A table spoonful to be taken every two hours. To drink Seltzer water.

July 30th.—We have now tried to effect the removal of the morbid product, by acting on the secretions; and we have adopted this slow method, because there was no danger of a rapidly unfavourable result to be apprehended from the character of the exudation.

The question now is, whether the remedies administered have had such a success as to induce us to a continuance of them, or whether the method, after 48 hours, has already proved to be so unsuccessful as to render it necessary to adopt some other system? No one will expect that changes in the symptoms produced by the pleuritic exudation should already manifest themselves. You will recollect, by other cases, how slowly the re-action sometimes takes place. The point to be determined is, whether the remedies have produced such a change in the secretions as denotes a progress towards the cure. The appearance of the urine in this instance seems to be favourable; there is one circumstance, however, connected with it which makes us pause; namely, that the change in the quality is not accompanied by a simultaneous change in the quantity. The qualitative change of the urine, such as denotes a favourable symptom in this disease, is very apparent. It was before a "urina inflammatoria," but transparent, similar to brown beer; the urine which the patient has discharged yesterday and to-day, is essentially different, both in its physical and chemical qualities from the former; it is more clear, has an acid reaction, but forms a thick sediment, the lowest stratum of which consists of urate of ammonia, above which there is a flocculent mucus mixed with the same salt. The quantity discharged is, however, not so satisfactory as the quality—it is too small. With regard to the intestinal evacuations, there are now two or three stools in the 24 hours. There is a slight change in the morbid symptoms; the same extent of faint sound on percussion; the same position of the heart; but the dry crepitation, and with it the inflammation of the parenchyma of the lungs, has somewhat abated; a mucous *râle* is heard in the anterior and superior portions of the left side, down to the second rib; as also behind in the intercostal spaces; thus exhibiting a bronchial irritation of the lung, with which the character of the sputa likewise corresponds.

The bronchitic phenomena displayed such an increase on the evening of this day, that a bleeding to the extent of eight ounces was performed, after which they again diminished.

August 4.—The patient discharges a greater quantity of urine, and its quality (it forms large mucous deposits) is likewise satisfactory; the difficulty of breathing has not increased; there has been no attack of asthma, so that in this respect we do not feel called upon to adopt any other system of treatment; on the other hand, no simultane

* Ectopia of the heart, which is so frequent on effusion into the left sac of the pleura, was exhibited still more distinctly in a case of hydrothorax of the left side, arising from a rupture of a phthisical cavity in the upper lobe of the left lung. The heart was situated quite at the right side of the sternum, a situation which, according to the patient's statement, it had suddenly taken in the night during a violent attack of coughing, when the lung was ruptured. The locality of the rupture was probably closed by a pseudo-membrane, at least for a time. Even in the evening, fever was scarcely perceptible. The difficulty of breathing was so slight that Schönlein thought it necessary to abstain from the operation of paracentesis, in the hope of previously effecting the absorption of the gaseous and pus-like effusion, by increasing the normal secretions. He prescribed, therefore, for internal use, an infus. herb. digitalis, and frictions on the chest with ℞. ung. mercurial, ʒij, ungt. potass. hydriod. ʒj, ungt. digitalis ʒiss. misc. This mode of treatment promised a favorable result at first. The pleuritic contents descended, however, more towards the left, and moved also towards the anterior parts, creating a painful swelling in the ninth intercostal space. The use of the lancet was still declined. It was only when the accumulation of fluid had considerably increased, and oppression of the chest, "orthopnœa," etc., became perceptible, that the spot indicated by nature for the artificial removal of the morbid product, was opened by the lancet, and a quantity of from six to seven quarts of pus removed. It was instantaneously followed by a favourable result, for the phenomena produced by the pressure of the effusion diminished very much. It was subsequently shown, however, that the locality of rupture in the left lung had again become open, as the copious sputa contained the same kind of pus as that which flowed from the wound in the chest. It was owing to this that the accumulation of gas, in the left pleural sac, remained nearly as before, and that the pus rapidly gained ground again, for which reason the wound of the chest was still kept open, in order to remove the pleuritic contents as soon as the oppression increased. In this manner we removed the empyema once or twice a week, an act succeeded each time by a momentary relief. The hectic fever, which at first had been but slight, soon increased. Inf. chinæ, acids, and opium, were ordered. Caries of the ribs formed, subsequently, at the wound of the chest; later, symptoms of a descent of the pus towards the vertebral column became apparent,—and thus the patient gradually sunk about six months after the rupture of the cavity, and nearly two months after the operation on the chest. On dissection, the left pleura was found to be thickened, containing pus and gas; the left lung was displaced towards the posterior and superior region; it was like leather, and, at its lower side, we found the rupture, through which a bronchial tube freely communicated with the pleural sac. The right lung was covered with tubercles.

s change has exhibited itself with the change in the urine, in regard to the extent of the faint sound, and to the displacement of the heart; but an incident has taken place which may perhaps derange our therapeutic treatment. Disturbances have exhibited themselves which create a suspicion of delirium tremens developing itself. It may be asked, how is it possible that delirium tremens can develop itself, as a result of the mild antiphlogistic treatment we have adopted? The answer to this is, "experience has proved that individuals, who have been deprived of their accustomed spirituous stimulant, very readily fall into delirium tremens." The most dangerous symptoms which exhibited themselves last night consist in the derangement of the patient's intellect, he fancying that he was in another place; in his desire to leave his bed, and in the confusion of his ideas in general; whilst no increase of the feverish symptoms was perceptible; he became more calm after a dose of morphia, and slept a little towards morning. This change will exhibit its influence on the removal of the pleuritic effusion, and the question, therefore, again forces itself upon our mind,—is our present system of encouraging the normal secretions to be continued? or shall we be obliged to have recourse to paracentesis? I have quite recently perused Skoda's account, in the Austrian Journals, respecting the cases of empyema, which came under his notice;* and I must own that the results of his practice are not such as to induce us to adopt the operation which he so frequently undertook; nearly two-thirds were unattended with any favorable results; the speedy reappearance of the symptoms of pleuritis, subsequent to the operation, deserves particular notice. In the instance before us, where we are threatened with a complication of delirium tremens, the method of treatment suggested just now, may find advocates; but I confess that the matter is not yet perfectly clear to me, and I am, therefore, not inclined to come to a precipitate conclusion;—1st., because the phenomenon is only threatened, and has not yet taken place—2dly, also because even if the threatened danger, the delirium tremens, should be realized, the operation might be attended with still worse results; for it is well known that wounds, during this disease, very readily assume a putrid character; and besides, that every operative interference reacts injuriously upon the brain. We shall again prescribe a dose of morphia, one-eighth of a grain, to be taken by the patient this evening.

August 6th.—As to the symptoms of the chest, inasmuch as they have reference to the pleuritic effusion, you will see that we have done well in not acting precipitately; for there are not only no threatening symptoms in the respiratory organs, no indication that the patient might be suffocated by the pressure of the effusion, but, on the contrary, there is an improvement in every point of view; a clear sound on percussion now extends as far downwards as the fourth rib, down to which point a distinct respiratory murmur is audible. The accumulation is certainly very considerable, causing the heart to be displaced even more towards the right; but we also find that the level of the fluid begins to give way; we shall, therefore, persist in the method already adopted. This instance again proves that the speediest method is not always the best.

There is a case of effusion into the pleura in the article alluded to by Skoda and Schuh, which will not only present great difficulties, but which, I may venture to assert, will *inevitably* end in a fatal result; it affords at the same time an additional argument, why, *generally* speaking, I must declare myself against the operation; I am alluding to the case, where coagulable lymph was found floating in the fluid exuded—a circumstance which certainly cannot be discovered during life. I first witnessed such an instance in Würzburg, in the case of an elderly man; Textor, at my request, undertook the operation; subsequently to a great number of these flocculent particles having been removed, there was a sudden stoppage to the flowing out of the water. Textor examined the wound with his finger, and, indeed, feared that he had penetrated into the pericardium, and that the heart itself was presenting at the wound; this, however, was only a convolution of plastic lymph, which, on being forced back, immediately made room again for the efflux of water. A violent inflammation, however, attended by a fatal result, ensued in consequence of this flocculent substance remaining in contact with the pleura. Skoda and Schuh have likewise enumerated similar cases, where they undertook the operation, without, as I believe, being compelled to it by the urgency of the symptoms: the termination was fatal. On dissection, the pleural sac was found to be filled with coagulable lymph. Post-mortem examination alone can discover the quality of the exuded fluid; we are as yet ignorant of the symptoms denoting it during life. This certainly ought to form an additional reason why we should not blindly adopt this operation. I may be told that the same mechanical irritation will be produced by the activity of the secretions removing the exudation (the fluid part being removed, and the flocculæ remaining), as by the paracentesis. But we know that the evacuation, subsequent to paracentesis, is a rapid one, and the coagula of albumen and fibrin are immediately brought into contact with the membranes of the pleura, after the removal of the water. Now, we are well aware that the more sudden the contact of a surface with a foreign substance, the more violent is the reaction, and *vice versâ*; the more gradual the contact the slighter the re-action, which in the latter case, indeed, frequently does not take place at all,—or, in other words, the irritation gradually neutralizes itself. But an additional reason may be adduced against this operation. It is well known that the coagula of the blood (for instance, in cerebral apoplexy) are gradually absorbed by the surrounding parts; and, on the same principle, the solution of the albuminous or fibrinous coagula may also gradually take place.

The disorder of the respiratory function has, in this instance, evidently again increased: the mucous rhonchus is not only audible in the left, but also in the right lung; the increase of the secretion in the bronchi is so distinct, that it can be felt, by the crepitating noise during inspiration and expiration, on laying the hand on the chest.

Prescription.—Addition of muriate of ammonia to the previously ordered infus. herb. digitalis, which has been used since the commencement.

August 9th.—We were undetermined for a long time whether we should have recourse to paracentesis, or continue our treatment of forcing the normal secretions. After duly considering all the circumstances of the case, we have come to the determination of persisting in the method adopted. The favourable results of the treatment are already apparent. Independently of there being no increased symptoms of oppression of the chest, &c., the former disturbances have materially decreased; a clear sound is already heard on percussion, extending to the vicinity of the left nipple;—to that point there is a natural respiration; the sound on percussion, further downwards, is, likewise, no longer so dull as before. The heart, also, begins to move towards its normal place; it is already to be felt and heard more towards the left, although principally, as yet, behind the sternum. The symptoms of irritation of the bronchial mucous membrane, which we formerly noticed in the right lung, have diminished; there is, therefore, as I believe, every reason to hope for a favourable result by persisting in the treatment already adopted. We shall now relate the further course of the disease, and the success of our treatment, in a very few words. Several symptoms exhibited themselves, which complicated the principal affection—the effusion into the left pleural cavity. The morphia, which was administered every evening, had not the desired effect of totally removing the symptoms of delirium tremens, which were continually re-appearing; it only succeeded in diminishing them for a short time. These symptoms were only effectually removed by the application of cold *douches*, which the patient endured with the best success, in spite of the affection of his chest. The symptoms of renewed inflammation of the left pleura, together with a simultaneous painfulness on pressure at the pit of the stomach, made their re-appearance at a subsequent period. They were removed by local subtractions of blood, and the application of a blister.

The patient continued in the hospital till the end of October; when, not chosing to await his perfect convalescence, he left at his own request, being considerably better. (The level of the effusion had fallen to below the left nipple.)

Case of Rheumatismus Articularis—Commencement of Pneumonia—Miliaria—Pericarditis and Pleuritis—Re-appearance of Pleuropneumonia—Retrogression of the Rheumatic Malady—Cure.

Feb. 14th, 1842.—Christian Kumm, journeyman turner, 25 years of age. The patient asserts that he has never before been afflicted with the disease by which he is now attacked,—a circumstance which is particularly worthy of notice, as this disease has a tendency to a frequent relapse, forming a series of attacks. Without being able to state an exciting cause, he was attacked, about a fortnight ago, with tearing pains in his limbs, which at first were of a transient nature, affecting now one, and then the other side, now the upper and then the lower extremities; a simultaneous sensation of heat existed, but without having been preceded by shivering. The patient had taken a quantity of camomile tea, which was succeeded by perspiration, but without amelioration; so that he was obliged to be brought into the hospital yesterday (on the thirteenth day of the disease.) The violence of the local, as well as of the general symptoms, demanded a strictly antiphlogistic treatment. A venesection of lb.j. was instituted, and nitrate of potash, with tartar-emetic, administered. To-day, we find three series of symptoms:—1st. Local phenomena in the extremities, consisting of moderate intumescence of both joints of the hands, the elbows and knees, which are impeded in their movement, and painful on pressure; the articulation of the ribs with the sternum, on the left side, is likewise affected.

2dly. With regard to the organs of the thorax, which, in this disease, ought never to be neglected, the examination over the heart does not exhibit anything abnormal,—not because the patient does not complain of certain symptoms, such as palpitation of the heart, oppression, &c., &c., for these are not decisive; but because no change can be felt on manual examination in the pulsation of the heart, and in its movements, and no abnormal character is audible by the ear with regard to its rhythm or sound. The heart is not affected at present; this however does not shew that it may not subsequently become so during the course of the disease. The organs of respiration, on the other hand, participate in the affection, although in a secondary and slight degree. The patient coughs and expectorates some sputa mixed with blood; on examination by the stethoscope, the sounds at the angle of the scapula correspond on both sides, but a more intense, humid crepitation, interspersed at some points with a dry crepitus, is heard towards the left. There is reason, therefore, to apprehend an increase of the bronchial irritation, or a limited inflammation of the parenchyma of the lung.

3rdly.—Symptoms of re-action: tongue moist, rather furred, but no vitiation of taste; the skin performing its functions abundantly, indeed excessively so,—the perspiration being characteristic of this form of the disease, by its acid smell; some rough red spots exhibit themselves on the back, as if a *miliaria rubra* was about to develope itself—a frequent phenomenon in rheumatismus articularis, and which may, in this instance, be partially caused by the excessive diaphoresis. The urine is high coloured, containing a slight mucous cloud, but without a critical tendency; it is a *urina cruda*. The pulse, which last night was hard, and 120 per minute, has become more soft, and moderated to 96 per minute.

We have, therefore, to deal with an articular rheumatism, combined with bronchitic inflammation in both lungs, which exhibits a tendency to extend itself to the parenchymatous tissue; whilst the heart as yet retains its state of integrity. The malady is further combined with a fever, of a rather inflammatory character. The disease may be said to be still in its infancy, for the secretions

* See Austrian Medical Journals, 1841—January to July.

of the skin cannot be considered as critieal, but merely as symptomatic phenomena. No amelioration has as yet taken place, and the principal crisis, through the urine, is still wanting Under these circumstances, therefore, we shall adopt a strictly antiphlogistic treatment. In accordance with this we shall immediately order a copious venesectiou; with a mixture containing potass. nit. and tart. emet.

February 15.—A variety of changes have taken place in the state of the patient, some of which are favourable; others, however, cannot be considered so. First, as to the favourable symptoms: the affection of the joints still exhibits itself to the same extent, but its intensity is very much diminished; the pains have to a great extent disappeared, but the flexibility of the parts affected has not yet returned; their painfulness on pressure, and the swelling, have likewise decreased. The heart has remained intaet. The changes in the respiratory organs are as follows:—the rhonchus (especially towards the right) has become moist to a greater extent; the eough is more rare, and the sputa are no longer tinged with blood, as they were yesterday. The re-aetive symptoms have assumed a still more favourable aspect; pulse now only 84 per minute, full but soft; the perspiration has the characteristic acid smell; the urine, which was so intensely red yesterday, now exhibits a very strong cloudiness, with indications of a formation of sediment; but, notwithstanding the quantity of the precipitate, it has a very acid reaction.*

A disagreeable feature of this case is formed by the eruption of miliaria, of whieh we already saw traces yesterday on the baek of the patient; it likewise exhibits itself to-day on the anterior surface of the thorax.

The appearance of the symptom alluded to just now is always a bad omen, although, in this instance, it is very much modified by the other phenomena. It is, however, a very unfavourable symptom when it exhibits itself after violent oppression of the chest, anxiety, palpitation of the heart, &c.; when it is combined with irritation of the vascular system, frequent alternations of a dry and of a perspiring skin, the latter exhibiting the *calor mordax*; and further, when it is accompanied by a disordered state of the sensorium (at first a pungent headache, afterwards delirium, alternating with a eomatose state). These accompanying bad symptoms fortunately do not display themselves in this instance; the fever, indeed, is even diminished, and the eruption, therefore, in this case does not bear so bad an interpretation. Still it is always a symptom which requires our most minute attention. The origin of the miliary eruption is evident enough in this case, if we recolleet that the patient had formerly taken such large quantities of beverages to encourage perspiration. The possible consequences which may ensue in the course of the disease, although the miliaria there is not marked with the bad characteristics already described, claim our attention to it. For, the exanthema may readily recede, when the most violent symptoms in the chest, and paralysis of the respiratory organs may ensue, with an inconeivable rapidity. I recollect very well a kind of epidemic some time ago, in whieh nearly all the cases of rheumatic affection in the Julius Hospital, even the mildest, were accompanied by this eruption, which so frequently produced a mortal termination, that it was almost considered synonymous with the plague; and this reminds us of the *febris sudatoria* of the 15th and 16th centuries. The difficulty in the treatment of such patients consists in the almost impossibility of keeping them in an equal temperature, so as to protect them against catching cold; and on the other hand in moderating the excessive perspirations.

In order to act more upon the kidneys and intestines (the best method for impeding the development of the eruption), we shall order—℞. infus. herb. digitalis (℈iss) ℥vj, nitrate of potash, ʒj, tinct. semin. eolchiei ʒij, syrup. simpl. ℥j. mix. A tablespoonful to be taken every two hours.

Feb. 17th.—In consequence of a re-appearance of the inflammation of the lungs, we last night again bled the patient to the extent of one pound, upon which an abatement took place. Some symptoms of inflammation of the pericardium, and of the adjoining pleura, now, however, manifest themselves by a frictional noise about the left nipple,and on the right towards the sternum; the bleeding must be repeated on the slightest increase of these phenomena. The pulse is full, and rather expanded; the urine clearer, but still rather clouded with mucus. As the colchicum acts rather too violently upon the intestines, we shall decrease the dose to ʒj.*

Feb. 18th.—We yesterday observed a decrease of the local symptoms in the joints and the lung, but also the appearance of phenomena in the heart which did not previously exist; the fever likewise was certainly moderated; but this moderation was not attended with a continuance of the critical symptoms, especially of those of the urine, which are so important in this disease. The urine, it is true, has no longer the dark red colour, but it exhibits no eloudiness nor sediment; and it has become rather clearer, eontaining merely a slight mueous precipitate; it is still, however, very acid. We eontinued the use of digitalis, with nitrate of potash and tinct. colchici, as also the antiphlogistic diet. I observed, however, that venesection would probably be neecssary towards night. The morbid symptoms in the lung and in the heart increased towards evening (without, however, a simultaneous increase of the fever), so that it was found again necessary to subtract a pound of blood, which exhibited a buffy coat, and was perfectly cupped. The ensuing night was spent calmly; and to-day we find the state of the patient as follows:—the affection of the joints very slight, the joints of the shoulder only are still somewhat painful; the symptoms of inflammation in the parenchyma of the lungs are very much diminished; but those of the pleura, and of the pericardium (although we find no palpitation, no sensation of anxiety, no disturbance of the breathing), still manifest themselves by the frictional sound, which may be observed by the stethoscope, towards the left of the sternum. The fever moderate; pulse no longer expanded, but rapid (96 per minute); the urine acid as yesterday, without sediment; the perspirations have disappeared; the skin is moist, though not sufficiently so. It is more than probable that the disappearance of this secretion is in connexion with the increase of the intestinal secretion, produeed by the colchicum. We shall, therefore, discontinue the colchicum, and instead of it, add liq. ammoniæ aeetat. ʒij. to the infusion of digitalis.

February 19.—If the regular course of this disease has once been disturbed at the commencement, it will always remain a matter of difficulty to bring it again into the desired train. The quantity of remedies, acting upon the perspiration, which the patient has taken, have partially produced an excessive secretion of the skin, with great irritation and fever, which led to a very disagreeable turn of the morbid disposition, namely: to a tendency to the development of the rheumatic eruption, which interferes very mueh with our treatment. We now find the state of the patient as follows:—1st. The affection of the joints in the same moderate degree as already described; the joints of the shoulder only still affeeted. This, however, cannot exactly be viewed as a favourable symptom, since the doctrine holds good in this disease, "that the nearer towards the head the joints that are affected, the more dangerous the disease; and the less so, the more remote they are from it."—2dly. As to the affection of the organs of the thorax, the symptoms of inflammation of the parenehyma of the lungs have almost disappeared (a humid *rale* only is audible at the base of both lungs, especially of the right); the symptoms of the disease of the pleura, and of the external lining membrane of the heart, on the other hand, for which it was found necessary last night to employ cupping, were certainly ameliorated, but have not yet disappeared. The fever is slighter than it was at the time of the reeeption of the patient into the hospital, and it is rather less of the sthenic character; pulse 90 per minute; the skin moist, but not bathed by colliquative perspirations; the eruption still exists, but is dying off; it is now limited entirely to the chest, and is not attended by any other phenomena. The diarrhœa, which has no doubt been produced by the use of the colchicum, has very much decreased, in reference to the number of the stools: the latter, however, are still watery; a more copious secretion of the skin has made its appearance since the decrease of the diarrhœa. The urine is still very acid, and deposits a slight, mucous sediment; but which does not possess the desired rose-red colour.

Prescription.—Continuance of the medieine ordered yesterday, and application of a blister over the cardiac region.

February 21st.—The state of the patient in general is better; but there are some unfavourable circumstances connected with it. The affection of the joints has now almost disappeared; this however would not form a very desirable feature, if its disappearance had been attended with an increase of the affection of the heart, which is fortunately not the case in this instance; on the contrary, we find a decrease of the latter symptoms; the beat of the heart has become normal. A frictional noise and dry crepitation are, on the other hand, to be heard in the left lung, especially at the posterior part of the thorax;—a proof that inflammation of the pleura and of the parenchyma of the lung still exists there. The fever is very moderate; the pulse soft, 80 per minute; skin perspiring; the eruption has made no further progress; and where it existed, it is now in the act of dying off. The urine is discharged in tolerable abundance, is clear, but still has a very acid reaction.

Prescription.—Application of cupping glasses to the left side of the thorax, posteriorly.

February 25th.—The state of the patient has improved within the last few days in every essential point of view, especially with regard to the affection of the heart and the lungs; inasmuch as the phenomena which had reference to the inflammation of the pericardium, as also those of the inflammation of the tissue of the lungs, and of its enveloping membrane, have entirely disappeared; a slight bellows murmur only being perceptible. The affection of the joints has diminished very much both in extent and intensity; it is only in the right shoulder joint that the patient complains of pain on moving, or on pressure. Thus far we may be very well satisfied; but some symptoms exist, which prove that the diminution must by no means be considered as the total cessation of the morbid process; it is merely a retrogression

* It is not only the urine which, in rheumatic patients, exhibits an excessive quantity of acids, but also other secretions, especially those from ulcerations. Schönlein mentions the case of a patient, where an ulcerated surface overspread itself during the night with an earthy, crystalline crust. According to Dr. Simon's researches, this concretion of pus contains uric acid in a remarkable degree, combined with ammonia and soda. Schönlein expresses himself on this occasion as follows:—"This is quite a new fact, which formerly indeed was conjectured, but which has now been confirmed by chemical researches. To judge from this circumstance, it is not a very remote inference to suppose that uric acid is also existing in the blood in this disease, it being ascertained that it occurs in great quantity in the urine, as also in the perspiration. It has now, moreover, been found in the secretion of rheumatic ulcerations; it most likely also occurs in the secretion of the mucous membranes (for the saliva also has an acid re-action); it probably will, therefore, soon be discovered in the blood of such patients."

* Schönlein remarks that colchicum (particularly the tinctura and the vinum seminum) has a very advantageous effect in rheumatism of the joints, but not so much so in rheumatism of the muscles, where, in fact, it is almost useless. In accordance with the opinion of the English physicians, who have recently recalled into use this almost forgotten remedy, I believe that the primary effect of it is directed on the intestines, and that it does not act so much upon the kidneys (as *Chelius* asserts). I have not observed that it affects the formation of the rheumatic sediments.

it; which fact manifests itself principally by two phenomena; 1st, by the pulse, which still continues of an abnormal frequency (eighty per minute); but (as this continued frequency may be accounted for by the copious subtractions of blood, and the strictly antiphlogistic treatment which preceded it) still more so by the peculiar metallic sound. This latter peculiarity continues even when the frequency of the pulse is lowered to sixty, or when it is still more diminished by the use of digitalis; and whenever this is the case you may be sure that the morbid process has not yet terminated; 2ndly, in the urine, which had only been clouded for twenty-four hours, and during which time it contained characteristic sediments; it has now certainly become clear, but has still a very acid reaction. Both are symptoms which, when apparent, after the cessation of the local phenomena, indicate to us that the morbid process is not yet entirely removed, but that it may make its re-appearance on the slightest occasion. The patient complains of dryness in the throat, which may be attributed to the use of the digitalis, instead of which we shall therefore prescribe a decoction of althea, with tart. emet. (gr. j.) and vinum colchici (ʒj.)

February 28th.—When we saw the patient last, all the local phenomena were very slight; they had almost disappeared in the joints; had diminished to a minimum in the heart; I cautioned you however against being deceived by these symptoms; it was not a perfect convalescence, but the morbid state had merely become latent; as a reason for this opinion I adduced the condition of the pulse and of the urine. This opinion has now been clearly confirmed: more pungent pains have again made their appearance in the shoulder joints; the phenomena of the heart are increased, and the pulse at the same time has become more frequent. The urine, although apparently normal, still exhibits a great excess of acids, when tested with litmus paper. The skin is again more constricted; the effect of the colchicum on the intestines is still very powerful; we shall therefore diminish the dose of vinum colchici to ʒjss, and substitute liq. ammoniæ acet. (ʒiij.) for the tart. emet.

March 1st.—We find in the patient a considerable amelioration with regard to the local symptoms, and a particularly agreeable feature is presented by a remarkable change in the pulse; it is still perhaps abnormally accelerated (eighty per minute), but I do not lay too much stress upon this, as it may be the consequence of the exhibition of ammonia; the pulse has no longer that peculiar wiry feel, but is soft; it is still frequent, but no longer so greatly accelerated. The skin is again moist; the urine has still a more acid reaction than it should have.

Prescription.—The same medicine; and bicarbonate of soda as an addition to the beverage.

March 9th.—We have again returned to the point at which we were once before,—an almost entire disappearance of all local symptoms in the joints; but a series of other phenomena still continue, which I consider as essentially belonging to the morbid state, and their existence proves that the malady has not yet perfectly terminated. Strictly speaking, it can scarcely be called a retrogression of the disease, since the symptoms denoting the latter are still present, but the localization of them is wanting. These symptoms are: 1st. the quality of the pulse, which has not only become again a *pulsus frequens*,* but has at the same time, also, again assumed the wiry feel; 2d. the quality of the urine and of the perspiration.—The morbid state cannot be considered at an end, so long as the perspiration has the peculiar acid smell, and whilst the urine has an acid reaction, however normal it may otherwise be in its physical characters. This circumstance is of the greatest importance to the practical physician; as the majority of the faculty yield to the delusion that the morbid condition is terminated, as soon as the local symptoms have disappeared, and are thus, perhaps, induced to employ baths, &c., which are then only calculated to give a strong impulse to a renewed development of the morbid process. It is under these circumstances frequently said that a relapse of the disease has taken place; but it is not a new commencement of the same disease, it is merely the continuation of the old.

March 15th.—The patient approaches the state of convalescence; the only trace of the former symptoms, now existing, consists in a slight stiffness in the left shoulder joint, and in a slightly abnormal frequency of the pulse. The change in the pulse, which has now became soft, is a particularly favourable feature; as also the change which has taken place in the urine, which now exhibits a normal colour, and only a slightly acid reaction; so also the perspiration, which has now lost the acid smell. The duration of the disease in this instance has been a lengthened one; which, no doubt, is a consequence of the first mode of treatment, which produced considerable irritation of the system and the development of the miliary eruption,—a complication which rendered the treatment very difficult, considering the simultaneous appearance of the affection of the heart and of the lungs.

It is now only necessary to keep the patient in an equal temperature, and to protect him in a dietetic point of view.

The patient was discharged from the hospital, as cured, towards the end of the month.

* Schönlien, on the occasion of another patient afflicted with rheumatism of the joints, drew attention to a second peculiarity of the pulse, denoting a latency of the rheumatic morbid disposition—namely, to the increase in the frequency of the pulse which is produced by the slightest movement, as, for instance, on sitting up in bed, &c. &c.

PARISIAN INTELLIGENCE.

(FROM OUR OWN CORRESPONDENT.)

Paris, April 4th, 1844.

On Albuminurorrhœa, or Bright's Disease.—The following case, which occurred in the wards of M. Piorry, furnished this distinguished professor an opportunity of pointing out to the students who attend his clinical lectures, how useful plessimetry is in establishing the diagnosis. M. ——, ætat 45, strong constitution, suffering for a twelvemonth past from Bright's disease, for which he had already been treated in several hospitals. On the 25th February, 1844, he was received in the wards of Professor Piorry, at the *Pitié*, and presented the following symptoms:—The pain which existed in the lumbar region has, the last two days, increased considerably; the quantity of urine passed in the twenty-four hours is not more than lbiss.; it is pale, thick, of a disagreeable smell, and forms, on cooling, a filamentous, flaky deposit. When nitric acid is added, an abundant white sediment is precipitated; and when heated in a glass-tube, the coagulum formed is considerable. Fever; pulse 120, strong; no anasarca. The results obtained, on examining by percussion the kidneys, differed;—thus, on the right side, the organ is of the natural size; whereas, on the left, it had considerably increased. The diagnosis thus established, the patient was ordered to drink freely about fourteen to sixteen pints of tisanne daily; but this treatment, instead of alleviating the sufferings of the patient, on the contrary aggravated them; and what is still more remarkable, by percussion, the right kidney was found to have become twice the size it was when previously examined. This effect, caused by liquids drunk in large quantities, has as yet never been recorded. The next day all liquids were forbidden, the patient was put on a *dry regimen*, and from this moment the quantity of urine decreased, and, two days after, the kidney had diminished to its primitive size. The albumine, which had increased in quantity, as soon as the patient drank so much, on the contrary began to decrease when he was prevented taking any liquid—so much so, that in eight days, nitric acid and heat showed that the urine contained a very small quantity. The fever had disappeared, and the patient appeared in a very fair way of recovery. His diet was composed exclusively of roast meat, and in order to quench his thirst, he was ordered to take a few drops of water in his mouth, and then spit them out. Ten days after his entry, he complained of smart pain in the right fossa iliaca, which seemed to follow the direction of the ureter, for which twenty leeches were applied, and afterwards emollient poultices. The patient remained in this state a fortnight longer, when all at once he was taken with violent pain in the præcordia, accompanied with intense dyspnœa and fever. By percussion, the dulness in this region (about six and a half inches transversely, and nearly six vertically) was found to be considerable; the hand placed on this part did not feel any tremor. Auscultation indicated the presence of the friction sound, masking completely the first sound of the heart, and continuing nearly the whole of the first interval; the harsh sound offers its maximum of intensity over the right ventricle, near the left border of the sternum. Nothing abnormal in the large vessels. Evidently the patient was now affected with pericarditis, and notwithstanding an active antiphlogistic treatment, he died five days after.—*Post-Mortem Examination:*—The two kidneys had increased in size; the adipose capsules which envelope them were rather increased in size, and adherent. When cut into, the cortical substance was found to be pale, of a yellowish tint, with slight traces of injection; no granulations. Each kidney presented, at its upper extremity, a cyst, filled with serosity, of the size of a small walnut, which had developed itself in the cortical substance: several others, of the size of a pea, were disseminated here and there. The tubular substance healthy. In the right fossa iliaca, in the spot where the patient experienced such pain, there existed under the aponeurosis, and in the substance of the iliacus internus muscle, an abscess, which offered no connection whatever with the disease of the kidneys, and whose cause was unknown. The infundibula, the pelvis of the ureters, and the ureters themselves, healthy. Finally, on examining the heart, all the characteristic signs of pericarditis were discovered.—While on this subject, we may notice an article published in the last number of the *Journal des Connaissances Medico-Chirurgicales*, in which the writer, after enumerating the different authors who have studied this disease, from the days of Hippocrates down to the present time, classes the different varieties under the following heads:—1°. Albuminous nephritis perfectly characterized.—2°. Albuminuria without nephritis, but complicated with dropsy.—3°. Albuminuria without nephritis or dropsy.—And concludes—that Albuminuria is a humoral disease, produced by a peculiar alteration of the blood and of the renal secretion,—that it is not absolutely necessary that the kidney should be altered in its texture to give rise to this disease,—that the blood is generally changed in its composition, let the origin of the disease be what it may,—that when the albuminuria is not caused by nephritis, it is owing to disorders which act on the whole system, such as cancers of the uterus and stomach, typhoid fevers, phthisis, scarlatina, chlorosis, &c.,—that it may be asked whether, in albuminous nephritis, albuminuria does not precede the lesion of the kidney, especially when this takes place after scarlatina,—that the divisions here established may become important in a therapeutical point of view, and albuminuria possess special remedies, as chlorosis, &c. In the meanwhile its history, though still incomplete, is an important addition to that of humorism, renovated and enlightened by chemistry and pathological anatomy. The discovery made by Bright is one of the most useful of the present day, and is sufficient to immortalize his name.

On Diseases of the Eye. By Professor Velpeau. *Introductory Lecture.*—These diseases are extremely frequent, and the truth of this assertion may be verified daily in the hospitals; but as many practitioners make mistakes, it may not be uninteresting nor useless to pass them in review; and, at the same time, I will add some further details to those which I gave in my lectures some years ago. The eye being one of the most important organs of the animal economy, naturally, practitioners in all ages have studied its diseases attentively, and placed them in a category separate from other disorders. Thus, we find the germ of this speciality in the writings of the Hebrews and Egyptians. Reasons have been urged for and against this tendency, but

these being foreign to our subject, need not here be discussed. If we reflect for an instant on the organization of the eye, we shall easily conceive why it and its appendages (the eye-lids, vessels, nerves, muscles, and lachrymal ducts), are so frequently the seat of disease; and being composed of elements differing essentially in nature, are consequently susceptible of producing disorders, *sui generis*. For instance, do not the eye-lids offer in their composition tissues very different from each other? Do we not find there integuments of a peculiar nature, cellular and muscular tissues, cartilages, glands, and eye-lashes (these last themselves formed of various elements); and on their inner surface a mucous membrane, with its follicles and *villosities?* What a diversity of elements! Again, if we examine the lachrymal organs, we find the puneta, ductus, and saecus lachrymalis, the ductus nasalis, and the glandula lachrymalis. And for the eye itself, the conjunctiva, the sclerotica, the cornea, the choroidea, the retina, the iris, the crystalline lens and its capsule, the aqueous humour, the vitreous humour, and the hyaloidea; all these contained in an organ not larger than a walnut. But these parts are not separated from each other; on the contrary, they cross, and are closely united to each other. Now, it is generally admitted that these several parts may be the seat of diverse lesions, for the conjunctiva may be affected by the various forms of inflammation, and it is the same with the other elements which compose the organ.

These diseases offer several peculiarities worthy of notice. 1º. They may have their seat in the surrounding, or the component parts, of the eye, and may, therefore, be divided into external and internal. In the former they are visible; and, consequently, the diagnosis is easily established; whilst in the latter, the difficulty is greater, and errors far more frequent. 2º. The consecutive accidents are very different from what is observed in the diseases of other organs. Thus, in the different viscera, inflammation may take place, and terminate by resolution, even when pus has been formed. This is not the case in the eye; for though the patient may be perfectly well in other respects, still he may lose his sight from the opacity produced in certain parts of the eye by the previous affection. The eye may, therefore, be considered as a special organ, and this accounts for the tendency of certain practitioners to make it the object of a speciality in medicine, which is, I do not hesitate in saying, highly dangerous. Doubtless, the advancement of science, and the good of mankind were the "*primum mobile*" of these authors, and no one would think of raising his voice against so praiseworthy an intention. But there is another motive why in medicine men adopt a speciality, a motive which, while excusable in other professions, is *beneath* one whose object is so noble as ours. In a word, in adopting a speciality, the aim of the individual is to place himself in a position to gain money; whilst that of the physician is, or ought to be, the relief of his fellow creatures. In acting otherwise, our noble profession is assimilated to a mechanical art, in which the artisan seeks his own interest, not that of his fellow creatures. The medical profession can never be considered as a business. But what occurs, in general, when an individual creates a speciality? He reads all that has been written on the subject; after which the object of his studies becomes disagreeable, however pleasing it may have been at first; and then, either he chooses another subject which is certainly the most honourable, or he endeavours to turn to profit the knowledge he has acquired, and in order to attain his ends, he must employ the necessary means. Thus, he must endeavour to make the public believe that he knows more than his colleagues, like a manufacturer who publishes that his merchandise is the best. Concealing the cases in which he fails, he vaunts his successes, loses thus the scientific honesty, true courage of the savant, and the works which he publishes, though perhaps containing excellent and instructive matter, are no longer of use to the scientific man, who dare not adopt them for fear of being led into error. But "*specialists*" pretend that as they have passed their life in studying a given subject, they ought to know it better than those who study all the diseases which affect the human frame. This opinion has not only been received among the public, but has also been adopted by many members of the profession, and yet however correct it may appear, can easily be proved erroneous, for there is no part of the human frame which can be separated from the rest with impunity. Can the eye be considered as foreign to the organism? On the contrary, is it not the model of all other systems, as we find in it all that is to be met with elsewhere? Is it necessary to give a proof that what interests this organ, interests the rest of the economy? Are there not diseases of the eye which are produced by a carious tooth, by certain conditions of the brain, the liver, the lungs? Now, if an oculist neglected studying the disorders of these parts, how can he cure those of the eye. Thus, whilst in all ages, specialities have fallen to the lot of men of mediocre talent, those whose endowments are greater, and whose intelligence is more highly developed, concentrate the activity of their mind, first on one subject, and then on another, without studying one to the exclusion of all others. But it would be hardly worth while occupying ourselves with this question, were it not that I wish to lay before you the tactics of these individuals. If unknown, they have a patient whom they wish to show you, a new mode of operating which they ask leave to try, not publicly, but in your presence only. If they are in vogue, we have quite a different affair. They, and they alone, know how to cure diseases of the eyes; an opinion shared by numbers of our brethren, who, by advising their patients to consult these persons, aid this *manœuvre*, which really ought not to be considered as forming part of the conduct of a conscientious practitioner. And now, as far as concerns oculists, let us examine the pretensions they have the courage to emit as to their having promoted the science. To whom are we indebted for the different operations performed on the eye? To Pott, Searpa, and Dupuytren for that of couching; to Richter, Wenzel, Boyer, and Professor Roux for that by extraction. In England, we find among those who have particularly distinguished themselves, Cheselden, Guthrie, Travers. Mackenzie (of Glasgow), whose treatise is so highly and so deservedly esteemed, is not an oculist; as to Bier, what he left, is, comparatively speaking, of minor importance. Thus, it is evident that we owe the four-fifths of what is really useful on diseases of the eyes, to surgeons, not to specialists. Have we not, from surgeons, numerous articles in the different "dictionaries" which of late years have been published in France? Have we not, in Boyer's treatise, a volume in which these disorders are described? Again, there are few clinical professors who do not daily study them, and I myself delivered, some years ago, a course of lectures on this subject, at la Pitié. These preliminary remarks are sufficient to show how necessary it is for every physician to study diseases of the eye.

Some oculists have asserted that it is possible to discover from the nature of the disease the constitution of the patient: thus while one kind of ophthalmia is of a scrofulous nature, another is of an hemorrhoidal, an hepatic, a varioloid, &c. This idea is but the reproduction of that of Sauvages, who considered these diseases as of a peculiar nature, and recommended a method which teaches us to study a class of disorders as we would plants, and which I have long since combated, not only because I consider it erroneous, but likewise, because I think it dangerous. There is another point, as yet very obscure, but which I hope to elucidate in these lectures, viz., that no disease exists to which the prefix of scrofulous, rheumatismal, and such like, ought to be attached. Let it not be supposed, however, that I deny the existence of a scrofulous or rheumatismal taint; what I mean shall be explained as I proceed. All that I will say to-day is that ophthalmia in scrofulous patients is modified, as when it affects persons of a sanguineous or nervous temperament. But in order to prove beyond a doubt how erroneous the opinion is, which attributes such and such a disease of the eye to such and such a constitution, we need only examine a scrofulous person attacked with pleuritis, pericarditis, or any other disorder, and see if we discover any material difference in the symptoms. Who would ever think of calling pleuritis in such cases scrofulous pleuritis? Doubtless we must not omit in studying the affection, to examine of what constitution the patient is, but I think it impossible to discover it from the examination of the eye. This organ, as we have already stated, is composed of numerous tissues, which may be affected separately or conjointly. Now when we say such an individual presents a scrofulous ophthalmia, we do not indicate what tissue is affected. Such a doctrine would lead to the supposition that the disorder, inflammation for instance, does not differ according to the tissue, or that the knowledge of the precise seat is of no importance whatever.

Academy of Sciences—Sitting of the 1st April—M. De Beaumont, V. P. in the Chair.—The Academy proceeded to elect a correspondent in the section of geometry, vacant since the death of M. Ivory. Mr. Hamilton, of Dublin, was elected.

Critical Observations on the Chemical Phenomena of Respiration. (Memoir read by M. Gay Lussac.)—Two theories have been proposed to explain the chemical phenomena of respiration: according to to the 1st,—Carbonic acid and water are formed, and nitrogen disengaged in the lungs, from the contact of the oxygen of the air with the blood contained in the capillary vessels; and to the 2nd, oxygen does not act on the blood in the lungs, but is absorbed, and the chemical phenomena to which this gives rise takes place in the blood while it circulates; the carbonic acid being thrown off on its return into the lungs. The latter has principally been adopted since the researches of M. Magnus, shewing that the blood contained carbonic acid, nitrogen and oxygen. From experiments which lasted six hours, the result was:—

Venous Blood. Cubic Cent.	Carbonic Acid. Cubic Cent.	On 100 parts. Cubic Cent.	Carbonic Acid. Cubic Cent.
66·8	16·6	100	24·8
59·8	12·8	100	21·4
62·9	22·2	100	35·2
After 24 hours, the blood free from odour:—			
66·8	24·9	100	37·2
59·8	23·9	100	40·0
62·9	34·0	100	54·0

The same result was obtained with atmospheric air, oxygen or nitrogen, instead of hydrogen; but in order to render it complete, a comparison ought to have been established between arterial and venous blood. The researches published by this physiologist, may be comprised in the following table:—

ARTERIAL BLOOD.

Origin.		Volume. Cubic Cent.	Carb. Acid. Cubic Ct.	Oxygen. Cubic Ct.	Nitrog. C. Cent
From a horse	A	125	5·4	1·9	2·5
From an old horse in good health	B	130	10·7	4·1	1·5
The same blood	B	122	7·0	2·2	1.0
From a calf	C	123	9·4	3·5	1·6
The same blood	C	108	7·0	3·0	2·6
		608	39·5	14·7	9·2
On parts		100	6·4967	2·4178	1·5131

VENOUS BLOOD.

From the horse, 4 days after taking the arterial blood	A	205	8·8	2·3	1·1
The same blood	A	195	10·0	2·5	1·7
From the old horse, 4 days after, &c.	B	170	12·4	2·5	4·0
From the calf, four days after, &c.	C	158	10.2	1·8	1·3
The same blood	C	140	6·1	1·0	0·6
		863	17.5	10·1	8.7
On parts		100	5·5041	1·1703	1·0081

This new theory asserts that, during respiration, oxygen is absorbed by arterial blood in the lungs, and carried by the circulation to different parts of the system, where, by the action of the capillary vessels, it combines partly with the carbon contained in the tissues, and partly with the hydrogen, to form carbonic acid and water—so constituting the difference between the two species of blood. This operation terminated, it returns to the lungs, where the carbonic acid is thrown off, and a fresh quantity of oxygen absorbed. Thus, the theory of M. Magnus admits—that venous

blood contains carbonic acid, and that if there is any in arterial blood, it is in much smaller proportions—that the difference ought to be enough to accomplish the phenomena of respiration—that the quantity of oxygen absorbed in the lungs, must be sufficient to form the carbonic acid and the water thrown off—and that venous blood contains nitrogen, and in greater quantities than arterial, if, indeed, this last contains any. But the last table proves that carbonic acid, nitrogen and oxygen, are contained in arterial as well as in venous blood, and whilst 100 parts in volume of the former gave 6·4967 of carbonic acid, the latter gave only 5·5041, which ought not to have been the case if his theory were exact. The same remarks are applicable to the nitrogen. The proportions of oxygen are the only ones favourable, but, in presence of two negatives, what reliance can we place in one affirmative fact. To ascertain the quantity of carbonic acid, we will take the conclusions of M. M.: which are—that, according to the opinion of Sir Humphrey Davy, a man throws off in a minute 13 cubic inches of carbonic acid, and that each pulsation of the heart furnishes ℥i. of blood; and, in supposing 75 per minute, 75 oz. of blood will pass through the lungs during that time, or 115·7 cubic inches. If 115.7 cubic inches contain 13 carbonic acid, 100 will contain 11·23. Now, if venous blood, to become arterial, disengages 11·23 carbonic acid, it necessarily contains the same quantity of oxygen; and as on 4 parts of this latter absorbed, 3 are converted into carbonic acid, and 1 into water, the blood must absorb in the lungs $11{\cdot}23+\frac{11{\cdot}23}{3}=14{\cdot}97$, which is 16 times more than water could absorb. According to M. Bourgery, an adult draws in a pint of air at each inspiration, or 15 per minute; during which time the heart beats 75: now, in supposing that the heart propels 75 oz. of blood through the lungs, and that the expired air contains on an average 0·04 of its volume of carbonic acid, it may be concluded that, since 15 lbs. of air are introduced into the lungs during each inspiration, whilst the quantity of blood is 75 oz. or 3·26 times less, that the venous blood, in order to give to the expired air 0·04 of its volume of carbonic acid, must contain $(1+3{\cdot}26)\times 4=17{\cdot}0$ per cent.,—this forming the minimum contained in the blood, and the difference between the two sorts of blood. Finally, nothing proves that the change of colour is owing to the loss of carbonic acid in the lungs; and even in admitting such to be the fact, the quantity of carbonic acid retained would be so considerable in comparison to what it abandons, that it is impossible to explain the change by so slight a difference.

Laryngotomy in Polypus of the Larynx.—M. Hermann, Professor at the Faculty of Medicine, Strasburg, addressed a letter in which he gives an account of an operation performed in order to remove a polypus, which had developed itself on one of the chordæ vocales. This fibro-cellulous excrescence had protruded between the lips of the glottis, and would have caused suffocation, if the trachea had not been opened and a canula introduced. The next day, the patient being quite calm, the thyroid cartilage was divided, and the foreign body removed.

On Elephantiasis.—Dr. Daniellsen, Physician to the Hospital St. Georges, Bergen, addressed a memoir on this disease, endemic on certain parts of the Norwegian coast, and principally at Christiana, Bergen, and Trondhjern. This disease is very common in Norway; in 200,000 inhabitants, 1,200 are affected. It shews itself under two forms, elephantiasis affecting the skin, and that which attacks the glands. The autopsies performed by the author shew that there existed in the dermis, as well as in the sub-cutaneous cellular tissue, a hard, granular, and yellowish substance; that this infiltration took place likewise—in the walls of the veins, so much so, that the basilic was equal in size to the finger—in the larynx, trachea, bronchi, pleura, liver, spleen, uterus, and intestines, but, what is remarkable, not in the lungs. As to the treatment, all remedies hitherto employed have been unsuccessful.

On the Tinea Tonsurans. (Memoir addressed by Dr. Gruby.)—This disease is characterized by the hair falling off in small round spots, covered with white scales and asperities, similar to what is observed in what is called *chair de poule*. If fragments of the hair are attentively examined, their tissue is found to be full of eryptogamiæ, and the hair is covered with epidermic scales, whilst their interior is filled with *sporulæ*. The cryptogamiæ originate in the root of the hair, under the form of small, round sporulæ, and follow the hair in its growth. They differ so much from those which exist in phyto-alopecia, that it is impossible to mistake the one for the other. Thus—1°, they are formed of sporulæ, or chaplets, seldom ramified; 2°, the sporulæ are from $\frac{2\cdot6}{1000}$ to $\frac{4\cdot10}{1000}$ of a *millimetre*, and are contained in the interior of the hair, 3°, the cryptogamiæ commence and are developed in the root of the hair. This disease offers no other pathological character excepting these cryptogamiæ, and consequently ought to be classed among the parasitical disorders, with the phyto-alopecia, mentagrophilis, &c. Finally, to distinguish it from phyto-alopecia, Dr. G. proposes calling it Rizo-phyto-alopecia.

Professor Orfila addressed a printed memorial, in which are developed his ideas against the localization of poisons.

M. Pouchet addressed the resumé of his researches on fecundation (already published).

Academy of Medicine—Sitting of the 2nd April—M. Ferrus in the Chair.—Professors Blandin and Roux intended making some remarks on the *procès verbal*, but postponed them on account of the absence of Professor Cruveilhier.

M. Henry read a report on the mineral waters of Eveux (Creuse), the conclusions of which were adopted, after some observations by MM. Caventou, Desportes, and Chevallier.

M. Carnac proposed naming a Commission in order to adopt the most efficient measures to be taken in order to place the busts of Dupuytren and Broussais in the *Salle des Seances*, and at the same time regretted that the *Conseil d'Administration* had not come to a decision relative to those of Corvisart and Laënnec. (Proposition adopted.)

M. Melier read a memoir, "Remarks on Statistics." After criticising the mode in which the statistical tables were made out, and pointing out the errors contained in a work lately published, the author proposed:—1°. To point out to the proper authorities, as defective and inexact, the statistical tables of insanity in France, as the principal cause (*heredity*) is not mentioned.—2°. That, hereafter, the Academy ought to be consulted on the statistical tables which contain subjects relative to medicine and public hygiene. The propositions are sent to be examined by the *Conseil d'Administration.*

On "Heredity," the Cause of Insanity.—M. Baillarger read a memoir, and presented an atlas containing 38 statistical tables. In his memoir, the author endeavoured to elucidate the following questions:—1°. Is the disease oftener hereditary on the side of the mother than of the father. In 453 cases it was transmitted, by the mother 271 times, by the father 182; difference about one-third.—2°. When hereditary, does the mother transmit it to more children than the father? In the 271 families in which it was transmitted by the mother, it had manifested itself in one child in 203 cases; in two children, in 62; in three, in 5; in four, in 3;—in 346 children affected, or in 271 families, it had shown itself 70 different times, in several children—about one-fourth. In the 182 transmitted by the father, one child only was affected in 152 cases, two children in 26, three children in 4;—of 182 children, on several 30 different times, or one-sixth.—3°. Is it transmitted more frequently from the mother to the girls, or from the father to the boys? In 346, there were 197 girls, and 149 boys—difference about one-fourth. In 216, there were 128 boys, 88 girls—difference about one-third. Again, in 271 boys, 146 received the disease from their mother, and 125 from their father—difference hardly one-sixth. In 274 girls, 189 received the germ from the mother, 85 from the father—difference upwards of one-half. From these facts the author concludes:—1°. That the disease of the mother is more dangerous than that of the father, not only because it is oftener hereditary, but likewise because it is transmitted to a greater number of children.—2°. That the girls are oftener affected when the disease is transmitted by the mother, and boys by the father.—3°. That its transmission from the mother to boys is not more frequent than from the father; whereas, in girls, it is twice as much.

On the Danger attendant on Myotomy in Deviations of the Spine. (Memoir read by M. Malgaigne.)—The author, after criticising the statistical table published by M. Guerin, and pointing out its errors, and the dangerous consequences of myotomy, concludes thus:—"The greatest difficulty is, not to straighten the vertebral column, but to restore to it the solidity it has lost, by strengthening its ligaments and its muscles; and this is so palpable and so constant, that it may be considered as one of its principal causes. Six years ago, I condemned the different apparatus invented to straighten the column, as being only fit to weaken the ligaments and muscles. To-day, I will add that, in order to strengthen a muscle, its division is a very bad means, and experience has proved that this is the case."—The following members were named by the president to examine this memoir—MM. Amussat, Louis, and Jobert..—M. J. Guerin requested to be heard on account of *personality (fait personnel)*, but several members—as M. G. began to discuss the subject contained in the memoir (and as this was against the rules of the Academy)—protested against his being allowed to continue. This incident caused considerable tumult, during which M. G. said a few words on the attack made against him.—M. Nacquart requested that Professors Roux and Velpeau might be added to the Commission.—M. Guerin opposed the nomination of the latter, as his decided adversary.—Professor Velpeau. "Though the honour of forming part of a Commission is not always the most agreeable, still, as I am opposed, I request the favour of being named. It is not M. Guerin's, but M. Malgaigne's memoir, upon which I am called to give my opinion, and I cannot allow M. G. the right of refusing any commissary named by the Academy."—The proposition of M. Nacquart was then voted, there being only one dissenting voice.

GARLAND DE BEAUMONT, D.M.P., B.L., & S. &c.
Honorary Physician to the Spanish Embassy.

EXTRACTS FROM THE GERMAN AND ITALIAN JOURNALS.

(Memoriale della Medicina Contemporania, Wiener Archiv. der Pharmacie, &c.)

HYSTERIA CURED BY ERGOT OF RYE.—Dr. Nardo found the ergot of rye exceedingly efficacious in hysteria, whether it depended on simple atony of the generative system, or on a simultaneous exhaustion and weakness of the nervous system. He administered it to females of weak sexual activity, but subject to hysterical fits. He gave a scruple of the powder with sugar for several days successively, made a pause of one or two days, and then continued the medicine for two or three days more. After the hysteria was cured, menstruation became normal.

ADVANTAGEOUS METHOD OF PREPARING LACTATE OF IRON. By Professor Wöhler, M.D., Ph. D. Pour finely triturated sugar of milk, and iron filings (pure) into acid whey; digest for several days, and shake frequently, at a temperature of 30° to 40° C. Take one ounce of sugar of milk, and one ounce of iron, to two pounds of sour milk. The iron dissolves gradually, under a weak evolution of hydrogen. At the same time, new lactic acid is formed from the sugar of milk by means of the caseine. When the sugar of milk is dissolved, add a new portion of it, and as soon as lactate of iron is produced in sufficient quantity (which is known by its being precipitated in the form of a white crystalline powder), boil the whole mass, and filter it, hot, in a closed vessel. In cooling, the lactate of iron separates itself in the form of greenish-white crystalline crusts, composed of little prisms. The separation is not completed before the lapse of several days. Then decant the liquid; break the crystalline crusts; wash them sometime with cold water; put them upon folded blotting-paper, and cause them to be dried by a moderate heat as quickly as possible. The salt

ius obtained is sufficiently pure for medical use. 'o prepare it perfectly pure, nothing is required ut dissolving it in boiling water. *Lactate of Zinc* ay be obtained by the same method, in the form f colourless crystals.

To Procure Red Crystallized Iodide of Mercury. By Dr. Heller.—If you put as much ed iodide of mercury into a boiling solution of ıl ammoniac (consisting of two parts of sal amoniac, and three parts of water) as it will dissolve, and then pour out the boiling solution, and llow it to cool, the iodide of mercury will shoot nto beautiful purple crystals. Sometimes, the rystals appear to be at first of a pale yellow olour (in consequence of *dimorphism*), but they uickly acquire, after cooling, a beautiful purple olour.

Dumas's New Researches on Ergotine.—*M. Bonjeau* recommended, last year, as a styptic, watery extract of *ergot of rye*, under the name f *extractum hæmostaticum*. *Professor Dumas* made, n the Parisian Academy of Sciences, of July, 1843, he following mode of preparation:—Powder the rgot of rye, and extract it in cold water by ressure. Heat the liquid in a water-bath, in rder to coagulate the albumine; then filter the xtract, and allow it to evaporate in a water-bath, ill it has the consistence of syrup. Treat this luid extract with highly-rectified spirits of wine, vhich must be employed in considerable excess, in rder to separate all insoluble gummous parts vhich have no efficacy. Strain the solution, and llow it to evaporate to the consistence of a soft xtract. Out of 500 *grammes* of ergot of rye, Bonjeau obtained from 70 to 80 *grammes* of rgotine, or from 14 to 16 per cent. *Ergotine* is a lear, reddish brown, soft extract, of an agreeable mell, analogous to that of roast meat; the taste is ungent and bitter, somewhat similar to that of poiled corn. It is perfectly soluble in water. The olution is clear and red. M. Bonjeau calls it a pecific against hæmorrhages in general, and parıcularly against uterine hæmorrhages. He has onvinced himself these last four years, that the rgot of rye contains *two different agents*, namely, *rgotine*, which operates principally on the arterial nembranes, and the *oil*, which acts specifically on he centres of the nervous system. Ergotine is ecommended as *an eligible form for midwifery* ases. If employed against uterine hæmorrhage, æmatemesis, &c., it ought to be continued for ome time, even after the symptoms of the disease ave subsided. M. Bonjeau also recommends to xtract the ergot of rye first by ether (in order to emove the oil and resin), and to administer the emaining powder in doses of six to eight grains or promotion of labours.

The Midwives of Greece, and their Remedies. By X. Landerer, M.D., Professor of he University of Athens.—The ignorance and uperstition of the Greek midwives are very injuious to their patients. Their remedies are curious, ept secret, and are employed without consulting he physician. They consist, either in such as romote menstruation, or in such as remove steility. To promote menstruation, they use strong mmenagogues, as aloes, crocus, and rubia tinctorum, and they consider fresh resin of firs, prepared with turpentine, an infallible nostrum in hese cases, and administer it, made up with bread nto a sort of bolus, weighing about one drachm. Should this dose not have the desired effect, they dminister a second and a third, and recommend raughts of camomile tea, or decoction of natricaria parthenium, or of herba aurantiorum, o be taken afterwards. They also use, for the ame end, vapour baths in the following way:—The patient is placed on a close stool, filled with oiling water, in which rue and orange leaves are ligesting. After she has been exposed for some ime to the vapours, she is brought to bed, and receives some cups of rue tea. This last mode is aid to fail very rarely. Their treatment of *steility* is more dangerous. As a general rule, the arren female seeks first the assistance of midvives, who generally employ violent and exceedngly stimulating remedies, introduced at once, *per vaginam*. Among others, they use boluses of myrrh, camphor, oil of camomile, pinks and innamon, cotton *tampons*, with tincture of castoreum, moschus, and even cantharides! Onions, garlic, vapour-baths with herbæ rutæ, and fresh orange leaves, are also used. This unwarrantable treatment is often, of course, followed by dangerous local inflammations. In difficult and protracted labours, they often administer brandy or rum, with pepper and cinnamon, in such doses as to intoxicate the patient. The oil of almonds is also much used. *Some midwives are in the habit of shaking the patient very violently, in order to promote delivery.* The new-born child is nursed in the usual way, with the exception that the midwives consider dangerous—cleanliness, frequent washing, and combing. All diseases of infants are, according to midwives, caused by colic, and *syrupus rhei* is given as a specific. If the child becomes very restless, they give it poppy-juice, which they prepare themselves from the papaver rhœas. If the child remains still restless, they give it a panada prepared from wine and biscuit. The children, of course, become intoxicated, and often lie for days and nights in a soporific state. The abuse of these remedies, and the excessive swathing of the children are, no doubt, the causes of so many of them dying by hydrocephalus. If the child cannot be pacified by opium, nor by its vinous food, it is supposed to suffer from flatulence. To remove this, the midwives perform an exceedingly cruel operation; namely, the inversion of the navel. They bore a finger into the navel of the child, and turn it round several times. The cries of the children show the incredible pains caused by this operation, which, however, generally removes the flatulence. Umbilical ruptures are thus often caused. We know, that in consequence of determination of blood towards the abdomen, the movements of the living fœtus are sometimes not felt by the mother. In such cases, the Greek female immediately applies to the midwife, who roasts a few pieces of cheese, which she lays on the belly in the form of a cross, and makes the patient eat some of it. Should the child not move now, a second remedy is employed, which consists in boiling dates, and binding them on the belly. Should both these remedies fail, the life of the child is despaired of. The midwife, resorting to her last resource, takes a mouthful of rum or brandy, and spirts it with force in a fine stream through the teeth on the naked belly of the pregnant woman, whose eyes are generally blindfolded, to prevent her from witnessing the operation. This remedy, I have been assured, according to the assertions of many women, is infallible, and promptly elicits the child's movements, if it be alive. To *promote the secretion of milk* in the suckling woman, the Greek midwives chiefly use the *milk of hazelnuts*. The hazel-nut kernels are made into an emulsion with melon-seeds, and sugar. *In three cases* I witnessed *a considerable increase in the secretion of milk* after the use of some glasses of this emulsion.

(To be continued.)

Recent Researches on the Origin of Carbon. By Dr. F. Simon—*Gustav Bischoff* showed *the origin of carbon* in the vegetable and animal kingdom. In the oldest mountainous formations no carbon is found. The great strata of coals are of much later origin, as also the bitumen in the formation of trap. The blacklead found in granite, and the anthracite found in porphyry cannot be considered as original carbon, but must have been derived from the decomposition of a destroyed vegetable world. It is highly probable that even diamonds owe their existence to a process of decomposition, just as much as amber, and mellitic acid. The combination of carbon most frequently found is carbonic acid, which streams out in great quantities from exhausted volcanoes. In former periods, when the volcanic phenomena have appeared in quite different proportions, a much greater quantity of carbonic acid must have been formed. Bischoff's calculations show, that in the environs of the Lake of Laach, 228,855,000 pounds, or about 1-6606 cubic mile of carbonic acid rises into the atmosphere, which amounts in ten years to $1\frac{1}{2}$ cubic mile. If only 2575 times as much carbonic acid would be disengaged from the interior of the earth as from the Lake of Laach, and could be continued for ten years, the whole quantity of carbonic acid which exists now in the atmosphere would be furnished; and if the disengagement of carbonic acid had taken place in these proportions since the formation of coals, their quantity would already amount to three millions of cubic miles, or $33\frac{1}{3}$ per cent. Plants thrive in an atmosphere which contains much more carbon than would be favourable to the life of animals. Hence, the atmosphere could thus have been freed of a part of its carbon by the plants before the animal kingdom existed. They might have appropriated the carbon to themselves, and buried it, so to say, as coal in the bosom of the earth. It must have been after this period that the race of monstrous reptiles, that could live in a much impurer air than the warm-blooded animals, made their appearance. The majority of mammalia came after the earth had been covered by immense forests, to which the widely spread peat-bogs owed their existence. Thus, the atmosphere attained that degree of purity which is necessary for the respiration of the higher warm-blooded animals. The simultaneous existence of the vegetable and animal kingdoms maintains the air now in a state of stability. *Brogniart* considered the whole carbon of the earth to have formerly existed in the air as carbonic acid; but *Bischoff* is of opinion, with us, that carbonic acid emanated from the interior of the earth. But how was it contained in the interior of the earth? If the result of reduction or oxydation, coals must have been previously present, and this seems unlikely; and if the result of a carbonate, the conditions of its disengagement were greater at that antecedent period of the earth's liquefaction, than subsequently.

OBSERVATIONS ON MESMERIC AND HYPNOTIC PHENOMENA.

By JAMES BRAID, Esq., M.R.C.S., Edinburgh.

I have great pleasure in answering the "questions in hypnotism" proposed by "a Subscriber," in your 232nd number. Numerous private letters intimate that my late communications have excited considerable interest, and I shall therefore add a few additional remarks by way of answering their queries, and also with the view of explaining some of the more interesting points which were not embraced in what I have already published.

I have frequently hypnotised *insane* patients, and with marked advantage; but hitherto I never could succeed in inducing sleep *in a decidedly fatuous case*. This I attribute to the great difficulty of arresting their attention; and after numerous and prolonged trials, being unwilling to waste more time, I have abandoned them, although it is highly probable that a continuance of the means might have ultimately succeeded. I am therefore unable to speak from personal experience as to what might have been the result of hypnotism on a decidedly fatuous person, but for the benefit of your correspondent I shall transcribe the following case of mesmeric somnambulism from the learned and truly interesting work of J. C. Colquhoun, Esq., "Isis Revelata." It is recorded at page 74 of vol. ii.

"In the same article from which I have extracted the preceding account of the two young magnetisers, the author mentions that, at Landau, he once magnetised a lady of about thirty years of age who had been fatuous from her birth. She belonged to an opulent and distinguished family, who had used every possible means to endeavour to restore her intellect, but without success. When placed in a state of somnambulism, she conversed upon various matters with great propriety; she was no longer the same being; a person who saw her then for the first time would never have suspected that she was deficient in mental energy. Her parents, who were present, were astonished, wept for joy, and exclaimed, 'Ah! why is she not always a somnambulist?'"

As to your correspondent's last queries, whether I have tried the effects of nitrous oxide, and whether I consider it might be hazardous,—I beg to state that I have never tried such experiments, and, therefore, any opinion I could offer would be mere conjecture. However, I am by no means

inclined either to try or recommend such experiments, because I am quite certain that *hypnotism alone*, as I apply and recommend it, is not only *a safe, but also a most valuable remedy for a class of diseases which resist all ordinary means*, and are, therefore, considered the "opprobrium medicorum." I am consequently unwilling to hazard the reputation of hypnotism, by associating it with any doubtful allies. Were an untoward event to happen, especially in my hands, from any experiments instituted to gratify idle curiosity, or the mere love of science, it might be turned to the prejudice of what, in itself, is both harmless and valuable when properly used. The propriety of such caution will be apparent when we look to the prejudice which has been excited against mesmerism by such untoward accidents as have lately happened, where the patients could not be aroused for hours, or even for several days. I am glad to be able to say such accidents *ought not* to happen *from hypnotism*, for I have never had a case which I could not arouse in two minutes. In this respect, as well as in its more certain and speedy induction of sleep, hypnotism is decidedly preferable to mesmerism as a therapeutic agent.

In my communication in the *Medical Times* of 13th January last, my object was to point out certain sources of fallacy, likely to mislead the mesmerists in respect to the marvels of clairvoyance, which they have recorded from time to time. Every one knows the extraordinary marvels lately recorded in this way of the boy Cooke, at Deptford. I addressed a few queries to his master (who was the mesmerizer in this case) which he most obligingly answered, and authorised me to make what use of I pleased. From these answers, compared with the sources of fallacy pointed out in the above paper, it was quite clear that there were no real clairvoyant powers exhibited by Cooke, all which appeared to Mr. Smith and others as such, being attributable to the condition I had explained in the above paper. The case itself was a valuable proof of the extraordinary influence which had been effected on the mental and physical functions by the mesmeric processes; but the erroneous views arising from the supposed marvels of clairvoyance, have furnished a handle to sceptics to throw a doubt on the veracity and good faith of the parties most nearly and painfully interested in it.

In your 216th number, I made allusion to the remarkable fact of the influence of contact, during hypnotism, in exciting memory. Thus, at page 75, "a patient may be unable to answer the most simple question, on a subject with which he is quite familiar; but touch any part of his person either with a finger, or any inanimate substance, or cause him to place one of his own hands or fingers in contact with some other part of his own body, and immediately he will be able to reply correctly." The mesmerists might be inclined to attribute this to a mental influence passing from the operator when he touched the patient, but then the fact of the patient's *own* touch or any mechanical contact being established by a person coming into the room, without knowing the question proposed, having the same effect, is quite fatal to such an inference. At page 148 of my work on hypnotism, I stated that the phrenologists point "eventuality" I had strong grounds for believing to be the chief seat of memory. I was led into this error from finding that patients, when touched on that point, could always answer correctly any question about past events, although unable to do so *without* such contact. The circumstance now noted, however, proves I was so far in error, as contact *with any part of the body* would have produced similar results. Whether it is by partially arousing the patient, and thus bringing him nearer to the waking condition, or by merely mechanically arousing and fixing, or concentrating the attention in *one* direction, instead of the mind being allowed to wander uncontrolled, and incapable of fixing itself definitively on any subject, whilst addressed only through the organ of hearing, (or both combined,) may admit of some doubt. It throws much light on the supposed special influence of the "rapport" of the mesmerists, however; as it proves the attention may thus be excited to receive impressions to which it would otherwise be quite dormant.

There is also a stage when there seems to be an extraordinary revivification of the memory, so that there is a lively remembrance of what had been long forgotten during the waking condition; and the power of imagination pointed out in my former paper, gives to these remembrances of past impressions, all the force and vividness of present realities. May this not have proved a special source of error in cases of supposed clairvoyance and intuition.

Another most probable ground of error arises from the interesting state of double consciousness, the existence of which I have proved in almost every case in which I have tested for it. By double consciousness I mean that there is a stage of the sleep, when a patient may be taught anything, and be able to repeat it with verbal accuracy as often as in that stage again, whilst he may have no idea either of the subject or the words when in the waking condition. This is quite analogous to what is recorded of natural somnambulists; but it was some time before I discovered the exact stage for eliciting it, and I had consequently recorded this as a remarkable difference between natural and artificially induced somnambulism. The following are interesting examples of this condition. The detail of the first case is also most interesting, as illustrating the power of hypnotism in curing an obstinate disease.

Mr. Jones, eighteen years of age, applied to me at the beginning of last winter. About two years previously he had been attacked by a powerful dog, and was thrown violently on the ground, which hurt his back considerably, and alarmed him greatly, although there was no wound inflicted on his person by the teeth of the dog. Shortly after this he was attacked with fits of an epileptic character, which went on increasing in frequency and severity, in defiance of the medical treatment prescribed. Previously to applying to me he had frequently been out of one fit into another, for whole nights together, and had sometimes six or seven attacks in a day besides. His sleep was thus quite destroyed,—sometimes eight or nine nights passed entirely without sleep. When Mr. Jones first applied to me, I hypnotised him in the ordinary mode, but without apparent improvement. I now prescribed medicines for him *in addition* to the hypnotism, but without benefit. He was, therefore, sent into the country, but returned without improvement. On the 6th of January last I resolved to try hypnotism alone, and *in that mode calculated to depress the circulation*, and immediately the beneficial effects were most manifest. The first night he had no fit, next day only one, and from that day they declined both in force and frequency. On the fifth night he had a slight attack, and none since, being a respite of more than ten weeks. In order to test the extent of double consciousness in this case, before he entered the room, I wrote a letter to him, and having explained my intention to a scientific friend (without the patient's knowledge), in the presence of my friend, after the patient was asleep, I read over the note, requesting him to repeat it after me, which, after the second reading he did, *with verbal accuracy*, excepting the date, which he placed *after*, instead of *before*, the month. I considered this of no material consequence, and therefore deposited the letter in a drawer, and in a little time after aroused the patient, who remembered nothing of what had been done, said, or heard, during his sleep. The following day, after being asleep and passed into the same stage as the previous day, the letter was taken out of the drawer, and held at a distance by one gentlemen, whilst myself and another who was present the day previous, listened attentively to hear what he would say, when asked to repeat the letter he had from me the day before. He repeated it *with verbal accuracy*. Shortly after he was aroused, when I asked if he remembered anything of what had been said or done during his sleep, but he remembered nothing. I then asked if he received a letter from me the day before, to which he replied in the negative, and moreover, added that he had never in his life received a letter from me. I told him that during his sleep he had admitted so, and even repeated its contents. He looked surprised at this, and could only be made to believe I was not hoaxing him by the other two gentlemen assuring him it was true. I then gave him the letter to read, and told him he had repeated the very words he now read, as a letter which he had received from me the day before. To this he replied, that as we all said so he was bound to believe us, but that to him it appeared a very strange affair, as he had not the slightest recollection of anything of the kind. After he had returned the letter to me, I requested him to repeat it now that he had read it whilst awake; but he could not repeat a single line, only a few of the leading words, and the general purport of the letter. He never saw the letter from that moment; but on every occasion when asleep since, he has repeated it with verbal accuracy, but remembers nothing of it when awake. About two weeks after the first trial, when he was asleep, I requested him to write me a copy of said letter, which he did whilst a book was held betwixt his eyes and the paper. Of course he wrote, as he and other patients always do, under hypnotism, and as pointed out in my communication of the 13th January last, by feeling. The following are the original and copy, which differ only in two unimportant words:—

"Sir,—I am glad to inform you that you will have no more fits. Your case is a good proof of the power and use of hypnotism, and your sister's case also proves this equally well.—I remain, Sir, your obedient Servant,

"James Braid.

"Manchester, 18th Jan. 1844."

(Copy.)

"Sir,—I am very glad to inform you that you will have no more fits. Your case is a good proof of the power and use of hypnotism, and your sister's proves this equally well.—I remain, Dear Sir, your obedient Servant,

"James Braid.

"Manchester, 18th Jan. 1844."

Mr. Jones called on me on the 11th March, after an absence of five weeks. He was quite well, and when hypnotised, repeated the above letter with verbal accuracy, but remembered nothing of it after being aroused. His sister, who was speedily cured of spinal irritation by hypnotism, manifested double consciousness also.

(To be continued.)

NOTICE TO CORRESPONDENTS.

We this week commence with our cover; and a host of complaints that have been made to us will have found their remedy. The six columns thus cut off in scientific matter, we have more than made up by the use of a smaller and handsomer type. In addition, we shall occasionally give gratuitously 24 *extra columns, with the view principally of making our Periscope a complete reflection of every thing of value in* all *the other medical journals.*

Some irregularities arising from the dishonesty of a clerk, now in custody, have been made known to us, and will speedily be set to rights.

Mr. Baldy, M.R.C.S.—*We must decline publishing our Correspondent's note, for the reason given last week to Dr. Curtis, viz., that Dr. Dickson had been allowed to speak for himself. This is our answer to other Correspondents who have written on the same subject.*

A Subscriber *is anxious to learn the composition of Bellerby's (of York) pulmonic tincture, formerly Lee's, of* 103, *Shoe Lane, London.*

Mr. J. Taylor, of Surrey Place, Old Kent Road, *writes:*—"*In your notice to "readers" in the* Medical Times, *for March* 30, *'A chemist is informed that Matteucci was the first* savant *who applied electricity with success for the alleviation of tetanus.' If you, or any of your readers will take the trouble to refer to the* 14*th volume of the 'Lancet,' page* 72, *April*, 1828, *you will there find a case of tetanus cured by electricity and opium, consequently your humble servant has a prior claim to Monsr. Matteucci in the successful application of this powerful remedy.*"

Several letters *have come to us in reference to our "remonstrance," all suggesting to us various plans for making it of service. The scheme that appears to us best, is, that in every district or town some gentlemen should make the remonstrance the ground-work of one of his own drawing, if he cannot adopt it* ipsissimis verbis, *and so far giving his time to his brethren as to have it copied—submit it to his professional neighbours for their signatures. He could then transmit it by post to the College of Surgeons. If apprised of the facts, we shall record the transmission of each protest, giving the number of signatures. If concurrently a copy of the remonstrance, with the required alterations, were sent to Sir James Graham, the good effect would be doubtless increased. We know that this mode of procedure involves a tax on our friends' liberality, but the exigency requires it.*

"A Medical Man, but a Gentleman."—*The letter is too long,* considering the subject, *for our pages, though we concur wholly in our correspondent's opinions, especially that which declares, that, "if, as you tell us, Wakley had the meanness to try to secure Dr. Lynch by bribes, or Lynch the meanness to be secured by them, both ought to be scouted from decent society." The* fact *is indisputable. Lynch boasted of the offers to several parties—as we can vouch for—and Lynch was "secured." As our correspondent says "as no gain could justify such means on one side, no poverty could justify such treachery on the other." But the subject, like the parties' reputations, is thread bare; like the "gain" to either party, it is utterly contemptible.*

A Ci-devant Author's *authentication has been received. In what year occurred the bankruptcy?*

Mr. G. Rigden, *surgeon to the Canterbury Dispensary, sends us one hundred cases illustrative of the influence the changes of the moon may have upon pregnancy, and the periods of parturition. The results briefly given are, that* 23 *were born nearer to the date of the new moon, than to either of its changes;* 26 *nearest to its first quarter,* 31 *nearest to the full moon, and* 20 *nearest to the last quarter. The tabular report of the Infirmary has been received.*

A Brimstone "Epitaph" has been sent us which needs explanation.

I. A. M. *is thanked for his suggestion.*

Dr. Rees' Work *has been received, and will be reviewed. We do not acknowledge receipt of books.*

Appledore.—(1.) *We cannot give a decided opinion either way on the skill of the physician named.* (2) *An advertisement might probably succeed.* (3) *The case is interesting.*

We do not understand Dr. D.'s double entendre. *If ill-natured, it has been much thrown away.*

A Non-Sub-Editor.—*It is not a matter suited to our cognizance. It must be left to the Court that had it, or that presided over by the defrauded sponse.*

Cases in Private Practice.—*Mr. J. Sproule sends us a few cases occurring in his practice. In one, "the cause of an enlargement of the sub-lingual gland occasioning for about two years great disturbance in the system was not detected till the patient ejected a small concretion which was found to have been originally an orange seed. He quite recovered."*—Second Case: "*Mr. Charles Mc Guigan came under my care for granulated tumour on the anterior part of the patella; I removed it by the knife, and found a distinct sac adhering to the periosteum; the adhesion was caused by the puncture of a lancet. I made an incision four inches long, introduced my finger, dissected out the sac, and brought the edges of the cut together. It healed by the first intention; the mobility of the limb before the operation was very imperfect; he now has the same power he ever had.*"—Third Case: "*Mr. Patrick Daly applied to me to remove three granulated and saeculated tumours on the head, the largest about the size of a goose's egg. He has been troubled with them for twenty-one years. I removed the small ones first, by cutting the scalp and shooting them out. For the large one, I had to make two semi-circular incisions, one on each side, and then dissect it out, it being firmly attached to the scalp and periosteum, and supplied by two large arteries, which had to be tied. The sac was cartilaginous, and as thick as calf-skin, and contained a very offensive and granulated matter. The weight removed was six ounces. My patient has done well, and experienced no inconvenience from the loss of his twenty-one years' friend.*"—Fourth Case: "*Mrs. Mc Meninesse came under my care on the 23rd ult. for* uterine hæmorrhage, *marked by unusual symptoms. The heart's pulsations were not to be discerned; the breathing was laborious; the pupils dilated; she could not lie on the* left side *without fainting; there was a great tendency to syncope; the hæmorrhage was very extensive—about sixteen pounds of blood had been discharged before I saw her, and there was still a continuous stream; I pressed with the hand on the internal parietes of the womb, and secured contraction. Small quantities of stimulants were administered for the first two hours, at which time the stomach began to reject everything, except a spoonful or two of cold new milk, which would remain for about ten minutes. Wine, soda water, and, in fact, everything taken into the mouth was rejected. 24. Pulse still imperceptible, nor can the slightest action of the heart be felt. Ordered soda water and lemon juice* — rejected *in five minutes; repeated them, and they remained on the stomach; I now ordered beef tea, and a small quantity of bread, which was retained; I desired her to be turned on her left side, it was done, and she fainted away as usual; she was turned on the right side again, and soon recovered. 25. A trembling pulsation every twenty minutes; breathing much easier; pupils more contracted; complains of pain in the head. She was turned on the left side, and fainted as usual; beef tea, &c. &c., was continued. 26. Quick pulse; skin slightly healed; head very much pained; tongue furred; face flushed. I tried the turning this morning, which succeeded much better than usual, but still produced great weakness; a dose of castor oil was given, which produced a copious stool. 27. All symptoms are better, and patient out of danger.* Fifth Case: Ascites. — *Mrs. Russel was delivered, under another practitioner, of a child about fourteen days ago. There remained after the birth of the child an unusual largeness, which was mistaken for a scirrhous liver. On March 22 last I found, on examination, a large quantity of urine in the bladder, accompanied by ascites and anasarca. I removed the urine per catheter, and removed the serum from the belly by tapping, when* four gallons *of serum escaped. I found great difficulty in passing the catheter, the opening to the urethra being turned backward, and the vagina being pressed down as far as the os externum, offering a perplexing complication. I passed my finger into the vagina, and replaced that organ; I then passed the catheter on my finger, carefully directing it in its course.*

Errata in last No.—*The Theories of Liebig, p.* 15, 2*nd col. line* 18, *for* "in addition phosphorus and sulphur," *read* "in addition to phosphorus and sulphur"—*page* 10, 1*st col. line* 15, *for* "countys," *read* "county."

THE MEDICAL TIMES.

SATURDAY, APRIL 13, 1844.

"Quant a votre diplome, Monsieur, il ne vaut rien."—French Professor to M.D. in the "Times" of April 4.

THE people of the *Times*, that journal mighty always—for *right* often, for wrong not rarely—have recently shewn an intention to take our coy filly, Medical Reform, in hand, and if they have no fixed archetype in their own mind after which to break her, should she need it, seem not the less disposed to seek the pleasure of freely showing her paces to their loving public. Though they hold the colt just now rather loose, it is easy to see that if a closer acquaintance with her good qualities promise her to be a serviceable *cheval de battaile*, our now hesitating centaurs will be right astraddle of her before many days. We shall not go in mourning for the circumstance. The weight will be none of the lightest, it is true; but it may give the mare a surer footing, and there is something in the guidance of so powerful a leader that is worth purchasing *in one's favour*, if to be won without the cost of an honourable independence. "Take it then," we say to our literary jockeys of Blackfriars, "ride her hard, gentlemen, if you please—but ride her fairly; above all, ride her to triumph!"

We know the habit of the jade to kick off its riders. Messrs. Wakley and Webster and Warburton and Hawes, less lucky with it than we, have shattered the collar-bones of their reputations in a chivalrous essay to back her, and taught people to be shy. Yet restive, intractable, and dangerous, as she is, we should still expect from such daring equestrians as the *Times'* people a little less hesitation in mounting. As for untying a Gordian knot of intricate policy in a soldier-like way, so for backing, if not mastering some indomitable Bucephalus of a party question, to whom should we go if not to the Alexanders of the *Times?* They carry the sort of hide that makes a fall a very innocent matter; and, as if to provide against casualties, and make certainty doubly sure, the soil in Printing House Square is so deep in saw-dust and an ordinary upset so much mere matter of useful exercise,—of sanatory recreation,—that it would give to a stranger a notion that it was an ordinary and essential part of the establishment's business. Mount then, Alexanders of the *Times*, mount our Bucephalus! Your hesitation is more creditable to your modesty than to your well-approved courage. What if you know nothing about the matter. You have the higher qualification for action, and will feel less fettered in making a bold dash—in enacting a gorgeous "rush." Those who, like us, admire you, know that in the *fearful* tread of angels there is no chance of sublimity. We pray ye, then, try an intrepid "rush!"

It sounds oddly, but it is true.—The fearless *Times*—like a tail-less rat at a set mouse-trap—is afraid of Medical Reform. It is at once attracted and repelled; it is about and about it, but not as usual, *at* it. Like a prudent attorney in love with a pretty face—the great question, the settling one, will be popped when the charmer proves it more distinctly worth while. It acts with it as *some* prudent medical men do with mesmerism, who put it on the carpet that they may be talked out of their happy ignorance, without any body suspecting that an useful educational process is going forward. As a green-horn in a menagerie pokes the ribs of a lion with his friend's stick, or his own, to see what sort of a roar the animal has, the *Times* comes into our medical den, stirs us about with the ornamental end of its club, or the less substantial bamboo of its correspondents, to see what manner of men we are. It seeks instruction on our outlandish subject of Medical Reform, and clearly will have it.

Of all the correspondents they have thus cautiously let in on their journal, or let out on us, the most recondite—the most *a la Times*—is M.D., and a dashing M.D. is he. Do our readers know M.D.? If not, they are much in M.D's position—for fortunately for his high standing *with himself*, his self-knowledge is infinitesimally small. But *we* know something of him, and will make our readers, on *this* head, as wise as ourselves. Imprimis, then, he is a gentleman who took the trouble to write a very singular letter to the *Times* on General Practitioners, some day about April 1. He is a man of *some* name in the profession, but whether it be Smith, or Hobbs, or Dobbs, or Scroggs, or one of two or even more syllables, the Lord—that is to say, the editor of the *Times*—knows; for to that gentleman's ear (how we pity it!) was the great secret committed. The letter was so suspiciously odd that they would have it authenticated, and hence M.D. is not only a man of name, but is known (*by name*)—thanks to his own industry—to a gentleman in the neighbourhood of Blackfriars! Before such laurels fade he will surely do well to retire on them.

Now, what does M.D. tell us, or rather the public, under the head of "*Medical Reform?*" Some things worthy to be remembered:—That "'London made' General Practitioners, as a body, are notoriously the most ignorant medical men in Europe!"—that "they adopt a system of drugging and drenching their *dupes*, by which they lay on the industrious and struggling, a burden heavier than the poor-rate and income-tax together,"—that, "while pretending to be walking encyclopædias of medicine, surgery, obstetricity and pharmacy, they are essentially jacks of all trades and masters of none,"—that they are "touting fellows, accustomed to the routine of sneaking about for patients, and creeping into the houses of the wealthy by the area steps!" This is his valuable contribution to Medical *Reform*, in whose name as many *deforms* are likely to be perpetrated, as despotisms, according to Madame Roland, under that of liberty. M.D. tells us he was trained in the usual educational routine of a General Practitioner. Will he let us ask him—did that "routine" tend to make him an "area sneak," a "touting fellow," "a master of no part of his profession?" Were his three years' hospital attendance, and his attention through so many sessions, to the various lectures required, calculated to make him one of the most "notoriously ignorant medical men in Europe?" If they were—will he let us ask how, as *he* believes, they failed in producing that effect? Was it by some brilliancy of natural talent, of which his *grandis et verbosa epistola* offers us no trace? He treats English physicians and pure surgeons, as well as Scotch and Irish physicians and pure surgeons, as of a very different order to "the most ignorant medical men in Edrope." Will he tell us in what consisted the difference of their education? Among the candidates rejected at Apothecaries' Hall, is it not a fact that a large proportion are gentlemen who have passed, very creditably, Irish and Scotch examining boards? The Hall *may* ask from them too much; but what shall we say of the general practitioners of whom this too much is asked and got? Are they in M. D.'s off-handed words "notoriously the most ignorant medical men in Europe?" If so, to what a position does he reduce his respectable physicians and pure surgeons!

One supposition, the most correct, we fear, to account for M.D.'s absurdities, is that he is a disappointed physician—a "walking" monument of patients' discernment. They may be fools enough to become the dupes of the abused General Practitioner, but they are perspicacious enough to see that no faith can be put in the phrenzied judgment of M.D. Incapacity, when very huge, they can detect, it would appear! The madman who, finding himself at variance with every body else, voted the rest of the world mad, is the very prototype of M.D. Rather than acknowledge his own want of the talents that make claim on a patient's confidence, he will believe that all the sick are dupes, and all his successful rivals, knaves! This explanation keeps him on good terms with himself, if it give no very favourable idea of his powers of ratiocination. So true is it, that there is no stage of mental bereavement without a solace.

And this leads us to another supposition, which will do much to explain the publication of M.D.'s wofully comical conceits, viz., that, for some years past, he has been personally experiencing the benefits of the gradual improvements introduced in one of our lunatic asylums. Twenty years, which may have appeared as but a day to an unfortunate inmate suddenly restored to whatever little sense nature had endowed him with, has made a great difference in the medical profession. The Apothecaries of that time and the General Practitioners of to-day are very different men. Whatever our connection with the Company in Blackfriars has done to lessen our nominal standing in society, it has unquestionably done much to raise our professional qualifications, and improve our actual respectability. We are not only better than M.D. reputes us, but better than the world generally considers us. We ourselves know something of what M.D.s of Paris, Dublin, and Edinburgh, were some few years ago—at a period when this censorious writer probably was honoured with his degree—and we should hesitate some time before we would assert that even the *medical* qualifications then required from them were ever so high as those exacted from a gentleman passing the College of Surgeons, and Apothecaries Hall, and entering the body of "notoriously the most ignorant medical men in Europe!" Such men's diplomas may be "laughed at by all the world" as M.D. energetically misstates it—and if laughter be the distinctive sign of intelligence as some naturalists assert, and of joy as all are prone to think—the world is right in so laughing, for such diplomas, as a general rule, assure the public—the poor as well as the rich—of an enlightened aid in the hour of sickness and danger. It is at diplomas possessed by such indifferent reasoners and intemperate writers as M.D., that the world should look serious. If the truth could be known, we would lay a wager that M.D. has as much reason to complain of the non-success of his few patients, as of the great success of his many rivals. The man who sees a dupe in every brother practitioner's patient, sees a fool in himself. A cat has nine lives—but if we valued ours, we would withdraw it from his physicking.

And now in withdrawing from the subject altogether, let us hope that we shall have no more phrenzied or disappointed M.D.'s publicly sullying their nests like birds of a filthy character. Whatever dirty linen we have, we shall do well—adopting Napoleon's recommendation—to wash at home. Physicians are very well in their place—so are pure surgeons—and so we will contend, and we will contend for no more—are general practitioners. Why shall they be brought into collision when their destiny and best interest is in union and harmony? We may contend that the education of all shall be based on the same principles; but no one thinks to force all into the same line of action. The most perfect of columns, even if formed of one kind of material, has base, shaft, and capital—is it weaker, less handsome, less a column, because different parts go to constitute the whole? We know it is not: why shall it be in our profession? Let us brand with odium, then, all encouragers of unnecessary and mischievous disunions between the orders in our profession. whether they take the shape of hollow-hearted brawlers railing at M.D.'s under the nickname of Dubs or Bats, or maniacal M.D.'s railing at general practitioners as "area sneaks," or jacks of all trades. Neither class of dissension-mongers have any *sane* idea, save that of consulting wounded pride, or wounded interests.

——— "Darkness visible
Served only to discover subjects of woe,
Regions of sorrow, doleful shades, where peace
And rest can never dwell."—MILTON.

EXPERIENCE has taught us too well how contemptible and useless to the country, that pays for them so handsomely, are the great majority of Parliamentary Committees. Adopted by idle statesmen to gain, as managed by fribbles to kill, time, they question and talk through months, and we ask vainly what have they said? they spin and toil through years, and we ask as vainly what have they done? At this moment, however, we await from *one* a different lesson. We fondly hope that that of Lord Ashley on Medical Relief is to teach the country the consolatory truth of how great and glorious a thing *may* be a Parliamentary Committee. More exciting—more high sounding—more politically important committees have not unfrequently been seen; never one which in-

volved more intimately the highest matters of human right and happiness. It stands before us like the outstretched arm of that Providence whose eye, so long gazing on human suffering, has at length looked a remedy into being. It is to arrest, not from one, but from a thousand, "the whips and scorns of time;" to deliver the helpless and infirm—those who are powerless to save themselves—from

> The oppressor's wrong—the proud man's contumely—
> The insolence of office and the spurn,
> That patient merit of the unworthy takes.

Throughout the whole country it is to stand as a judge between the hard-hearted covetous and the poor and poor's doctors, revealing the hidden wrong, pointing out the unperceived good, and so forcing on the *sordid* or *neglectful* rich—what their own interests much require—a more merciful exercise of the rights, and fuller performance of the duties, of their station.

The Committee have already done much, but as they have unfortunately prohibited any *verbatim* publication of their proceedings till the conclusion of their enquiry, we are indebted entirely for what we know of their doings to a report from memory—a very good one, luckily—by a gentlemen connected with the *Times* newspaper. We cannot be too thankful to the leading journal for that opportune statement. It calls attention to an important matter that might otherwise pass unnoticed, and so tends to enlist for it a wider range of service and vaster result of good. It reveals the secret—throws a flickering light on the shady, making "darkness visible," and so discovering to the eye of benevolence "sights of woe and regions of sorrow" which make a resistless appeal to its active generosity.

The London Unions came first into question, and we are glad to say that the Committee have been the means of calling the most public attention—and thereby of doing the highest honour—to the wisdom and humanity of the Guardians of the West Ham and East London Unions. Mr. Streatfield (the Chairman of one of the Boards), Mr. Vallance, his colleague, the Rev. Dr. Russell (the Chairman of the other), and Mr. Lobb, the Union surgeon, conjoined in shewing that every thing that could reasonably be expected, in the way of medical relief, was provided and ordered for in these Unions, except the permanent appointment of the medical officer. All agreed that appointments during pleasure, or for a limited number of months, were not necessary—and Mr. Lobb shewed that they were most impairing to the independence of medical men, and, as a consequence, most injurious to the comfort and health of their patients. The following anecdote, given by Mr. Lobb, illustrates the *humane* economy characterizing the Guardians of an unnamed London Board. A distressed woman was brought to bed in a room which contained, at the time, (as her fellow-lodgers) three men and two boys. Inflammation supervened—the parish surgeon ordered leeches—but as the authorities could not "see the necessity," and would not tolerate the expense, of using another apartment (cost 2s. 6d.!), the leeches were not applied, and the woman died.

The Stepney Union is stained by a parsimonious management. With 91,000 persons, five parishes, and four Union house, it has but five surgeons. Mr. Barnet, a surgeon, formerly received annually, for *one* parish, twice as much as his son now receives for two. Mr. Barnet, junior, "shewed that no medical man, subject to an annual election, could ever venture to offend a guardian by insisting upon the removal of any nuisance; that the shilling a case allowed him, physic and visit included, would not on the average pay for even the necessary medicine required, so that it may be presumed they often were not supplied. And with respect to the refusal to grant orders for midwifery cases to medical men, he related some cases too horrible to be mentioned."

This Stepney Union, it appeared, was even too niggardly for the Poor Law Commissioners, who vainly endeavoured to improve it. The Commissioners' orders were passed over contemptuously, and one of the Guardians boasted to the *Times*, reporter, that if the Somerset House people "had the law and learning on their side, we had it all our own way on ours!"

The Bethnal Green poor seem to labour under an equally unkind board. The sick are left in the most helpless condition, and the filth and ordure allowed to accumulate about them is described as frightful. Extra nourishment, where required, seems to be rarely ordered, and still more rarely given, and the former circumstance is explained in the fact, that the surgeon is kept under his economical masters' thumb by half-yearly re-elections. In reference to the evidence of one of the surgeons examined, we have the following information given us:—

"Lord Ashley descanted learnedly to the surgeon on the difference between the natural and modified small-pox, particularly as to the secondary fever, which in bad cases of natural small-pox, he said, destroyed many, but which did not prevail in the modified small-pox. The medical man could not tell; his re-election was to take place that afternoon at three o'clock, and it seemed so fully to occupy all his ideas, as to render him unequal to anything. In vain Lord Ashley urged that wine, sago, arrow-root, beef tea, &c., were necessary in such cases. The doctor said they might or might not, and intimated that this did not depend *so much on the practice of physic*, as *on the practice of the board of guardians*. Three o'clock came, and it was reported that the medical men were re-elected for six months, and the medical men breathed more freely. The screw parliamentary was again applied, and at last elicited the four following facts:—

"The first is, that medical men will not always state the exact facts when under the influence of an election which is to take place annually; and that an election every six months would be more certain in preventing unnecessary loquacity.

"Secondly, that the most satisfactory and least expensive way of granting nourishment for the sick poor is to make the surgeon, when he finds it absolutely necessary, enter the words 'nourishment wanting' in his book, which book is to be sent, when convenient, to the relieving officer who, also at his convenience, visits the sick person, and if he should agree in opinion with the medical man, he sends an order for him to draw up a certificate of what he recommends, which, when drawn up, is returned to the relieving officer, who, probably, after consulting the board of guardians, furnishes the articles to the sick person, if he or she can then be found. There is an exception to this proceeding deserving of great commendation—namely, that if a sick person is to be moved to the union house, and likely to die on the road, wine may be given to them occasionally to enable them to get there alive.

"The third fact is, that the administration of tonics, or other such remedies, which are usually given to persons likely to recover from the lowest state of fever, and other diseases attended with extreme debility, with the view of restoring the tone of the stomach, is founded in error, and is an unnecessary expense, it having been duly ascertained that nothing can be more cruel than the endeavour to improve a poor man's appetite, when at the same time care is taken that he shall have nothing to eat.

The fourth is, that as medicine can do no good under such circumstances, it is useless to give it; and as Lord Ashley stated that the average duration of a case of sickness in London had been ascertained to be thirteen days, twelvepence, or somewhat less than a penny a day, is good remuneration daily, for the physic and a visit at the distance of a couple of miles."

PATHOLOGY OF PHTHISIS.

In a former article upon this subject, we discussed the connexion existing between certain forms of inflammation, and the original deposition of tubercles; and came to a conclusion in respect of their relation as cause and effect. It has been admitted, that the phenomena attending tubercular formation may sometimes be viewed as constituting a modification of the nutritive process; but as we have already said, and we hope proved, in many instances, these phenomena are such as to approximate tuberculisation to the character rather of an inflammatory, than of a nutritive action. In addition to the data then adduced in evidence upon this question, we shall have occasion to allude to other facts which confirm the opinion we accepted. To prove that this growth of tubercles is occasionally connected with, and dependent upon, an inflammatory condition of the textures in immediate relation with these morbid deposits, it would suffice merely to recur to the facts, from which it was deduced that tubercles sometimes originate in a process, having a closer resemblance to a state of inflammation, than to one of simply impaired nutrition; we proceed, however, to further reasonings which, while supporting our present position, will add greater force to the opinion we have expressed on the primary development of tubercle.

1° On examining tuberculous deposits in the lungs, we often find evident traces of inflammatory action in the surrounding pulmonary tissue, by which the tubercle itself sometimes becomes identified with the usual products of sthenic inflammation, and by which it may pass insensibly into the healthy tissue. The same remark applies to the appearances occasionally presented by tubercular deposition in other organs. It is true that the inflammatory action affecting the contiguous texture in these cases, may be an accidental occurrence; it may not have existed from the first formation of the tubercle, but have been subsequently induced as a result of the irritation excited by the presence of an adventitious deposit: it is, nevertheless, a condition which gives rise to the further development of tubercular material, so that the mode and date of its production is a matter of no importance. The traces we refer to, consist in a consolidation of the pulmonary tissue, in a state similar to grey hepatisation, depending upon the infiltration of a deposit, which generally presents in part the characters of healthy coagulable lymph, and in part those of tuberculous matter. We have before remarked that tubercle not unfrequently passes insensibly into the normal effects of inflammation, and shall again refer to these interesting varieties of the products of inflammation.

2° When the advance of tuberculisation is rapid, an inflammatory action is almost invariably found to exist; the active growth of the tubercle is then dependent upon the exudation which is necessarily associated with this state. This exudation may retain for a time its normal characters, so as to exhibit evidences of healthy inflammation around the tuberculous deposit—a circumstance not of very frequent occurrence. If the inflammation at this period be subdued, and the patient restored to comparative health, the exuded material may become absorbed, and the tubercle left distinctly isolated from the containing structure. Neither of these results is observed when a constitutional predisposition to tubercular disease continues to impair the powers and strength of the individual; the plastic exudation loses its vitality and organizability; it tends to degenerate into tubercle, and so adds to the deposit, already existing, matter of its own kind. The material that now occupies the interstices of the tissue in the vicinity of the tubercle is of the description before mentioned; it is made up of coagulable lymph and tuberculous degeneration. In proof of this assertion, we may

be permitted to adduce some observations made by Mr. Addison, and published by him in the Transactions of the Provincial Medical and Surgical Association. He finds that the tubercle, or *the tissue of the lung surrounding it*, when compressed between two slips of glass, with a drop of water, will, from its friability, crumble and break into fragments: the fluid is rendered milky from the presence of white objects, which in the mass constitute tubercle. These objects consist for the most part, of molecules, granules, and granulated corpuscules; of aggregated granules without any tunic, and of collapsed tunics without any granules; these are mingled with flakes and filaments, which are fragments of the membrane of the air-cells and minute vessels, and probably also the results of the further transformation of the primitive cells. Mr. Addison has compared these appearances in the tissue around tubercle with those resulting from ordinary inflammation: the deposit causing hepatisation, is found by him, when examined under the microscope, to present objects like those which compose tubercle, with the simple addition of pus corpuscules. We are inclined to think, however, that there is some error in this observation; that the hepatised tissue examined had been the seat either of a scrofulous inflammation, or of a previous infiltration of tubercular material; the products of a sthenic inflammation cannot have retrograded in the manner the exudation must have done, to present the characters described by Mr. Addison. Still, the observation is not without its value, as it serves to indicate, that, between the unimpaired elements of coagulable lymph, and the imperfect constituents of tubercle, there are all grades of intermediate conditions; perfect cells and fibres, even presenting themselves to a greater or less extent in deposits usualy called tubercular. The occurrence of these perfect cells and fibres in tuberculous deposits, is highly interesting, seeing that it raises tubercle in some of its forms to the order of lymph that is capable of retaining its organization; the connexion between tubercle and healthy coagulable lymph is thus established by so many transitional forms, that a distinct line of demarcation can scarcely be drawn between these products. We conclude that the appearances observed in the tissue around tubercles, justify us in regarding the growth of these bodies, as occasionally dependent on the degeneration of plastic matter exuded as a consequence of inflammation.

3º In the history of tubercular development, we frequently find tubercles existing in the lungs without their being the cause of the least disturbance. In the majority of such cases, the growth of tubercles is referable to a degraded nutritive process; in other instances, their growth may be owing to a strumous inflammation, which exists with the same absence of constitutional symptoms. There is another series of cases, however, in which tuberculisation announces its progress by signs that can only be produced by a congested state of the parts containing the morbid deposit. Thus, in the lungs, we have following the irritation caused by tubercles, a hacking cough, mucous expectoration, pain in the chest, quickness of the pulse, dyspnœa, &c. Andral regards hæmoptysis at once as a proof and a consequence of pulmonary congestion, and attributes it to the rupture of congested vessels. Hence, we observe, if the hæmoptysis be considerable, that it removes the distended state of the vessels, and suppresses the pain, sense of constriction, dyspnœa and cough—all of which symptoms are consequently owing to a state which the local loss of blood is calculated to relieve. Tubercles may exist even in the brain without engendering any disturbance in the functions of this organ; in these cases the tuberculous deposits are not found to be attended with any traces of inflammation in the surrounding cerebral tissue. There is, however, generally vascularity and softening in the contiguous nervous matter, and a corresponding train of symptoms are produced; headache, vomiting, constipation, &c. In whatever organ tuberculous matter occurs, its advance is more rapid when its presence excites irritation and inflammation. The growth of tubercles in acute phthisis must, doubtless, be regarded as owing to an inflammatory state of the pulmonary structure. The symptoms characterising its progress confirm this explanation of the speedy course of the disease: the urgent pain in the chest, the dyspnœa, headache, heat of skin, rigors, the frequent, hard pulse, the excessive and repeated attacks of hæmoptysis, the frequency of inflammation in the pleura and bronchial mucous membrane, the rapid loss of strength and flesh—all indicate the existence of inflammation in the lungs. The observation of Professor Alison relating to this subject has been already cited. We have other evidence of the inflammatory nature of the causes influencing the course of acute phthisis, independently of the symptoms, by which alone the fact is demonstrated. Louis states that the infiltrated form of tubercle, described by Baillie and Laënnec, is a morbid appearance peculiar to acute phthisis. Now, it is generally admitted, and the microscopical evidence countenances the idea, that the form of tubercle, in which the lungs are universally infiltrated with tubercular matter is the result of an inflammatory action. Again, the growth of tubercles in acute phthisis is so rapid, that their development cannot possibly be said to depend upon any form of nutritive action. M. Andral has given four cases which varied in duration from twenty-one to thirty-five days. The explanation of Sir J. Clark that the tuberculous disease might have been latent in many of these cases will not admit of general application. M. Louis states that grey granulations in acute phthisis may acquire the size of a pea in three weeks. It is also well known that tubercles are sometimes deposited so rapidly, and in such numbers, as to give rise to most alarming dyspnœa, and even cause asphyxia. In persons little liable to inflammation, consumption runs a slow course, whilst its rapidity is usually proportionate to the extent of pneumonic inflammation. These facts suffice to show that a state of inflammation is highly conducive to the rapid growth of tubercles. In early life, phthisis is generally rapid in its progress—a circumstance which we are inclined to refer rather to a strumous or tubercular inflammation, than to an active but modified nutrition, as stated by Dr. Williams.

4º Tubercles may lie dormant, without causing any irritation, and without suffering any further development or other change. Under these circumstances, inflammation of the bronchial membrane, or of the substance of the lungs, determines their growth. Bronchitis and pneumonia, of a scrofulous character, sometimes exist as a primary disease, and directly induce tubercular formation; in other cases, they supervene on an already tuberculated state of the lungs, and, under the influence of a strumous diathesis, increase the morbid depositions. An opinion has generally prevailed that pneumonia is the chief cause of consumption; but, such an opinion, unless modified by proper reservations, is undoubtedly fallacious. It is necessary to admit the existence of a scrofulous predisposition, before we can regard pneumonia as the direct cause of tuberculisation; the inflammation which is set up is not of its usual sthenic character, and is not attended with its ordinary healthy products. Sir J. Clark, whilst he denies that tubercular matter is never a product of inflammation in a healthy person, is of opinion that inflammation may, and often does, prove a determining cause of its formation in a scrofulous constitution. Dr. Carswell is justified in ascribing the peculiar and distinctive characters of tubercle to a constitutional cachexia; but we cannot, for this reason, allege that inflammation is never the means by which this peculiar product is deposited.

5º. That the growth of tubercles is due to some form of inflammation; we observe that they occur most frequently, and are most rapid in their progress in organs most liable to scrofulous inflammation—the lungs, and absorbent glands.

6º. The dependence of the growth of tubercles upon an inflammatory action, serves to explain the further advance of tubercles in one lung. Inflammation may affect the two lungs differently, but nutrition must be equally active in both; and yet one lung may be quite consolidated from tuberculous deposit, and the other be comparatively free.

Finally, there can be no doubt that inflammation, or rather a certain variety of it, frequently leads to the formation of heterologous products. In this case, the inflammatory action is modified and influenced by a special predisposition to the disease. As an illustration of this fact, we may allude, in conclusion, to a case which occurred in the practice of Dr. Carswell; it was one of fungus hematodes of the shoulder, towards the termination of which the patient had an attack of pleuritis, followed by effusion, in consequence of exposure of the chest during the application of lotions to the diseased part. "After death," observes Dr. Carswell, "there was not found, as was anticipated, the usual or natural products of inflammation, viz., pus and false membranes. Instead of these, the pleuræ were studded with carcinomatous tumours of various sizes, and the greater part of the lung occupied with a mass of the same disease." The disease was found in no other parts; the opposite side of the chest presented no trace of it; it existed only where the inflammation had occurred.

PENCILLINGS OF EMINENT MEDICAL MEN.

DR. JEFFREY, OF GLASGOW.

(Continued from page 8.)

He has been contented with going through decently the mere routine of his duties. An amusing instance of his absorbing regard for externals is told, of the first words of his introductory address on opening his grand class room, which he had much trouble in planning and getting built. "Gentlemen," said he, looking round him as if in amazement, "this hall—is it not a noble one!'

In compliance with the general usage at this University, he sometimes endeavoured to introduce the system of examinations, but with little success. The students either did not attend, or those who did, trifled while their neighbours were undergoing his gentle *questions*. He seems to have been always averse to use any means of discipline, which yet might have been completely in his power. A gentleman in his manners himself, he never seems to think that in a class of medical students, there might be some who would not behave like gentlemen. And this has given rise sometimes to ludicrous incidents. We have seen, when some uproar had arisen, occasioned by the tricks of two or three idle fellows in a corner, the worthy doctor take it as an insult from the class to himself, and walk indignantly out of the room, instead of desiring the offenders to retire. This, of course, produced silence and penitential looks, and some one explaining to the assistant how matters stood, the professor returned quietly to his post without taking any notice of what had occurred. Dr. Jeffray should not have been a teacher. It was the fault of a system not his. Few men placed in a situation at once lucrative, certain, and irresponsible, would have continued any very active course of studies. Had he struggled with other competitors, until he had raised himself to a high repute in public opinion, he might have become eminent, and no one should hold such an office without having done so. As a physician, and in this capacity his opinions were always respected, although he was not much consulted, he might, in other circumstances, have risen high, and the opportunity being given, he might, from his good sense and elegant manners, have rivalled Sir Henry Halford.

Dr. Jeffray, we learn, has now retired from teaching, retaining the emoluments, and devolving the duties upon his son. This is not a very satisfactory arrangement, but neither can he well be blamed for it. It is again the fault of the system, which ought to provide a retiring allowance to professors, and prescribe the circumstances under which such retirement should be enforced.

But there is another matter which has been whispered of, and which ought to excite the attention of all lovers of sound education and fair play. It is said that there have been attempts made to induce the Government, under a quiet resignation, to transfer the chair from the father to the son. We hope Government will be on its guard. The medical public has not any great reason to put confidence in Sir James Graham.

The Tories, when formerly in power, jobbed the University chairs most notoriously. Their Whig successors followed their example, and there

is every reason to believe that the present ministry are not a whit better. At all events, they require to be sharply looked after; and the plan of transferring a highly important public office from father to son, without regard to qualification, is not to be borne.

We should be sorry to use this venerable old gentleman's name to "point a moral, or adorn a tale;" but in this case we could not pass the subject entirely by without forgetting our public duty.

In his private capacity, Dr. Jeffray's character is unexceptionable. On all occasions affable, when any student required to speak to him, or needed his advice, he was yet far from encouraging familiarity. In fact, he is an aristocrat in manners, and a high conservative of the old school, by principle; indeed, he carries this last peculiarity to a ridiculous extent. During the war he held Bonaparte in such terror, that he sometimes could not avoid giving utterance to his feelings in the class, in which he was not likely to meet with much sympathy. He gave up attending the college chapel, because the preacher was accused of being an admirer of the Emperor of the French. This alludes to the celebrated affair of Professor Mylne, who was placed under arrest for having preached a sermon before the University, in which he spoke in terms of rejoicing at Napoleon's return from Elba, whereas the Professor proved that he had preached the same sermon some half dozen times before, and that this was the first time he had ever heard that any one remembered a word of it.

The same affair was likely, it is said, to have nearly, from his zeal, led him to take a step which would have tarnished his chivalry. Having had some high words with a colleague, he thought himself obliged to challenge him to mortal combat, and sent for a military friend to bear his defiance. On hearing the quarrel with Dr. ——, the son of Mars was quite ready to aid two Doctors in so laudable an attempt as endangering each other's lives, rather than those of the public; but on receiving the address, he exclaimed "Good God! Dr. Cooper is a parson—what a scrape we should both have been in."

Although by no means miserly, but on the contrary, living elegantly, Dr. Jeffray is fond of turning a penny; and having a house assigned to him in the college, to which a sort of out-house was attached, which he found too small to hold his carriage, he determined te turn it to advantage, converted it into a shop, and let it to a dealer in butter and cheese. This did not escape the notice of the students, at all times ready for a joke against their seniors. It was immediately spread that the Professor had set up a shop for the sale of his farm produce, and that the other professors were about to convert the ground floor of their houses to similar uses. This *mauvaise plaisanterie* found its way into the newspapers, and excited so much notice in the Faculty Hall. that the doctor shut up his shop, and would neither use it for one thing nor another.

Dr. Jeffray had other resources to employ his mind than anatomy. He was fond of farming, took a great interest in a railway, which interscted his estate, and finally set up a brick field. At one period he had a great fancy for mechanics, and like many great geniuses invented a new kind of steam-boat; it engrossed his whole attention. He discovered a young artist making excellent drawings in his dissecting rooms, invited him to his house, and employed him in making the plans of his intended engine. This gentleman now stands very high in the medical world, and should this meet his eye, will smile as he recognises the anecdote. The boat was built and launched, but whether it stood still, went forwards, backwards, or from side to side, or sunk, is not known. It was never more heard of, and the time and money spent on it were lost.

We have said that he was not familiar with his students, but he was never severe. In his examinations for degrees he was remarkably gentle and indulgent, and it is well known that on more than one occasion, when some unfortunate aspirant had, from bashfulness, or other *gaucherie*, been rejected by the Court, a private appeal to Jeffray has procured another hearing in a few days, with probably a reversal of the sentence, and the saving of a meritorious student from undeserved disgrace. His maxim seemed to be that he would trouble no one, and he expected in return that no one would trouble him.

He has been twice married, and has been happy in his family. To conclude: Dr. Jeffray has passed a life already far past the time usually allotted to man, without enemies, and with much credit to himself, save from his lot having been cast in a situation for which neither his inclination nor his talents fitted him. K.

REVIEWS.

An Essay on the Tongue, in Functional Derangement of the Stomach and Bowels: with some Observations on the Tongue's Aspect in Organic Diseases of the Lungs. By Edward Williams, M.B., Cantab., &c. &c.

This is a *register* in a tabular form of the various *aspects* and *states* which the tongue presents in functional diseases of the stomach and bowels. The register appears to have been kept with care, and a great body of facts collected, which may ultimately lead to some useful practical conclusion.

The author has noted minutely the appearances of some of the more important parts of the tongue—as the papillæ, the epidermis, the secretions, and the general aspects of the organ, with the accompanying local and constitutional symptoms. From the tables, we learn that the same states and "aspects" of the tongue exist under different diseases, and that different conditions and "aspects" of the tongue are found in the same disease, yet our author in no way disconcerted, continues to extend his observations, and is enabled to arrive at the conclusion, that certain glossal phenomena are *more frequent* in certain states of the stomach and bowels, than in others. The tongue then is not an infallible diagnostic guide, but according to the tables of our author, an index of some value, when taken in connexion with other symptoms. Many practitioners attend only to the state of the secretions of the tongue, and this is, no doubt, very important, but we fully agree with our author, that conclusions of great value may be drawn from a greater range of glossal phenomena, particularly from the state of the papillæ—from the form and movements of the organ, from the state of its mucous investment, as well as from the quantity and quality of the secretions covering it. As we cannot transmit the tables of our author to our pages, we would recommend all who take an interest in the subject, to refer to the Essay itself—which displays a highly commendable spirit of minute and careful observation on the subject to which it refers.

———

The Chemical and Physiological Balance of Organic Nature. By J. Dumas and J. B. Boussingault.—Balliere.

The names of the distinguished authors of this book as strongly recommend silence to our criticism, as purchase to the good taste of our readers. Dumas is probably the first of European chemists. To industry the most unflagging, and experience of no limited years, is added, in the constitution of his mind, a loftiness of conception and a marvellous capacity for at once rigid and profound ratiocination, which must infallibly give him rank among the highest of this age's inductive philosophers. Aided by the labours of his scarcely less celebrated *collaborateur*, Boussingault, he comes before us in this work to assert their joint claims to priority on some of the most important views announced by his rival, Liebig. Indeed, the short *resumé* of the work might be given in these words, "Whatever is new in Liebig is not true, whatever true is not new." Thus they adduce the strongest—and we cannot but think the most irrefragable—evidence that they are entitled to ascribe,

1st. To Lavoisier, the discovery of the theory of animal heat, that of the part which animals play as consumers of carbon and hydrogen, the function which characterises their influx, and the first application of the balance to the study of the phenomena of life;

2d. To Sennebier, the discovery of the decomposition of carbonic acid by vegetables;

3d. To Boussingault, the discovery of the decomposition of water by vegetables; the use of the balance in studying the phenomena of vegetation.

4th. To Schattenmann and Davy, the discovery of the intervention of ammonia in the process of vegetation.

5th. To Ad. Brongniart and Parrot, the first thought of assigning to the carbonic acid of the atmosphere the origin of all the carbon of organised beings.

6th. To Vauquelin, Boussingault, Mulder, Prout, and Braconnot, the discovery of fibrine, albumen, and casein in vegetables.

7th. To Dumas and Boussingault, the discovery of the reducing faculty of the vegetable kingdom at large over the face of the earth.

8th. To Chevreul, the true theory of the respiration of animals.

The main part of the volume consists of the concluding lecture of Dumas' course, delivered in 1841, forming a complete summary of the authors' views—such as had been entertained and expressed by them for at least two years previously. We offer a few extracts from this eloquent discourse:—

THE SIMPLICITY AND GRANDEUR OF NATURE.

These words will bring to your minds with what amazement we discovered together, that of all the elements of modern chemistry, organic nature made use of but three or four; that of those vegetable and animal substances which are now multiplied almost to infinity, general physiology requires no more than some ten or twelve species; and that all the phenomena of life, so complex in appearance, may be referred in their essence to a single general formula, so simple, that in a few words every thing seems stated, every thing having been recalled to mind, every thing foreseen.

Have we not, in fact, found, by a multitude of results, that an animal, in a chemical point of view, constitutes a true apparatus of combustion, by which carbonaceous matters, burnt incessantly, are returned to the atmosphere in the shape of carbonic acid; in which hydrogen, burnt incessantly, is returned as water; whence, in fine, free azote is ceaselessly exhaled in the breath, and, in the state of oxide of ammonium, is thrown off in the urine?

From the animal kingdom, therefore, as a whole, carbonic acid, watery vapour, and azote or oxide of ammonium, are continually escaping,—simple substances, and few in number, the formation of which is intimately connected with the history of the atmosphere itself.

Have we not, on the other hand, found that vegetables, in their natural and healthy state, decompose carbonic acid incessantly, fixing the carbon, and setting free the oxygen; that they decompose water, seizing on its hydrogen, and disengaging its oxygen as before; lastly, that they either abstract azote directly from the air, or take it indirectly from oxide of ammonium, or nitric acid; thus acting, in every particular, inversely or in opposition to animals? If the animal kingdom constitute an immense apparatus of combustion, the vegetable kingdom, in its turn, constitutes an immense apparatus of reduction, where carbonic acid decompounded leaves its carbon, water its hydrogen, and oxide of ammonium and nitric acid their ammonium or their azote.

If animals incesssantly produce carbonic acid, water, azote, and oxide of ammonium, vegetables consequently consume, without ceasing, oxide of am-

monium, azote, water, and carbonic acid. What the one gives to the atmosphere, that the other takes from it; so that, surveying these facts from the loftiest point of view, and in connection with the physics of the globe, it would be imperative on us to say that, in so far as their truly organic elements are concerned, plants and animals are the OFFSPRING OF THE AIR; that they are but condensed or consolidated air; and that, to form a true and accurate idea of the constitution of the atmosphere at the epochs which preceded the birth of organized beings, it would be necessary to restore to it, by calculation, the whole of the carbonic acid and azote, the elements of which were appropriated by vegetables and animals when they appeared.

Vegetables and animals, therefore, come from the atmosphere, and return to it again; they are true dependants of the air.

Vegetables, then, assume from the atmosphere the elements which animals exhale into it; viz. carbon, hydrogen, and azote, or rather carbonic acid water, and ammonia.

But how do animals procure the elements which they give to the atmosphere? Let us inquire particularly into this point. Now it is impossible to contemplate, without admiration, the sublime simplicity of the laws of nature here, as every where! Animals always derive their elements primarily from vegetables.

We have found, in fact, by results beyond the reach of question, that animals do not create any of the truly organic substances, but that they consume or destroy them; that vegetables, on the contrary, habitually create these substances, and that they destroy but few, and this only for particular and determinate ends.

It is, in the vegetable kingdom therefore, that the great elaboratory of organic life is found; it is there that both vegetable and animal substances are compounded: and they are all alike formed at the cost of the atmosphere.

From vegetables these substances pass ready-formed into the bodies of herbivorous animals, which destroy one portion of them, and store up another in their tissues.

From herbivorous animals they pass ready-formed into the bodies of carnivorous animals, which destroy or lay them up, according to their wants.

Finally, during the life of these animals, or after their death, the organic substances in question return to the atmosphere from whence they originally came, in proportion as they are destroyed.

Thus is the mysterious circle of organic life upon the surface of the globe completed and maintained! The air contains or engenders the oxidised substances required,—carbonic acid, water, nitric acid, and ammonia. Vegetables, true-reducing apparatus, seize upon the radicals of these, carbon, hydrogen, azote, ammonium; and with them, they fashion all the variety of organic or organisable matters which they supply to animals. Animals, again, true apparatuses of combustion, reproduce from them carbonic acid, water, oxide of ammonium, and azotic or nitric acid, which return to the air to reproduce the same phenomena to the end of time.

And if, to this picture, already so striking by its simplicity and grandeur, we add the indubitable part performed by the solar light, which is alone possessed of power to bring into play this immense, this unparalleled apparatus, constituted by the vegetable kingdom, in which the oxidized products of the atmosphere are subjected to reduction, it is impossible not to be struck with the import of these words of Lavoisier: "Organisation, sensation, voluntary motion, life, only exist on the surface of the earth and in places exposed to light. It might be said, indeed, that the fable of Prometheus was the expression of a philosophical truth, which had not escaped the penetration of the ancients. Without light, nature were without life and without soul: a beneficent God in shedding light over creation strewed the surface of the earth with organisation, with sensation, and with thought!"

* * * *

As it is from the mouths of volcanoes, whose convulsions so often make the crust of our globe to tremble, that the principal food of plants, carbonic acid, is incessantly poured out; so is it from the atmosphere on fire with lightnings, from the bosom of the tempest, that the second, and scarcely less indispensable aliment of plants, nitrate of ammonia, is showered down for their behoof.

Might it not be said, that we have here a remembrancer of that chaos mentioned in the Bible, of those periods of tumult and disorder which preceded the appearance of order and organisation upon the earth?

For, scarcely are carbonic acid and nitrate of ammonia formed, than a calmer, though not less energetic force begins to act upon them for new purposes: this force is LIGHT. By the agency of light, carbonic acid yields up its carbon, water its hydrogen, nitrate of ammonia its nitrogen. These elements combine, organic matters are formed, and the earth is clothed with verdure.

It is, in fact, from absorbing incessantly a true force, the light and heat of the sun, that vegetables perform their functions, and produce the vast quantities of organised or organic matter, which are the destined food of the animal creation.

And then, if we add that on their side animals engender heat and elicit force in consuming that which vegetables have produced and slowly accumulated, would it not seem that the ultimate intent of all these phenomena, that their most general or comprehensive formula was laid open to our view?

The atmosphere presents itself to us as including the primary materials of all organisation. Volcanoes and thunder-storms meet us as the laboratories in which are compounded the carbonic acid and nitrate of ammonia, which life requires for its manifestation and extension.

Light arrives, and with the concurrence of carbonic acid and nitrate of ammonia, the vegetable world, the grand producer of organic matter, is developed. Plants farther absorb the chemical force which reaches them from the sun, and enables them to decompose carbonic acid, water, and ammonia; plants are embodiments of a reducing power, of greater virtue than any other that is known, for no other will decompose carbonic acid in the cold.

Then come animals, consumers of matter, and producers of heat and of force, true instruments of combustion. It is in them, unquestionably, that organised matter acquires what may be called its highest expression. But it is not without detriment to itself that it becomes the instrument of sensation and of thought. In this new capacity organised matter is burnt; and in giving out the heat, or electricity which constitutes and is a measure of our force, it is destroyed and returned to the atmosphere from whence it had originally come.

NATURE THE CONSUMMATE ARTIST.

Each of us here assembled excretes, on an average, according to the estimate of M. Lecanu, fifteen grammes, or nearly four drachms of azote with his urine every day. The azote here is obviously derived from our food, as are the carbon and hydrogen which we burn.

Under what form does the nitrogen escape? Under that of ammonia. And here we have another of those wonderful arrangements which never fail to fill the mind with admiration of the simplicity of the means which nature brings into play in working out her very greatest ends. If, in the general economy of things, we render to the air its constituent azote which certain plants may one day appropriate, it might have been anticipated that we should also be bound to restore the ammonia we have received, seeing that this is a compound so necessary to the existence, to the perfect evolution of the greater number of plants.

Now, this is precisely what is effected by the urinary secretion; which is neither more nor less than a solution of ammonia restored to the earth or the atmosphere.

But, need I observe, that the urinary organs would have been affected in their functions, in their vitality, by the contact of so caustic a substance as ammonia, or even carbonate of ammonia? provident nature has, therefore, caused us to excrete urea.

But urea is still a carbonate of ammonia; that is to say, it is a compound of carbonic acid, such as we expire, and ammonia, in the shape in which it is craved by plants. But the carbonate of ammonia has here lost, or is without hydrogen and oxygen in the proportions that would form two atoms of water; deprived of which it constitutes urea, a neutral and inert substance, which can pass through the delicate structure of the kidneys, the ureters, and the bladder, without irritating or inflaming them.

MAN THE BEST CONSTRUCTED STEAM ENGINE.

To reach the summit of Mont-Blanc, a man spends two days of twelve hours each. In this time he burns, on an average about 9½ oz. avoirdupoise of carbon, or an equivalent quantity of hydrogen. Were a steam-engine employed to carry him thither, it would consume from 2lb 8 oz. to 3lb. 2 oz. avoirdupoise of carbon in the service. Considered as a machine, then, deriving the whole of its power from the carbon it consumes, the body of man is at least, three or four times more perfect in its mechanism than the most perfect steam engine. Our artificers and engineers have, consequently, much still to accomplish.

THE BALANCE OF ORGANIC NATURE.

The primitive atmosphere of our globe has formed itself into three great parts or masses:—

One, constituting the atmospheric air of the present time; a second, represented by plants; a third, by animals.

Between these three masses continually exchanges are effected: matter descends from the air into vegetables, penetrates in this way into animals, and returns to the air in proportion as they consume or apply it to their purposes.

Green vegetables constitute the grand laboratory of organic chemistry. They are the agents which, with carbon, hydrogen, azote, water, and oxide of ammonium, slowly form the most complex organic substances.

Under the form of heat, or of chemical rays, they receive from the sun the force which enables them to accomplish this great work.

Animals assimilate or absorb the organic substances which plants have formed. They alter them by degrees; they destroy or decompound them. New organic substances may arise in their tissues, in their vessels; but these are always substances of greater simplicity, more akin to the elementary state than those they had received.

They decompose, then, by degrees, the organic matters treated by plants. They bring them back by degrees towards the state of carbonic acid, water, azote, and ammonia, a state which admits of their ready restoration to the air.

In burning or destroying these organic substances animals always produce caloric, which, radiating from their bodies into space, goes to supply that which vegetables had absorbed and fixed.

Thus all that the atmosphere yields to plants, plants yields to animals, animals restore to the air. Eternal round, in which death is quickened and life appears, but in which matter merely changes its place and its form!

The crude and formless mass of the air, gradually organised in vegetables, passes, without change, into animals, and becomes the instrument of sensation and thought; then vanquished by this effort, and, as it were, broken, it returns as crude matter to the source from whence it had come.

We conclude our notice of this valuable volume by giving it our warm recommendation. The distinguished authors furnish matter that cannot but interest and instruct, and we are glad to find that they have had full justice done to their investigations by their English editor and publisher.

IDIOPATHIC ERYSIPELAS.—A case of this disease is reported from the practice of Dr. Wilson at St. George's Hospital, illustrative of the views advocated by Dr. Wilson, and published in a late number of the *Medical Times*.

TRANSACTIONS OF LEARNED SOCIETIES.

MEDICAL SOCIETY OF LONDON, April 8th—Dr. Theophilus Thompson in the Chair.—*Intestinal Tumour; Discharge of Fat from the Bowels; Intestinal Malformation; Abuse of Enemata.*

Dr. Willshire narrated the case of a female patient, 50 years of age, who, on the 4th March last, after eating a hearty dinner of beef sausages, was seized with pain at the epigastrium, and between the shoulders, and had also a lump in the left hypochondrium. Medical assistance was sought, and she was bled to twelve ounces with relief. Dr. Willshire saw her on the 6th, when she complained of pain over the abdomen, which was much greater in the iliac region, and to the right of the umbilicus; it was increased on pressure. The tongue presented a red streak down the centre, but was coated with a yellowish fur elsewhere; the countenance was anxious; there was not any vomiting, and the bowels were open. The tumour was transferred to the right iliac region. Leeches were ordered to be applied over the tumour, and an aperient of castor oil, together with repeated doses of hyoscyamus. She was seen the next day by Dr. Aldis, who, as the pain was not relieved, ordered her to be cupped, and gave her calomel and opium, as well as another dose of castor oil. The pain was thus relieved, but the tumour continued as before, the bowels were open. The pills were discontinued, and saline draughts given instead. A dose of castor oil was again prescribed, soon after taking which the woman was seized with pain at the epigastrium, which was followed by violent and repeated action of the bowels, on each occasion a chamber-pot being half filled. On the surface of the evacuations there floated large drops of oily matter, which burnt like fat. The odor was fœtid, but not that usually presented by fœces. Another dose of castor oil brought away another very large and more solid stool, after which the tumour was not so prominent, nor so soft. The patient, by the use of these remedies, gradually got better, and the tumour finally disappeared. Dr. Willshire remarked that his object in narrating this case was to enquire the experience of the society respecting the appearance of fat or oily matter in the stools, when castor oil had not been given, and whether such is a common occurrence. Several such cases are on record, and Sauvages has described a disease by the name diarrhœa adiposa. On the other hand, Dr. Golding Bird has shewn, that castor oil may re-appear in the stools, under very extraordinary circumstances. Dr. Willshire, in the present case, was of opinion, that the fatty matter discharged was not the castor oil, but a peculiar secretion from the intestines, and he entered, at some length, into an argument to shew that the cœcum was probably the source whence it was derived. He considered, that the cœcum was the part implicated in the disease, and remarked, that as it was supplied with follicular glands, which secrete an oily matter to lubricate the canal, it might act as a depurative organ for the blood, which was known to contain fatty matter.

Dr. Theophilus Thompson enquired what interval occurred between the hearty meal of beef sausages, and the first appearance of the fatty matter in the stools?

Dr. Willshire in reply stated, that the meal was eaten on the fourth, and the fatty matter discharged on the ninth. The woman had had a tumour in the abdomen for some time previously, which she had shewn to her daughter.

Dr. Thompson remarked, that in Dr. Bright's cases of discharge of fatty matter per anum, the occurrence was connected with disease of the pancreas. He wished to know if there was reason to suspect any such disease in the present case.

Dr. Willshire replied in the negative. His attention had been drawn to the kidneys, by the cases narrated by Dr. Elliotson, but those organs were healthy. The woman had not passed any fatty matter since her recovery. He had reason to believe there had been a very large collection of fœces in the cœcum, from the great quantity that had been evacuated at a time. He was certain he was within bounds in stating it at half a chamber-pot full on each occasion.

Dr. Risdon Bennett said, that the only case of discharge of fat that had occurred to him, was in a well-marked case of long-standing disease of the gastro-intestinal mucous membrane in a girl, about twenty-five years of age. Her complaint was follicular pyrosis. The pain was felt more when the stomach was empty. On several occasions she passed an adipose-looking matter, and as she ate but little, and that chiefly arrow-root, and such like articles of diet, there was very little probability of the discharge being an extraneous mass of undigested fat. Although she complained of pain at the epigastrium occasionally, there was not any physical evidence of pancreatic disease. The patient was ultimately lost sight of; she experienced most relief from a combination of alcalies with opiates, as regarded the character of the dejections, the pain at the epigastrium, and the vomiting. Copaiba with opium was given for some time, with relief, but she was never benefitted by any remedy for a length of time. There was occasionally a swelling found in the course of the intestines, which he referred to the inability of the canal to expel its contents.

Mr. Headland observed, that there were one or two points in the case worthy of consideration. He desired to know whether Dr. Willshire was, at the commencement of his attendance, able to recognise correctly the character of the tumour; it was a matter of considerable uncertainty with regard to abdominal tumours. The passage of fatty matter by the bowels had not been sufficiently noticed for information of a valuable kind to be obtained; we, every now and then, meet with cases of different diseases, where that occurrence takes place, not indeed in large quantity, but in persons of all ages, and in very mild forms of disease. He was inclined to regard it as a mere excrementitious matter, a remanet of digestion in peculiar constitutions. Oily and fatty matters were of very difficult digestion, and there is no reason why they should not collect in the intestinal tube. If this discharge depended on disease of the cœcum, he thought it would be of more frequent occurrence, and also be more commonly discovered in that gut, when bodies are examined after death. He could not admit the chemical changes, which castor oil was said to undergo in the *primæ viæ*, by Dr. Golding Bird; when it was passed at all, it passed as common castor oil, and not as a concrete substance. The disease in the case before the Society was caused by a collection of fœces in the bowels, and he thought that there was a very important and interesting question arising therefrom—with what degree of safety can large collections of fœces in the intestines be interfered with, after they have existed a long while?

Dr. Clutterbuck considered that the case was involved in a good deal of obscurity and difficulty. There were at first considerable pain, tenderness, and swelling in the left side, which, in a day or two's time, were transferred to the right. This made the case very obscure, and it was difficult to understand what it really was. That inflammation, either primary or secondary, existed, the nature of the pain, the tenderness on pressure, the state of the tongue, and, above all, the inflammatory crust of the blood, clearly shewed. The shifting of the principal symptoms from the left to the right side, might possibly depend on a change in the situation of the fœcal collection. Dr. Clutterbuck, in conclusion, commended the plan of treatment adopted, and deprecated any discussion respecting the appearance of fat in the stools, as of no practical advantage.

Dr. T. Thompson mentioned the case of a little boy who died of pulmonary disease, attended with cephalic symptoms. He was much troubled with diarrhœa, by which malady he had lost several relatives. On examining the body, there was discovered a peculiarity about the intestines; after tracing the transverse arch of the colon to its termination, it was found to end in another arch, which passed across the abdomen from left to right, and back again to the left, before it formed the rectum. The adventitious arch was attached to the spine by a true mesentery, which was supplied with lacteals and glands. There were one or two other children in the same family, troubled with diarrhœa. He had, however, lost sight of them for the last year or two.

Dr. Bennett remarked, that he supposed Mr. Headland, in proposing his question, did not intend to object to the clearing out of the intestines in cases of long-continued collection of fœces, but merely to recommend caution in effecting that object. Of course, he did not doubt the propriety of the proceeding.

Dr. Willshire mentioned a case of a young woman, who was advised by an eminent practitioner to use half a pint of water as an injection. Finding, after a time, that that quantity failed in effecting her object, she had gradually used more and more, until at last she had thrown up as much as three pints, and even two quarts, at a time. He had advised her gradually to diminish the amount of the injection, and had prescribed a combination of blue pill, colocynth, and strychnine, by which a healthy action of the bowels was produced, and she can now do without the enemata altogether. Blue pill and colocynth, without strychnine, had been previously tried, and found to be ineffectual. He was strongly opposed to the continued use of injections, which he thought highly prejudicial.

Mr. Headland thought that the combination of remedies used by Dr. Willshire rather detracted from the value of the case, which was still a very important one. The use of strychnia for such a purpose was a novel one. With respect to the observations of Dr. Bennett, he had a very great objection to interfere with large fœcal collections in the intestines, when of long duration, when symptoms warranting such interference, did not exist. He had seen such constitutional irritation lighted up in consequence, that the patient has sunk and died. He would be guided, under such circumstances, by the age of the patient, and the duration of the collection. When interference was advisable, he preferred using a combination of jalap, galbanum pill, and soap.

Dr. Bennett observed that the cases referred to by Mr. Headland certainly do occur sometimes, but it must be recollected that they occasionally terminate by inducing fatal inflammation of the bowels. To prevent this, it would be necessary to use means early, taking care to avoid the danger mentioned by Mr. Headland. He would give a grain or two of blue pill, with small doses of ipecacuana for a few nights, then omitting them for a time, and resuming afterwards; the decoction of aloes, being administered during the day, together with the occasional exhibition of enemata. He would not use those medicines which excite the secretions. Much nicety and discrimination are required, and he would be guided in the treatment by the peculiar aspect of the case.

Dr. T. Thompson enquired if, in cases of an atonic condition of the muscular coat of the intestines, any member had any experience of the effects of electricity or galvanism. He had tried galvanism in a case of partial paralysis of that coat with advantage. The lower limbs were partially affected with the same complaint, but they were very slightly benefited by the treatment that was pursued.

HOSPITAL REPORTS.

WESTMINSTER HOSPITAL.

Lumbar Abscess.—Thomas Jones, ætat 27, a clothier by trade, middle size, pale, and rather emaciated, of the lymphatic temperament, and scrophulous habit, residing in Tyer Street, Vauxhall, was admitted April the 30th, under Sir Anthony Carlisle. About eight weeks previously, he considers that he was as well as ever he was in the whole course of his life. He was then suddenly attacked with shiverings, head-ache, and a dull pain in the loins, without being able to assign any satisfactory cause for the attack. On the 28th, a swelling appeared on the right side of the spine, opposite the last dorsal, and the commencement of the lumbar vertebræ, previously to which, gradual diminution of power over the lower extremities had been coming on. The disease is unattended with cough or difficulty of breathing, and the sphincters ani and vesicæ are unaffected.

The appetite is bad, the bowels irregular, and the general health much disturbed. Jones was a patient in the hospital three years and a-half previously, under the care of Mr. White, with lumbar abscess on the same side of the body. A valvular opening was then made, and the contents of the abscess evacuated in small quantities at a time. The opening healed up, and a fresh one was made a fortnight afterwards. His life was then saved with considerable difficulty. He remained an inpatient in the hospital for some time, and when he left, he says he was quite recovered. The tumour, at the date of his admission, was rather larger than the palm of the hand, forming a prominence in its centre, which gradually lost in the surrounding parts. The projection of the spinous processes was effaced, on the diseased side, by the prominence of the abscess. The integuments were not discolored. Fluctuation was readily perceptible. He was ordered *full dict—a mutton chop, quinine, and to remain in bed.*

May 8th.—The abscess appears to be increasing in size daily; he feels much weaker, and is constantly losing strength. Says he has some difficulty in passing water; the urine is high coloured, and has an ammoniacal odour.

11.—He sleeps very badly; had an anodyne last night, and rested better in consequence. Towards night, there is considerable exacerbation of fever, attended with profuse perspiration, and heat of skin. The pulse is quick, small, and hurried. Sir A. Carlisle made a valvular incision into the most projecting part of the tumour, inserting the knife from below upwards, when nearly a pint of curdy matter, diffusing an unpleasant sickly odor, was discharged. By gentle pressure on the surrounding parts, between six and seven ounces more were evacuated. He complained of some pain towards the latter part of the operation, and of feeling faint, to relieve which, he had a little wine given him.

12.—Feels low and weak; fever slight.

13.—The opening has closed, but was re-opened to-day, as the tumour was again enlarging. Some matter was let out, and the aperture afterwards treated with lint. The pulse was small and rapid, and the bowels confined. *Was ordered a dose of Sir A. Carlisle's mixture.**

14.—Has passed a better night, and says that he feels that he is improving. Four ounces of the curdy matter were evacuated to-day. He has a chop, with porter, and four ounces of port wine daily, and quinine also is given him.

16.—Six ounces of matter discharged to-day; is very feverish, and perspires much at night. Is to have six ounces of wine daily, a pint of milk instead of beef-tea, and the following mixture:—
℞ *Sulph. quininæ* ℈j., *acid. sulph. dil.* ʒj., *infus. rosarum*, f.ʒviij.—*M. Fiat mistura, capiat cyathum vinosum bis in die.*

17.—When the contents of the abscess were discharged to-day, the tumour was more flattened than on any previous occasion. An evident curvature of the eleventh and twelfth dorsal, and of the first lumbar vertebræ, could then be readily distinguished.

22.—Has an anodyne at night, and sleeps well in consequence; rather less discharge for the last few days. The pulse continues frequent, and rather small.

26.—The tent is now left out altogether. He lies with a draw-sheet under him, and the matter is allowed to flow out on to it. He feels comfortable, and better in health; his appetite is improving.

June 10.—Is aequiring more power; the discharge lessened in quantity.

25.—Health improving; an ounce of pus discharged daily.

28.—Gets up, and sits upon his bed, but does not leave the ward; pulse stronger.

July 13.—Can walk about the ward, and finds himself improving in every respect.

19.—Walks daily in the park.

August 6.—Discharged.

---

* Sir A. Carlisle's Mixture:—
Pulv. jalapæ, } āā ʒj.
Potassæ bitartratis, }
" carbonatis, }
Infusi. sennæ, lbij.
M. Fiat. mistura.

ST. BARTHOLOMEW'S HOSPITAL.

Acute Rheumatism, followed by Endocarditis—Thomas Joynes, æt. 23, a short, but strong built, muscular man, habits temperate; was admitted into Matthew's ward, St. Bartholomew's Hospital, under Dr. Roupell, February 21st, 1844. On the morning of admission, he complained of pain in all his joints, but especially in the shoulders, left knee and ankle, and in the upper part of the back; the left shoulder, elbow, wrist, knee, and ankle joints, were considerably swollen, the same joints on the right side were slightly so; he complained of great thirst and loss of appetite; the skin was warm and moist; tongue covered with a white fur on dorsum, clean at the edges; pulse 96, and rather sharp; bowels relaxed from medicine; urine natural in appearance. Auscultation. The first sound of the heart was prolonged, the second sound natural. He stated he had two or three slight attacks of rheumatism within the last two years, but had never been laid up with them. The present attack came on about three weeks before admission, but it was very slight till three days ago, when having caught cold, it became much severer; he had been under medical treatment previous to his coming in. He was ordered to be bled to twelve ounces from the arm, and to take hyd. chlorid. gr. x. pulv. opii gr. ij. horâ somni.

22.—Passed a very restless night, in consequence of the pain in his back and limbs; tongue still furred; skin warm and moist; pulse 110, small and compressible; bowels opened three times during the night. The blood drawn yesterday appears buffed and slightly cupped; to repeat the hyd. chlorid. c. opio horâ somni.

23.—Passed a very restless night; about one o'clock he was attacked with severe pain in the left side, which he referred to the region of the heart; the breathing was difficult and hurried, he was obliged to be propped up in bed from a feeling of suffocation; the countenance is now pale and anxious, breathing short and hurried; inspirations being 50 in the minute, pulse 100, rather sharp and incompressible, tongue furred, skin moist, action of heart much accelerated. He was ordered to be cupped to ℥xij. from the region of the heart, and to take the following:—

℞. Hydrar. chlor. gr. ij.
Pulv. opii gr. ¼ M.
fiat pilula sextis horis sumenda.

24.—Passed a more comfortable night, breathing easier, countenance improved, pain in the side relieved, gums sore; to take the pill only night and morning.

25.—Still improving; has no pain in the side, and very little in the joints, pulse 92, and soft, bowels open, skin bedewed with perspiration; to continue the pill.

26.—Much better, but complains of the soreness of the gums; to take the pill only at night.

27.—Going on favourably, but has still a little pain in the joints.

℞. Vin. colch. mxx.
Liq. amm. ac.
Aquæ distill. āa ʒvj.
misce fiat haustus ter in die sumendus.

28.—Better, but complains of a griping pain in the abdomen, accompanied with slight diarrhœa; to discontinue the colchicum, and to take tr. opii m. x v. hora somni.

March 1st.—Progressing rapidly, has very little pain in the joints; ordered to have pulv. ipecac. co. gr. viij. ter die.

6.—Has been going on favorably up to-day.

11.—Feels himself quite well, excepting weakness; has no pain in the joints; to have half meat diet.

℞. Cinchona cordifoil. ʒvj.
Zingiberic ʒss.
Sacchari Fæcis ℥iiiss.
Misce. ft. confect, cujus capiat ʒij. ter in die.

25.—He left the hospital to-day, cured.

Scarlet Fever—Recurrence of the Disease four weeks after the primary attack.—Lenoria Taylor, æt. 22, a servant of all-work, of stout, strong, conformation of body, and of dark complexion, was admitted under Dr. Roupell into Mary's ward, St. Bartholomew's hospital, January 4, 1844. The countenance was highly flushed; eyes suffused; the face and upper part of the body were covered with a vivid scarlet rash; the face likewise appeared swollen; she complained of great weakness, thirst, head-ache, pain in all her limbs, sore throat, and loss of appetite; she had likewise pain in the chest occasionally, which was increased by a full inspiration; the skin was hot and dry; the tongue dry and furred; pulse 100, full, but soft; bowels open; urine scanty and high-coloured; the tonsils and velum palati were red and swollen. She stated she had generally enjoyed good health, with the exception of an attack of rheumatism eight months ago; she had felt herself poorly for the last six weeks, with pain in the limbs and side, accompanied with difficulty of breathing; five days before admission she was attacked with pain in the side, and sickness, followed by thirst and loss of appetite; the rash first made its appearance on the morning before admission. She was ordered the effervescing draught three times a day, and milk diet.

Jan. 5.—Not so well; countenance more flushed and glazed; the scarlet effervescence extends over the entire surface of the body; pulse 160, and full; skin much increased in temperature; tongue dry and furred; ℞. Ammon. sesquicarb. gr. v. ex haust. ammon. acet. ter in die; to have a cold lotion applied to the head, and the body to be sponged over with vinegar lotion three or four times a day.

6.—Appears a little better, but complains much of her head; pulse 150; to have three leeches behind each ear.

7.—Head relieved by the leeches; in other respects continues much the same.

8.—Better; tongue a little cleaner; less heat of skin; pulse 108, and softer; throat very sore; to have an acid gargle for the throat; continue the medicines.

9.—Does not feel herself so well; complains of pain in the abdomen; pulse small and weak; tongue cleaner; less fever. To have four ounces of wine daily, and a mustard cataplasm to the abdomen.

10.—Feels herself better; tongue improving.

11.—Much the same; continue the wine and medicines.

12. Much better in all respects; tongue cleaner; skin cool; pulse 90, soft and compressible; head-ache relieved; sore throat nearly gone; continue.

13.—Going on favourably; to continue the wine, and to have beef tea in addition to her milk diet.

17.—Has been going on favourably up till to-day; bowels rather costive; skin desquamating.

℞. Magnes. sulph. ʒi.
Infus. rosæ co. ℥iss. ft.
Haustus ter in die sumendus.

19.—Continues improving; complains of pain in her limbs; to have a warm bath at bed-time.

22.—Complains this morning of a throbbing pain in the head, with pain in the ankles, knees, and limbs; the skin is rather hot; pulse 86, and jerking; appetite good; urine abundant; to continue the draught.

24.—Going on favourably; bowels rather relaxed; omit mag. sulph. from draught, and to have half meat diet.

30.—Had been going on well till to-day, but this morning appears very unwell; she now complains of her throat feeling sore, and has lost her appetite; the skin is rather hot; the tonsils appear red, and slightly swollen. To have an acid gargle for the throat, and to take antimon. potass. tart. gr. 1-6th, ex mist. camph. 4ta q. hor.

31.—Complains this morning of pain in the forehead; there is a scarlet efflorescence over the face and upper part of the trunk; the skin is hot; pulse 140, weak and tremulous; tongue slightly furred in the centre, but clean at edges. To have a cold lotion to the head, and the following draught:—

℞. Ammon. sesquicarb. gr. v.;
Magnes. sulph. ʒi.;
Liq. ammon. acet.;
Aq. destill. āa ʒvj.
fiat haustus ter in die sumendus;

with the application of cold to the head.

Feb. 1—Not so well; appears very low and

weak. To have four ounces of wine daily; continue the draught.

2.—Passed a very restless night; complains this morning a great deal of her throat; pulse 130, weak and tremulous. To continue the wine and draught, and to have acet. canthar. applied to the throat.

3.—Not so well; pulse diminished in frequency and power. To have twelve ounces of wine daily, with beef tea.

4.—Continues much the same.

5.—Better; slept pretty well last night; pulse improved, but still small and weak.

6.—Improving; more power in pulse; the bowels are rather costive. To continue the wine, and to have ext. colocynth co. gr. viij. statim.

7.—Complains this morning of pain in the side; bowels have not been opened. Ordered to have cataplasm. sinapis. to the side, and a common enema administered statim.

8.—Much better in all respects.

12.—Still improving, but complains of slight headache.

R. Quinæ disulph. gr. i.;
Acid. sulph. dil. m. i.;
Aq. Cinnam. ℥iss. M.;

fiat haustus ter die sumendus; to have four ounces of wine, with beef tea daily.

21.—Has been going on favourably the last few days; she now feels herself well, excepting weakness; the feet and ankles swell a little towards evening, but do not pit upon pressure; the urine was tested, but was not albuminous. She was ordered to continue the draught, and to have a mutton chop, with three ounces of wine daily.

28.—Regains her strength, but very slowly; the urine was again tested to-day, but no albumen was detected in it. To continue the draught; wine and chop daily.

March 6.—Gains strength daily. Continue the draught, and to have four ounces of wine daily, with the meat diet of the house.

25.—She gradually recovered her strength and looks, and was discharged to-day cured.

PERISCOPE OF THE WEEK.

Lepra in Italy.—This and the nine following articles constitute the principal contents of the two last numbers of the *Lancet*. At the scientific congress in Italy, Dr. Trompeo read a memoir on lepra, (the elephantiasis of the Greeks,) which he contended still existed in Europe, more especially in the Sardinian States; in the district of Nice alone, he had seen a hundred lepers. He regarded it as not only hereditary but contagious. Undeniable facts having convinced him that the disease is on the increase, he proposed that special hospitals should be opened for the reception of those afflicted with it, and that measures should be taken to separate them from the rest of the community. Dr. Costa confirmed the statements of Dr. Trompeo, and mentioned his having witnessed several instances of the transmission of lepra among the inhabitants of Ligaria. The congress offered a prize of the value of twelve pounds for the best memoir "On the Lepra of Italy, and on the means of preventing and curing that disease." The malady is a very different one from that which is called "lepra" in this country; it is also much more severe. It manifests itself under the form of numerous tubercles of variable size, livid, prominent, soft to the touch, which eventually suppurate, and occasion most hideous deformity. It is said by M. Roussel to exist endemically on the coast of the Mediterranean, and that in the Martigue Islands there are entire families of lepers.

Facial Paralysis.—Dr. Marshall Hall describes a case of paralysis of the face, which he diagnosed to be an affection of the facial nerve only, and not connected with disease within the cerebrum, from the history of the case, from the inability to close the eyelids on the affected side, from the non-existence of paralysis of the upper or lower extremity, and from the fact that the patient protruded the tongue, when asked, in the mesial line. Taking these facts together, he says, he did not hesitate to declare that the case was one of paralysis of the facial nerve. In hemiplegia the eyelids of the affected side can always be closed, though not so firmly as those of the other side. In so severe a case of facial hemiplegia, the limbs are almost certainly paralysed, and the tongue is generally affected and protruded to the affected side. Still a question was raised whether this nerve was affected within or without the cranium; there was pain in the head and drowsiness. Now the portio dura and the portio mollis of the seventh pair (the facial and the auditory) are placed so immediately together in the cranium, that it is scarcely possible for one of these nerves to be affected without the other; yet there was no deafness. Dr. Hall, therefore, concluded that the case was one of facial paralysis, the nerve being affected externally to the cranium. Dr. Hall afterwards gives a case in which exposure to cold induced facial paralysis, which by-and-bye was changed to *spasmodic tic*. The first case, which was treated in the usual way, when the paralysis was diminishing, manifested a tendency to spasmodic action. The communication, of which we have just given an abstract, although a meagre one and devoid of novelty, may serve an useful purpose, by recalling the attention of practitioners to the diagnosis of facial paralysis.

Hæmorrhage after parturition.—Dr. John Hall Davis narrates a case of flooding occurring both before and after the removal of the placenta, which was arrested at first by a large draught of cold water, and finally by the application of the T bandage and a compress. The patient did well. He concludes by observing, that in the management of this case, which required much personal exertion, he was entirely deprived of the services of the party previously in attendance, who, frightened at the serious aspect which the case put on, had taken to his heels before his arrival, and never returned.

Use of alum in diseases of the chest.—Dr, Andrews has tried the internal exhibition of alum in cases of bronchitis, cynanche trachealis, hæmoptysis, pertussis, and in chronic affections of the lungs. In general, it does not interfere with expectoration. The first effect is usually a copious discharge of mucus, which is followed by a diminution in the quantity which collects, without any oppression of the chest, or other indication of improper interference with the secretions. The formula which he usually employs is the following:—R. Aluminis gr.48, syrupi f℥ss., aquæ ferventis f℥vss. One grain of alum is dissolved in each drachm of the fluid. To a child of three years of age he prescribed a teaspoonful of this solution, to be taken three or four times in twenty-four hours, or the alum was given at this age to the extent of three or four grains daily. To children between three and seven years of age, a dessert-spoonful was administered with equal frequency in the same period; and to persons beyond the age of puberty, two tablespoonsful were given as often, or the remedy was employed in the cases of adults to the extent of twenty-four grains in twenty-four hours.

Abortion and uterine hæmorrhage.—Under this title, a rather rambling paper, is published by Mr. Symons, which he prefaces by observing that, in the earlier years of his practice, he was always thankful to meet with any communication in the periodical journals, which, in language divested as much as possible of *technical slang and scientific verbiage*, cast to him fresh light on obscure or disputed points, either in the pathology or treatment of disease. Without a comment on the exceedingly bad taste shewn in the use of the words which we have put in italics, we proceed at once to notice the communication itself. Mr. Symons advises, when profuse and troublesome uterine hæmorrhage occurs in the earlier period of pregnancy, more especially between the second and third months, ascertaining the state of the os uteri. Sometimes the ovum will be found lying in the vagina, and at other times partly within the grasp of the os uteri, and partly protruding from it. When this is the case, the ovum may, without much difficulty, be laid hold of, and brought away; but when the mouth of the womb remains closed, and the discharge is profuse, no time should be lost in plugging the vagina with a soft handkerchief or napkin; or, what is perhaps better, a globular piece of sponge, to which some tape should be attached, for the purpose of withdrawing the plug when necessary. Scruple or half-drachm doses of powdered secale cornutum are also recommended by Mr. Symons to be given every two, three, or four hours, until the hæmorrhage abates. The usual routine practice is also combined by him with the plan of treatment just mentioned. It appears to us that the exhibition of the ergot of rye, indiscriminately, in cases of early uterine hæmorrhage, will be productive of exceeding mischief, and will very frequently cause miscarriage, when it might otherwise have been avoided. Mr. Symons has committed a very common error, in not discriminating between the different cases for which the plan of treatment he advises might be serviceable, and those in which it would certainly prove injurious. In cases of miscarriage between the fourth and fifth months, when the fœtus has been expelled, and the placenta is retained, he has occasionally extracted the afterbirth by introducing his hand into the vagina, or one or two fingers into the uterus, but the attempt was always attended with a good deal of pain and irritation, and latterly he has found the exhibition of the ergot of rye, in rather full doses, succeed in expelling the retained placenta without much delay. In cases of hæmorrhage occurring during the last months of utero-gestation, he strongly recommends the treatment described by the late Mr. Rigby, of Norwich, in his treatise on uterine hæmorrhage, and relates cases in illustration. In cases of uterine hæmorrhage unconnected with pregnancy, the most efficient of the various remedies he has tried, has been the acetate of lead combined with ipecacuana and digitalis. In other instances, he has seen very good effects from the use of the ergot of rye in powder, in the dose of from fifteen grains to a scruple, repeated three or four times a day, combined with sulphate of magnesia and the diluted sulphuric acid. When the discharge has abated, the muriated tincture of iron, or sulphate of quinine and iron, in combination with tincture of cantharides and diluted sulphuric acid, may be given with advantage in these, as well as in the more formidable instances of uterine hæmorrhage previously alluded to.

Ague treated by venesection.—A case of intermittent fever is reported from the Westminster Hospital, complicated with epigastric tenderness and feeling of distention of both hypochondriac regions, in treating which a small venesection was premised, and afterwards quinine given with success.

Affinity between intermittent fever and phthisis.—Dr. Schonlein observes, that although intermittent complaints and pulmonary phthisis prevail exclusively, apart one from another, so that in places exposed to the invasion of intermittent fevers, phthisis is of rare occurrence, still we often find that individuals who have a long time suffered with intermittent fever, and migrate, apparently cured, from the district where intermittent malaria reigned, into another country, where they expose themselves to frequent colds, fall into a galloping consumption. He observed this first of all in the Swiss, that returned from Holland, and has since remarked it many times. He believes that in these cases the seat of the tubercular disease was more commonly in the left lung. In the same way as we see this in individuals, we have sometimes occasion to observe it on a larger scale, for instance, in the country, between the lakes of Zurich and Wallenstadt, which was formerly exposed to intermittent fevers from the overflowing of the river; since then it has been drained, and intermittent fevers have vanished, but a more dreadful malady, pulmonary consumption, has appeared, it having been formerly completely unknown. The mortality continued the same, not by intermittent fever, but by phthisis.

Cochineal in hooping cough.—Dr. Allnatt in the *Pharmaceutical Journal*, objects to Dr. Cajetan Wachtl's formula for cochineal in the treatment of hooping-cough, because the solution becomes acid in a few hours, and unfit for use. He says he has employed cochineal for the last twenty years in hooping cough with the most satisfactory results, and has found the alkaline solution invaluable. His formula is as follows:—R. Carbonatis potassæ ʒj, cocci cacti ℈j, aquæ ferventis f. ℥viij, M. capiat cochleare minimum ter die. The solu-

tion is of a deep purple or violet hue, will keep a long time, without change, and the active powers of the cochineal are not impaired by the combination. Dr. Allnatt's formula resembles that of a quack medicine for hooping cough, except that he uses potash instead of soda.

Confectio ferri compositus.—Mr. Heathcote has published a formula for this preparation in the *Pharmaceutical Journal*, which he advises to be made in the following manner:—eight ounces of clinker, previously freed from all impurities, and reduced to an impalpable powder, half an ounce of carbonate of magnesia, a drachm of powdered ginger, with a sufficient quantity of treacle to form the whole into an electuary. Clinker may be readily procured at any blacksmith's forge. It has a bluish black colour. The bluest and heaviest should be selected.

GOSSIP OF THE WEEK.

We are glad to find that our Correspondent, Dr. James Sheridan Muspratt, of Seaforth Hall, Liverpool, has, through the instrumentality of Professor Liebig, obtained his degree at the University of Giessen, for an original paper on the Sulphites.

Apothecaries' Hall.—List of Gentlemen admitted Members on the 4th April, 1844.—Messrs. David Cole Noel, James Horton, John Lewis Williams, Benjamin Lancaster Jemmett, Thomas Gaskell, Nicholas Smith Glazebrook.

From the *Wolverhampton Chronicle* we learn that a man aged forty-five, of Sedgley, underwent an amputation, without feeling pain, during mesmeric sleep. Mr. Dunn, a surgeon, used the knife, Dr. Owens mesmerised, Dr. Mannix and several medical and non-medical gentlemen are represented as present. The case is named as one removing all doubts as to the unconsciousness of the patient, and leads us to express a hope that a *professional* statement may be sent us.

Mr. Lawrence, of St. Bartholomew's Hospital, is said by the *Morning Post* to be appointed surgeon to the Orthopœdie Institution, Bloomsbury Square, in the place of Dr. Little, who has resigned.

Mr. Dermott gave a *dejeuner à la fourchette* on Wednesday last, on the termination of the Winter Session. Among the gentlemen present were Mr. Carpue, Sir Charles Aldis, Dr. Scoffern, Dr. Ryan, Dr. Aldis, Mr. Hunter, Dr. Collyer, and a great number of other medical gentlemen, with a strong sprinkling of the pupils of the school. The healths of the host and hostess were drunk with enthusiasm, as was that of Mr. Carpue, who in rising to return thanks, referred feelingly to a portrait of the celebrated Brookes, that overlooked a side-table. He dwelt upon the high deserts of that eminent anatomist, on the labours which Brookes, Dermott, and himself had jointly undertaken, in establishing the first private Medical School, and inveighed with dignified bitterness, and with tears in his eyes, at the mismanagement of a College, which had condemned such a man as Brookes—his revered friend—to perish of want. The *dejeuner* was all that could be desired, and the proceedings did honour alike to hosts and guests.

Among recent appointments and promotions, are D. Thomas, Surgeon to the "Fire Fly," Assistant Surgeons J. D. Hooker to the "William and Mary," J. P. Lawrence to the "Styx," J. C. Walsh and J. Laird to the "Illustrious," for hospital service in Bermuda. Assistant Surgeon C. G. Logie, M.D., to the 6th Dragoons; Surgeon Gid. Dolmage, to the 54th foot, vice Ingham, who retires on half-pay; Assistant Surgeon G. Horniblow, M.D., to the 72nd foot.

Among recent deaths are those of Mr. Hey, late President of the Provincial Medical and Surgical Association, which took place at Leeds, and Dr. Macqueen, in camp at Gwalior.

Respect for truth is the characteristic of a gentleman. As that is departed from, in such a proportion sinks a man in the mire of vulgarity and disreputable morality. About a fortnight since the *Lancet* contained an attack on the *Provincial Medical Journal*, professedly written by "one of the oldest members of the Provincial Medical and Surgical Association," and dated Nottingham, March 27th, 1844. The letter was written with the object of persuading the Members of the Association to give up the *Provincial Medical Journal*, and extend a pitying patronage to the distrest *Lancet*, which the writer recommended in very express terms of eulogy. It now turns out that the letter is a forgery, concocted at the *Lancet* office, to serve a pecuniary purpose, for *all* the Members of the Association, amounting to eleven, resident at Nottingham, have written disclaiming any authorship or knowledge of authorship, of what they call "the scurrilous attack" in the *Lancet*. Now, what is to be believed that comes from an editor or publisher, who can, with an easy conscience, manufacture and palm such deliberate falsehoods as these on his readers!

Sir B. Brodie has been elected Corresponding Member of the Academy of Sciences, in the Section of Medicine and Surgery. He fills the vacancy caused by the death of Sir Astley Cooper. Though there were several celebrated men proposed, Sir Benjamin got thirty-nine out of forty-three votes.

The Committee for promoting the greatest attainable cleanliness in the public metropolitan thoroughfares, &c., have forwarded to us a copy of their prospectus, with an account of their proceedings. We need not say that a plan, whose direct effect is to increase the employment of the poor, and add to the comfort and health of all, at the smallest possible pecuniary sacrifice, has our warmest wishes in its favour. The Committee—composed of respectable and truly estimable men—sits at 20, Vere-street, Oxford-street. Mr. Cabbell, we perceive, is Chairman.

A SELECT PRACTICAL FORMULARY,

TRANSLATED FROM THE FRENCH OF M. FOY, PRINCIPAL PHARMACIEN OF THE HOSPITAL SAINT LOUIS, AT PARIS.

(Continued from Page 22.)

Odontine (J. Pelletier): a solid composition, of an agreeable odour and savour, which possesses the property of whitening the teeth, and of hardening and preserving their enamel, as well as of preventing and arresting their caries. (Prospectus.) The base of the odontioe is the cacao butter, the carbonate of magnesia, and an alumninous earth: the other substances and their proportions have not been ascertained. It is much to be regretted that the proprietor of this dentifrice, a distinguished Pharmacien, a Professor at the school of pharmacy, and a Member of the Royal Academy of Medicine, should keep secret such a composition.

Onion: a stimulant and diuretic, rarely employed. Its pulp when cooked, is emollient. The syrup of onions is used in colds and catarrhs, in the dose of from two to three ounces.

Olibanum: a stimulant rarely employed at present, except in fumigations, in the treatment of indolent tumours, &c.

Ointment of Marsh-mallow: an ointment prepared with pitch, resin, turpentine, yellow wax, and fenugreek oil. *** Healing, discutient.

Ointment of Arcæus: eight parts of mutton-suet, six parts of turpentine, six parts of elemi resin, and four parts of lard, melted together at a gentle heat. **** Detersive and desiccative.

Ointment, Basilicon (Codex): an ointment prepared with colophane, black pitch, yellow wax, two parts of each, and eight parts of olive oil. *** Maturative.

Ointment, White Camphorated (Austrian Pharmacopœia): fifteen ounces of powdered carbonate of lead (cerussa), three drachms of powdered camphor, mixed together, and incorporated with one pound and four ounces of lard. Used in cases of burns and contusions.

Ointment, Blanc-rhazis: a mixture of one part of carbonate of lead, with five parts of lard. It must be prepared as it is wanted, as it soon becomes rancid. Its property is dessicative, but it is rarely employed.

Ointment, Brown: sixteen parts of basilicon ointment, one part of red precipitate, mixed together. *** Stimulant, and slightly caustic. Used in the dressing of indolent chancres.

Ointment of Canet (Codex): an ointment or plaister, prepared with simple and gum diachylon plaisters, yellow wax, olive oil, and colcothar. *** A discutient and detersive; rarely employed.

Ointment, Citrine (Codex): an ointment prepared with one part of quicksilver, one part and a half of nitric acid at 38°, eight parts of lard, and eight parts of olive oil. Used in cases of itch in frictions, two to three drachms being used daily. Eight or nine days' treatment are generally sufficient

Ointment, Grey (Codex): a mixture of two parts of strong mercurial ointment, and six parts of pork-fat. Used for the destruction of lice, and other parasitic insects on the human body.

Ointment, Poplar: an ointment prepared with poplar buds, narcotic plants, such as belladonna, hyoscyamus, garden nightshade, &c., and pork-fat. *** Sedative and anodyne; employed in cases of hæmorrhoidal tumours.

Ointment, Rose. an ointment prepared with the petals of the pale rose, alcanet-root, and lard. *** Emollient, and slightly detersive.

Ointment of Storax (Codex): an ointment prepared with eight parts of colophane, four parts of elemi resin, four parts of yellow wax, four parts of purified liquid storax, and six parts of nut oil. Stimulant. Used in the dressing of ulcers and of wounds, the edges of which are of a pale colour.

Ointment, Tutty: one part of porphyrised tutty, two parts of rose ointment, two parts of butter, washed with rose water, incorporated together. *** Used in cases of ophthalmia.

Oponelnoc: Vogt, a druggist at Wildbad, has given the following formula for a liquid opodeldoc balsam: three parts of white Venetian soap, ten of alcohol at 34°, four of spring water, three of camphor. Dissolve the soap in the water, the camphor in the alcohol; mix the solutions together, filter, and add one part of the essential oil of thyme, one part of the essential oil of lavender, and two parts of liquid ammonia. To be kept in well-stoppered bottles.

Opiate, Anti-epileptic (Ideler): four drachms of powdered indigo, thirty-six grains of aromatic powder, mixed together with a sufficient quantity of syrup. Mode of exhibition:—This quantity is to be taken at first in the course of two days, and afterwards in the twenty-four hours. Used in hysteria, amenorrhea, and nephritic pains.

Opiate, Anti-gonorrheal (Swediaur): six parts of copaiba resin, forty parts of powdered sugar, mixed together, and a sufficient quantity of syrup and mucilage of gum arabic, gradually added, to make it into an homogeneous mass, the consistence of an opiate. Mode of exhibition:—One to two drachms morning and evening.

Opiate, Anti-leucorrheal: three ounces of conserve of red-roses, two ounces of conserve of rosemary, mixed and well incorporated together with an ounce of powdered cinchona bark, two drachms of powdered mace, half a drachm of powdered catechu, and three drops of essential oil of cinnamon. Mode of exhibition:—Two drachms evening and morning.

Opiates of Copaiba: the first of these (Boutigny) is a mixture of one part of copaiba, with three parts of the almond cake, from which the oil has not been quite expressed, or else of copaiba, cubebs, and sugar: the second (Labelonge) of impure cubebine (the resinous oleo-extract of cubebs), the yolk of egg, and liquoriee or marsh-mallow powder; the third (Gibert) of four parts of cubebs, one part of saffron, and eight parts of copaiba. **** The dose of each of these is a piece, the size of a nut, to be taken several times a-day, in acute and chronic blenorrhagia.

Opiate, Sulphuretted (Parisian hospitals). one part of washed sublimed sulphur, three parts of honey. Mode of exhibition:—One to two drachms twice a day, in cutaneous affections.

Opiate, Terebinthinate (Recamier and Martinet): twelve parts of powdered gum arabic, four parts of powdered sugar, mixed together in a porcelain mortar, and two parts of essential oil of turpentine, with eight parts of syrup of orange-flower gradually added. Mode of exhibition:—Three drachms three times a day, in the treatment of neuralgia..

Opiate, Terebinthinate: sixty grains of calcined magnesia, mixed in a porcelain mortar, with one drachm of the volatile oil of turpentine, and one drachm of the essential oil of mint. Mode of exhibition:—A piece the size of a nut three times a-day.

Opium: internally, previously deprived by a mechanical process of foreign substances, one, two, four, and eight grains, the dose being progressively raised as high as to one or two drachms daily, in bolus or pill, or in potion, julep, or mixture, or also by the endermic method. *Purified* or *Watery, gummy*, or *mucous, extract*, one-fifth, two-fifths, or three-fifths of a grain, progressively raised to one, two, or three grains, or more. *Syrup*: two drachms to an ounce, in potions, juleps, &c. *** The syrup of opium of the Codex contains a grain of extract of opium to the ounce. *Compound Wine*, or *Sydenham's Liquid Laudanum*: five, ten, to thirty drops, in potion, mixture, &c. *** Twenty drops of this preparation weigh fifteen grains, and contain one grain of opium. *Wine of Rousseau*: dose, three to ten drops. *** Twenty drops contain nearly two grains and a half of extract of opium. Externally; see cerate, lotions, injections, enemas, solutions, opiated collyria, &c. Opium is the narcotic *par excellence*: it is the type of the sedatives—of the debilitants of the nervous system. Opium is of service whenever patients are subjected to very severe pains, insomnia, and a very great general excitability. Tetanus, delirium tremens, diarrhœa, dysentery, rheumatism, &c., often yield to its use. It acts in these cases as a sedative, constipant, and sudoritic. It is also adapted for the greater number of chronic affections, and in syphilitic disease. In these last cases, opium retards mercurial salivation, favours the action of the specific, diminishes the irritation of the mucous membrane of the stomach by the sublimate, &c. It is contra-indicated when there is plethora, inflammatory diathesis, gastric disorder, a tendency to putrescence, and whenever bleeding is necessary.

Orange: leaves, flowers, and fruits: infusion, leaves, three or four to a quart of boiling water: infusion, flowers, one to two pinches to a quart of boiling water: distilled water, leaves, one to four ounces, as the vehicle of a potion, mixture, &c.: distilled water, flowers, two to four drachms, and sometimes an ounce, as an aromatic or adjuvant in potions, juleps, ptisans, &c.. syrup of the flowers, one to two ounces as edulcorant: essential oil (Neroli), two to four drops on a lump of sugar, or in a draught, &c. *** The leaves and flowers of the orange-tree possess antispasmodic properties; they are employed in the treatment of epilepsy, convulsions, and most nervous diseases. The agreeable acidity of the juice of the fruit renders it peculiarly adapted, in small doses and diluted with water, to combat inflammatory diseases.

Origanum: the origanum vulgare is a stimulant tonic, which is employed, although rarely, in chronic mucous catarrhs, humid asthmas, bronchial debility, &c, in the dose of from one to four drachms to the quart of water, as a theiform infusion.

Osmazone: dose, one to two drachms daily, to excite the digestive organs.

Oxalate of Potash, Acid: solution, half a drachm to a drachm in a quart of water. Refrigerant, rarely employed.

Oxisaccharum of Digitalis (Martins): one part of dried digitalis, digested for twenty-four hours in eight parts of vinegar, then strained and pressed, and ten parts of sugar dissolved in it at a gentle heat. Mode of exhibition:—Several drachms in a draught or potion, in phthisis pulmonalis.

Oxicrat: a cooling drink, prepared with one part of vinegar, and thirty-two parts of water.

Oxide of Antimony, White: see Antimony.

Oxide of Arsenic, White: see Arsenious Acid.

Oxide of Lead, White: see Cerussa.

Oxide of Iron: besides the properties generally known to be possessed by the Hynrated Protoxide of Iron, the Humin Black Oxide of Iron, the Humid Peroxide of Iron, and the Dry and Humid Hydrated Peroxides of Iron, as ferruginous products and compounds, they have been latterly recommended as antidotes to arsenious acid. See Hynrated Tritoxide of Iron.

Oxide of Manganese: used in diseases of the skin, particularly in porrigo, in the dose of from one to two drachms to the ounce of lard.

Oxide of Iron, Black: see Deutoxide of Iron.

Oxide of Mercury, Black; see Hahnemann's Soluble Mercury.

Oxide of Gold: powder, one fifth of a grain daily, in bolus or in pills. Anti-syphilitic and anti-scrofulous, but no reliance can be placed on its action.

Oxide of Iron, Red: an astringent rarely employed.

Oxide of Mercury, Red: a stimulant escharotic, which is employed in the composition of several collyria, and is used especially in those cases of chronic ophthalmia, which are kept up by ulceration of the free edges of the eyelids. Fungus hematodes has been cured in Germany, it is said, by means of lint dusted with the red oxide of mercury, combined with alum.

Oxide of Zinc: internally, four to thirty grains in bolus or pills, or by the endermic method. Antispasmodic: used in the treatment of epilepsy, chorea, hysteria, &c. It has also been recommended as an antidote to belladonna. Externally, astringent: used in the treatment of specks on the cornea, chronic ophthalmia, fissures of the nipples, &c.

(To be continued.)

CLINICAL LECTURES ON MEDICINE;

Delivered at the GREAT CHARITY HOSPITAL, Berlin, by Dr. SCHONLEIN, first Physician to the King of Prussia, founder of the Natural System of Medicine in Germany, and Professor of Pathology and Therapeutics in the University of Berlin.

Prepared from the German expressly for "The Medical Times."

LECTURE VIII.

Rheumatismus Articulorum Acutus.—Affection of the Heart.—Miliaria.—Mental Derangement.—Re-appearance of Rheumatism of the Joints.—Aphthæ—Pneumonia.—Death.—Section.

November 9th, 1840.—Louise Wüstenhagen, twenty years of age, a servant girl. The nature of the disease of this patient can easily be understood by her statement. She is afflicted with rheumatism of the joints. She states that she has been suffering from the same malady twice previously; the last time about three months ago. Chest symptoms were exhibited at that period, which did not cease on the disappearance of the rheumatism, but have continued ever since, although in a more moderate degree, and which by their nature clearly indicated an affection of the heart: difficulty of breathing, and palpitations followed immediately on any movement. Six days ago she was attacked for the third time with rheumatism of the joints. An emetic was given to her, which produced vomiting, but without amelioration, and thus the patient entered the hospital the day before yesterday. The intensity of the symptoms of the heart, as well as the fever, demanded an energetic treatment, and rendered a repetition of venesection necessary, (first to sixteen, then to twelve ounces): the blood on both occasions was strongly buffed and cupped.

The patient now exhibits the following symptoms; firstly, affection of the joints, principally of the elbow and shoulder, as also of the articulations of the vertebral column, so that the patient lies perfectly stiff, and straight on her bed. In such cases, I have not unfrequently observed that the articulation of the lower jaw is affected, by which trismus is produced. I have also frequently noticed an affection of the articulation of the ribs with the sternum; in the present case, there are no such indications.

2ndly, Phenomena of the heart: a complication of rheumatism of the joints, which is of extreme frequency, and which, in our patient, was exhibited as early as the second attack, not only by great oppression, dyspnœa, anxiety, palpitations, &c.; but which was still more decidedly confirmed by the local symptoms, namely: exaggerated pulsation of the heart, heightened impulse, especially of the left ventricle; besides this, we find a clear frictional sound and bellows-murmur; so that it is not only the pericardium which is affected, but also the substance of the heart itself.

3rdly, Febrile symptoms: pulse 110 per minute, but not very full nor hard; vehement thirst; profuse perspiration, which, however, alternates with a constricted state of the skin; it is only a symptomatic, and not the critical perspiration, which so frequently accompanies miliaria when developed in the course of this disease; in this instance, however, the latter symptom has not yet exhibited itself. The urine begins to form sediments, but its reaction is not very acid.

In our treatment, we shall principally have to direct attention to the affection of the heart; we shall, therefore, apply a strong mustard poultice on the cardiac region; and for internal use, partially in order to moderate the fever, partially to facilitate the urinal crisis, we shall prescribe: ℞ Infus. herb. digit. (℈j) ℥vj., mucilag. salap ℥ij., vin. semin. colchici. aq. amygd. amar. sp. æth. nitr. ää ʒij., syr. simp. ℥i., Mix. A table-spoonful to be taken every hour.

November 10th.—The phenomena of the joints continue at pretty nearly the same degree, but their intensity is by no means alarming; the locality of the affection is, however, a somewhat dangerous feature, since it is principally the joints near to the head that are affected, this being always a more unfavorable symptom than where the joints more remote from it are attacked. The cardiac symptoms are more moderate; there is no longer that feeling of anxiety; no palpitation of the heart; an improvement is also perceptible in the local phenomena: the impulse of the heart is weaker; the frictional noise has quite disappeared; the bellows-murmur is still audible, but less intense. The fever, which had lost its sthenic character subsequent to the abstractions of blood, and assumed the character of *erethismus*, still maintains the latter, but in a more moderate degree (pulse 90 per minute). The urine is no longer of so dark a colour, nor does it contain so much sediment; it would, however, have been desirable if this approach towards the normal state of the urine had been accompanied with the secretion of a crystalline deposit, since we know that, otherwise, in *endocarditis rheumatica*, the valves of the heart are very apt to become affected—gouty concretions being as readily formed there as in the articulations. It must not, however, be forgotten that the want of this characteristic sediment in the urine is more frequently observed in women than in men, without its producing so pernicious an effect upon the heart; and that a thick and acid mucus (probably *cystine*) is frequently observed, instead of the crystalline sediment, in the urine of the former; combined with this, there is also frequently an irritating and acrid discharge from the vagina. The skin is certainly moist, but the perspiration is limited; it is of a strong odour, and has a very acid smell. There is as yet no symptom of the formation of miliaria. We shall continue the remedies prescribed yesterday.

11.—We have observed the disappearance of the morbid phenomena, which had reference to the external membrane of the heart; those, however, of the muscular substance and of the internal structure of the heart still continue. The affection of the joints has not experienced any material change; those of the right side only are ameliorated. The fever also maintains itself in the same degree. Finally, we have to notice another symptom, namely, "that more liquid stools have taken place since yesterday in place of the former pappy ones." We now learn that the patient had already suffered from diarrhœa previous to her reception in the hospital, but which yielded to an antiphlogistic treatment. Wine of colchicum, even when given in small doses, is capable of producing diarrhœa; but so long as only two or three intestinal evacuations take place daily, we shall not be obliged to discontinue it. The addition of opium has been proposed, in order to correct the purgative effect of colchicum; but it is by no means attended with as certain results as supposed. Taking into consideration that we have at present to deal with an epidemic state of the air; that the occurrence of typhus is very prevalent; and further, that the character of the fever in the patient, while it has lost the sthenic type, still maintains itself at a considerable height, although it stands in no proportion to the local affection, since the joints are not swollen, nor the skin covering them reddened; we shall now resolve to proceed more cautiously in the employment of the colchicum, and we shall, therefore, administer to the patient ℞ Infus. herb. digit (℈jss.) ℥vj. liquor. ammon acet. ℥iss. extr. aconit. gr. vj. syr. opiat. ʒij.—Mix. A spoonful to be taken every hour.

12.—No material change has taken place, which indeed was hardly to be expected. The most satisfactory feature is, that the phenomena of the heart continue to be decreasing; the sounds in the cardiac region have almost disappeared, and simultaneously with them the other phenomena; but the violent impulse of the heart still continues. It must be our principal object to keep the heart free. In such patients, in whom the beat of the heart continues exaggerated, one can never be quite certain that the irritation will not again extend itself from the joints to this viscus. The joints of the right arm are again more violently affected; the febrile symptoms are moderate; pulse elevated (88 per minute); skin moist, but secreting a truly colliquative perspiration, of a very acid smell towards evening, which is so frequently a prognostic of miliaria; we must, therefore, not proceed too energetically in the diaphoretic treatment; for this complication is to be apprehended, and with it the affection may readily extend itself from the articulations to the heart, and terminate in a rapidly fatal manner.

14.—The fears which we entertained from the commencement have now realized themselves. A miliary eruption, especially on the throat and chest, has now made its appearance. This eruption may always be apprehended, when the skin is found to be hot, and alternately dry and moist, attended with a simultaneous affection of the heart;* and this state always demands a limitation of the use of diaphoretics.

The eruption, in this instance, however, is not a forced one; for we have employed no violent diaphoretic; it is further to be observed, that the eruption of *miliaria* frequently takes place, in spite of antiphlogistics, and cooling remedies. I frequently observed this at Würzburg, in the years 1823-25, where it exhibited itself, even on the second day of the disease, notwithstanding the bleedings instituted. The physicians at Verona and Bergamo bear evidence to the same fact. This exanthema, then, sometimes makes its appearance in spite of all medical endeavours, as may be readily ascertained on perusing the documents respecting the mortality of localities where miliary epidemics have been prevalent.

November 15th to 18th.—The eruption of the

---

* Another symptom indicative of miliaria consists in "*the sympathetic sensation of palpitation of the heart*," of which Schönlein expressed himself as follows, while speaking of another patient suffering from rheumatism of the joints.

"It has been stated to be a novel discovery that inflammation of the heart combines itself with acute rheumatism. Bouillaud, as is well known, has laid claim to this pretension; it is, however, a very old theory, which long ago found its way from Italy into the north. Although it is very desirable to direct attention to this fact, and to draw the inference from it, that it is always necessary to examine the heart in this disease, even when the patient does not make any complaints respecting it; yet an injurious error had arisen therefrom, as it had led to the conclusion that an organic affection of the heart is *always* combined with acute rheumatism, and, as a consequence, that blood must *always* be abstracted. Cases, however, have frequently occurred where the patient has sunk in consequence of these abstractions of blood, and where the medical man, to his subsequent horror, did not find any trace of this alleged inflammation of the heart. Cardiac symptoms sometimes occur in this disease, (besides carditis, pericarditis, and endocarditis,) which are not at all of an inflammatory nature, and which are attended with extremely dangerous consequences, when abstractions of blood are employed against them; they constitute a state which has been termed *enervation* of the heart, and which may be considered as a forerunner of the eruption of miliaria. The patient complains of oppression of the chest, difficulty of breathing, violent palpitation of the heart, &c.: but these are purely sympathetic phenomena, since, on examination of the heart, we find no trace of organic disease within it. This phenomenon reminds us of a similar one, which occurs in chlorotic girls. It is of the highest importance, in a practical view, to distinguish this state of enervation from inflammation of the heart; whilst inflammation demands copious abstractions of blood (although not in such rapid succession as Bouillaud advocates), this state of enervation requires the very opposite treatment: counter-irritation of the skin, and remedies acting upon the kidneys and intestines. The circumstances upon which the diagnosis is based, are not difficult to be understood:—firstly, the periodicity of the pulsation of the heart during enervation, whilst it is permanent during inflammation, though differing in its intensity. Secondly, the local series of symptoms: the stethoscope, during enervation, shows only rapidity of the pulsatory beat, but no increased impulse, as in inflammation of the heart, nor the sounds which are perceptible in pericarditis or in endocarditis. Thirdly, the other phenomena, which indicate the miliary eruption, are colliquative perspirations of a very acid quality, which appear suddenly, and as quickly disappear again. Sometimes, also, we find a circumscribed miliary eruption in isolated localities of the body, especially on the throat. These, finally, are sometimes accompanied by symptoms of angina, of a more or less intense nature, as in other acute exanthemata."

miliaria, and also the affections of the joints and of the heart, are gradually disappearing under the continuance of the former treatment, and sponging the body with a solution of potass.*

November 20th.—Remarkable changes have taken place in our patient within the last few days: there is now great depression; excessive irritability of the nervous system; weeping on the slightest occasion. Soon afterwards, the idea took possession of her mind that she was going to be poisoned; she therefore declined every beverage; she also, from time to time, began to cry aloud and to rage; on which account we were compelled to place her in the delirium ward.

No affection of the brain, however, nor any inflammatory symptoms, could be traced during this psychical disturbance; the febrile symptoms had disappeared, as also the affection of the joints. Last night she had more rest; she, however, immediately relapsed again into her former state. It may here be mentioned, that a moral cause had acted powerfully upon her, (she was lying next to a female patient, who had poisoned herself by sulphuric acid); yet this does not satisfactorily account for the fact. The form of the mania is, however, altogether a secondary consideration. There are two circumstances existing by which this peculiar form of mental derangement might be explained; and the only question is, which of the two deductions is the correct one, since it has some influence over the prognosis as well as the treatment? The one consists in the supposition that the mental derangement is the effect of the remedies applied, viz., the colchicum and aconite, which have been given for some days; and taking it in this point of view, the psychical disturbance would be of a less formidable nature. I must confess that I have repeatedly observed such a psychical derangement subsequently to the use of colchicum, and that more frequently where it had acted least upon the intestines. I particularly recollect the case of a journeyman barber, of some twenty years of age, who was suffering from acute rheumatism, and where the most violent delirium took place, without the slightest feverish symptoms, after having continued the use of the vinum colchici, in no very large doses, for four days. (Miliaria was also present.) The delirium continued for forty-eight hours subsequent to the colchicum having been discontinued; some doses of opium were administered, and sleep took place, from which the patient awoke perfectly recovered. I have also observed that heaviness of the head, a sensation of pressure in the region of the forehead, and uneasy sleep, are the usual forerunners of this state, and, on their appearance, it is advisable to discontinue the use of the colchicum. The mental derangement, in our present case, is probably not to be attributed to the use of this remedy, as it has acted upon the intestines, and has already been discontinued five days ago. No observations occur to me, at present, as illustrating the point whether aconite also may not have a similar effect; it is doubtful, at all events, in this case, as all the secondary narcotic effects of it are wanting. Another solution of the enigma might be found in the following fact: It is well known what an influence affections of the heart exercise upon the mental faculties; Nasse, in Bonn, has proved that the origin of a great portion of mental diseases is to be attributed to disease of the heart, although he has somewhat exaggerated this doctrine. The public at large are in the habit of saying, "that is a soft-hearted fellow." We, in this instance, have had to deal with a decided affection of the heart, although not exactly with a softening of it, for the increased impulse speaks, on the contrary, in favour of a thickening or hypertrophy of its walls. A softening of the substance of the heart is, however, not the only affection which is accompanied by mental derangement; for the latter is a concomitant of all affections of the heart, manifesting itself in the patient, however, at first, merely by anxiety and uneasiness, but which are gradually increased to delusions of a more or less alarming character. The solution of the question would, therefore, also be possible in this way. The prognosis, according to these two conclusions, will, however, be different. For, if the psychical disturbance is a consequence of the medicines administered, it is of a transitory nature; if, however, it is a consequence of the affection of the heart, then it is permanent with the latter, and is beyond the reach of medical art. The treatment is naturally, also, different in these two cases; cold fomentations of vinegar should be applied in the former instance; opium should be administered, with camphor and other diffusible stimulants; these remedies, however, are not available in the second case. Reasons may be adduced both for the one and for the other view. The effect of the remedies, and the duration of the affection, will afford information on these points, and soon enlighten us as to the pathogeny of this mental derangement. We shall, in the case before us, act as though we had to deal with a medicinal effect, since the remedies, necessary against the latter, cannot act injuriously, even if the disturbance should have its origin in the second state.

December 1st.—The continuance of the mental derangement, as also the absence of benefit from the remedies applied, prove sufficiently, that this state cannot be attributed to the medicines employed, but that it must be considered as consequence of the affection of the heart, left as a *sequela* of the former rheumatic attack. The mental derangement manifested itself principally in paroxysms, and had evidently decreased within the last few days, when a new attack of rheumatism of the joints suddenly exhibited itself last night, as well in the vertebræ of the neck as in the finger-joints. There was also, again, a considerable increase of fever simultaneous with this, and the symptoms of the affection of the heart augmented. The affection of the joints has again disappeared this morning, but the fever continues, and the patient has passed several watery stools.

Prescription.—Emulsio oleosa, with aq. laurocerasi, and liquor ammon. acetat.

December 4th.—The rheumatism, after a short duration, has again entirely disappeared, but the fever continues. On the former attack, we observed a formation of miliaria on the skin, and a similar exanthema seems to have formed itself now on the internal mucous membranes; for we find aphthous ulcerations in the cavity of the mouth; the diarrhœa also continues; the same morbid process, therefore, which we find on the mucous membrane of the mouth, has also probably developed itself on the intestinal mucous surface. If the formation of miliaria on the skin is a dangerous feature, its appearance on the intestinal mucous surface must be such in a much higher degree; the fever has now, also, assumed the typhoid character.

Prescription.—Against the affection of the mouth, cleansing with a solution of borax and honey of roses; internally, emulsio chinata, with liq. potassæ.

The fever, however, increased, and the diarrhœa continued, whilst the sensorium appeared to be free; pneumonic symptoms combined themselves with those already described, and the patient expired, after a long struggle, on the 7th December.

Post-mortem Examination.—The brain was not congested, nor did it present anything anomalous in any part. Distinct hepatization was exhibited in both lungs, in their inferior lobes. The heart was enlarged in volume, the walls of the left ventricle being greatly thickened; large deposits existed on the valves of the aorta. The liver was considerably enlarged, but normal in its structure; there was nothing else abnormal in the abdomen.

* Schönlein particularly recommends the application to the skin of a *solution of potass*, when the eruption of the miliaria manifests itself; this he considers as the best remedy to prevent the dangerous recession of the exanthema, and he by far prefers it to the transitory external irritation of the skin, recommended by the old physicians, or to heaping warm clothing on the patient; he also considers it preferable to the use of camphor, or the preparations of ammonia, which, by over excitement, may readily produce a loss of function in the skin. For, these baths neutralize the acid, which has been secreted on the skin in excess; and they produce, at the same time, a degree of irritation which prevents the receding of the eruption. An ordinary solution of wood-ash may be used for this purpose, or one of caustic potash,—from ʒj to ℥ss, to a pound of water; in the commencement, the bath should be used lukewarm, gradually proceeding to one cooler. The susceptibility of the skin must determine the strength of the solution, as it is necessary that a gentle prickling or stinging sensation should be produced on the skin, subsequent to the bath. The more profuse the perspiration, the more frequent should be the repetition of the bath; the patients themselves, however, by their feelings, are generally the best judges of that. The exanthema very rapidly terminates in desquamation on the application of the solution of potash.

ON THE PHYSIOLOGY OF HEALTH AND DISEASE.

APPLIED TO ANIMALS AND VEGETABLES, BUT MORE ESPECIALLY TO MAN.

By M RASPAIL.

3° *Genus:* Ascarides (*Ascaris*).

First species: *Ascaris Vermicularis* (Lin).—*The ascaris* is a small filiform worm, of a snow-white colour to the naked eye; varying in length according to its age, though never exceeding half an inch. We often see it in the liquid human excrement, twisting itself into a serpentine form, and swimming along the surface of the fluid to save itself from the asphyxia which menaces it when removed from contact with the air. This worm presents three well-defined regions: 1° the anterior or thoracic region; 2° the abdominal region; and 3° the caudal region. Though so thin and so transparent in appearance, this insect is endowed with an almost horn-like rigidity; on raising it out of the liquid with the point of a needle, it seems as though it would break rather than bend. The cause of this rigidity resides in four longitudinal and equidistant muscles,—species of bands or seams more opaque than the rest of the dermis, and which extend from the head to the very extremity of the tail. The whole of the tissues of the animal seem to be perfectly transparent, with the exception of the muscles and the ovary. The prominence of these four tendons or muscles gives to the body of the worm a slightly tetragonal form. From the arrangement of this muscular apparatus, we may conceive that the motions of the animal must be of an undulatory or spiral character. Its tail, which is stiff and pointed, and by means of which it is enabled to affix itself upon the living tissues, is articulated with the body in such manner that it can be bent at right angles. The dermis which fills up the intervals between these four muscles is of a horny consistence, composed of flattened cells, of a parallelogramical figure, the interstices of which form a vascular network, similar to the epidermis of a host of monocotyledonous plants; but with lines more developed in a transverse than in a longitudinal direction, and which form so many rings or segments (about the seventieth part of a *millimetre* in thickness) offering great resistance to cutting instruments when applied lengthwise to the body. This dermis, moreover, presents a chemical analogy with the epidermis of the graminaceæ. In fact, we have established elsewhere that the tissue which forms the epidermic layer of the straw, is there combined with silica which renders it in some measure impermeable. Now, it appears that there exists something similar in the reticulated epidermis of the *vermicular ascaris;* for this worm when plunged into liquid ammonia, or into concentrated sulphuric acid, is preserved in these fluids, as in pure water, at least for the space of forty-eight hours, now this could not take place, even for the short space of a minute, in these menstrua, if the tissue of which we are speaking were of an albuminous, or even of a mere horny nature. But if, on the other hand, we eviscerate the worm, before plunging it into these reagents, we shall instantaneously perceive the destruction or dissolution of all the internal organs—the ova, the ovaries, the digestive canal, &c., which previously were protected by the insoluble and impermeable epidermis against the corrosive action of the alcaline or acid menstrua.

The alimentary canal is dilated at its commencement into the œsophagus, before communicating

with the stomachic pouch, which is a mere spherical ball; then comes a pyriform pylorus, or rather an organ of duodenal digestion, which is shortly contracted into a cylindrical, rectilinear canal, terminating without circumvolution in the anus. Here commences the tail,—a mere organ of locomotion and of perforation. The opening of the anus does not appear distinct from that of the vulva, according to our means of microscopical observation. As to the internal organs of generation, they occupy the whole abdominal region, that is to say nearly three-fourths of the entire length of the animal. One might say that this creature is but a long ovary provided with a head and a tail,—a mere bag of ova. In fact, when we cut the *ascaris* through the middle, we see myriads of ova escape from its interior. The ovary is double, and each lobe is divided, by a constricted line, into two portions: the one superior and which seems to correspond more especially with the ovary; the other inferior and which corresponds to the uterus. Close to these two lobes, we may remark two unnamed organs, which have the appearance of two sessile kidneys, although, perhaps, they are but spermatic organs; for these helmintha are hermaphrodite. Under the microscope, this worm offers the most varied aspects, according as it is observed at a more or less advanced stage of gestation; after the expulsion of its ova, it would appear to constitute a species distinct from the same individual when observed on the eve of parturition. The ova are of an ovoid figure, and slightly protuberant. Their surface seems to be covered with granulations, and they might at first sight be taken for granules of fat. They aspire with avidity the air which surrounds them; for, if left for an instant without liquid upon the object-glass of the microscope, and then covered over with a stratum of water, we see immediately formed, in the midst of them, dark bubbles, which one cannot fail to recognize as bubbles of air. When plunged into sulphuric acid, the ovum spreads out and becomes clearer; and, by means of its transparency, we may distinguish internally three concentric zones, the most external of which corresponds to the chorion, the next to the amnios, and the internal one to the embryo; at the same time, the tissues acquire a carmine colour,—a circumstance which denotes a mixture of albumen and of sugar. We can estimate pretty accurately the number of ova which will be contained in the ovary of an *ascaris* one *centimetre* in length;—an ovary, as we have already said, which occupies a length of about seven *millimetres;* now, allowing the ovum to be a twelfth of a *millimetre* in length, we shall have a sum of eighty-four transverse rows of ova. I do not think I exceed the bare fact in admitting thirty-six ova to each row; for I have been able to count as many as thirty-eight upon a line equal to the breadth of this worm. According to this view then, the entire ovary would contain about three thousand and twenty-four ova. Now, consider the morbid effects which must be induced by this immense assemblage of insects, excluded at a single birth. thus to seek their own nutriment and prey upon the intestinal surface.

Manners and habits of the vermicular ascaris.—The vermicular ascaris does not live, like some larvæ, in the human excrements; we never find it either alive or dead in the centre of the excrementitious mass; it quickly perishes when plunged into the liquid stools; it dies in warm, and still more quickly in cold, water; its death is less speedy, if it be allowed to swim upon the surface of the liquid stool, or if it be merely moistened with water, not submerged, while on the object-glass of the microscope. The intestinal canal of the ascaris seems always colourless; now, if it lived upon our excrements or on the substance within the alimentary passages, its intestinal canal would be plainly delineated along the whole length of the body (presenting colours as variable as that of our food) by reason of the transparency of the tissue of the dermis. We thus see the *strongylus*, which lives within the blood-vessels, possessed of a red-coloured intestinal canal; in like manner, the intestinal canal of the louse may be traced, through its body, by the red colour of the clots of blood which it has sucked up.

The structure of the mouth plainly indicates that the animal affixes itself to the walls of an organ, after the manner of the leech; that it nourishes itself by the mechanism of suction and of aspiration, and not by means of solutions of continuity; in a word, that it does not tear our tissues, but drains them, so that the liquids which it digests are always colourless and lymphatic; that if the surface to which it affixes itself is poor in juices, and the aspiration of the parasite take place on tissues which are already drained, it may, by plunging its stiff and pointed tail into the substance of the walls, penetrate as far as the layers of turgescent cells, and thus enable its sucker to arrive at liquids, which the previously drained and exhausted surfaces had refused to it. This minute animal cannot cause a serious hæmorrhage, but simply a colourless exudation, or probably a bare tinge of blood, if the tail of the insect has chanced to stray through the wall of an artery, or of a vein. On giving a more marked attention, we shall perceive that the extremity of this horny tail is twisted into a spiral form, like a cork-screw. When the animal moves itself in the stools, we may see it swim backwards with the same facility as it advances; it describes a series of spiral turns, and passes through the liquid, like a screw in a box. It is then evident, that by virtue of this mechanism, the worm may penetrate through the membranes, in which it fixes its tail, simply by continuing to thrust it forward; and that it may thus pass through the membranous partitions dividing one cavity from another. Now, this passage would leave no trace of perforation accessible to our modes of observation, any more than would that of one of our finest needles; and we possess no needle of such fine dimensions as this living needle which is so greedy of our juices. The *ascaris* is hermaphrodite; every individual is provided with an ovary and with ova. But it would seem, that, like the *limacca* and the *univalved mollusca*, these worms are unable to fecundate themselves; for this purpose they are obliged to couple with others of their own species, each acting in turns both as male and female. At this period of excitement, they seek one another with great eagerness, but without distinction of sex; in fact, they have no distinct sexes amongst them; and they may frequently be seen in the alvine dejections, coupled together in great numbers, and rolled one around another in a spiral form.

The vermicular *ascaris* is not viviparous, like some other helmintha, more particularly the *strongyli*; it deposits its ova; but these ova preserve their germinative virtue without the human body, upon the soil, within our utensils and on our linen, and are thence scattered through the air like dust, or the finest particles of flour. These ova may then be again received into our body, through the vehicle of the respiration, or along with our food, and that in spite of all the cleanliness that may be employed to guard against it. We cannot, therefore, impress it too strongly on such as have the care of children, to be particular in burning, or destroying by the addition of alcalis, or such like substances, the worms which they may extract from the anus, or which they may observe in the stools; and, it is in this manner, that the filth which is left to dry and reduce itself to dust at the foot of the walls near our dwellings, becomes, perhaps, more dangerous in this pulverulent form than under that of the miasms engendered by its putrefaction; it is, under this physical form, that contagion flies, so to speak, on the wings of the wind. We must not, however, suppose that the *ascaris* naturally lays its ova in the products of defecation, or renders our excrements the depositaries of a fœtus which is unable to live there; on the contrary, there are no animals more careful for the provision of their progeny, than those at the bottom of the scale. It is only in the act of dying, that the *ascaris* excludes its ova out of the human body. I have examined minutely, with the microscope, the liquid and solid stools of persons in whom I had previously ascertained the existence of *ascarides*, but I have never observed in them anything similar to the ova of these worms. We must then, of necessity, admit that the parasite consigns the incubation of its ova to the tissues on which it feeds itself; and, for this purpose, the organization of its tail, as well as the po
serve it admirably. In fact, whe
plunged at a right angle into the
testinal surface, the worm has o
for them to pass of themselves from the vulva into the hole formed by its tail, and which is kept gaping by the undulatory movements of the insect.

Morbid Effects of the Vermicular Ascaris.—1° The vermicular *ascaris*, nourishing itself entirely by the mechanism of suction, must act on our tissues after the manner of leeches; it aspires the juices, drawing them towards the surface upon which it affixes itself, and thus determines, upon the point which it occupies, a more or less intense rubefaction, according to the nature of of the tissues and the time during which the insect remains there. But the suction of so small a being can produce no appreciable hæmorrhage, although its buccal orifice be provided with the same cutting blades as that of the leech, because the epidermic membrane, which clothes the mucous lining of the alimentary canal, is still too thick to allow so small an apparatus to perforate as far as the capillaries. If the invaded tissue be more lymphatic than sanguineous, the tumefaction which results from the suction of the worm will assume the characters of a pustule, a tumour, a phlyctæna, a tubercle, &c. according to the variable circumstances of the ultimate structure of the tissue.

2° This abnormal elaboration will be liable to give rise to abnormal tissues, when it shall be established upon a region favourable to their development; that is to say upon every region, removed from the drying action of the wind which stifles development in its germ; for, as we have already established, normal nutrition is repaired only by a new supply; it creates tissues in the place of those which have grown old, and which fall off; it forces outwards the exhausted tissues, the tissues of the periphery, by exciting development in the more internal tissues, which become old in their turn: an incessant succession of internal generations, in which the older structures serve to protect those of recent formation; in which the new are developed at the expense of the old; where, in fine, life may be said to be the parasite of death. Abnormal nutrition will then create abnormal tissues at the expense of the normal structures; drawing the blood around the stationary cells, it will bring an unaccustomed vitality into their hitherto barren interiors; it will fecundate them successively into organs whose evolutions will be marked by the characters imprinted on them by their primitive structure: tumours, bubos, spots, fibrilæ, expansions, false membranes,—all abnormal tissues capable of uniting the most heterogeneous surfaces, and of obstructing the largest canals of our bodies.

3° We have spoken of the local action of the vermicular *ascaris:* but from this local action may arise a general and morbid influence, the activity of which will extend itself to the whole economy. As the *ascaris* nourishes itself after the manner of the leech, we cannot better explain our meaning than by taking the mode of action of the latter as a term of comparison. Now, the suction of the leech produces a totally different action to that of bleeding; bleeding does not intervert the course of the circulation; it merely opens a new egress to the venous or returning blood; it partially empties the canal, but does not drive the liquid back towards its source. When attracted, on the contrary, towards the surface by the force of aspiration, the circulation changes in direction; the venous and arterial blood being drawn suddenly towards the same point, an inverse impulse is imprinted on the normal direction of the circulation, the vein becoming an artery, and the artery a vein. By means of the cupping glass, the blood is gradually made to abandon the regions upon which diseased aspiration had drawn it, and to flow back towards the surfaces by which a salutary discharge may take place. From this moment, the heat, which the circulation had accumulated in the internal organs of the body, is carried towards the periphery, thus causing as an immediate result the re-establishment of a temperature favourable to the elaboration of the tissues. But, if the application of the cupping instrument took place upon the internal surface of the organs, upon that,

for instance, of the intestinal canal, all the consecutive effects of its application would be manifested in an inverse sense; the heat, and the circulation which engenders it, abandoning the periphery of the body, would be carried, by reason of the energy of the action which attracts them, upon the organs where their accumulation would be fatal; the skin would become cold and contracted, in consequence of the contrast with the heat which would consume us internally, as well as from the approximation of the dermic papillæ which were previously kept dilated by the habitual heat; and, from this moment, every thing would be deranged in the economy; sensations of heat and cold would succeed one another alternately, in our organs, according to the interruption in the suction of the vampires thus devouring us internally; that is to say, according as they shall rest after having feasted themselves, or as they shall, when famished, reapply themselves to their work of destruction; in fine, fever would be induced, with its train of variable disorders, and which would change in name and in seat, with the simple displacement of a cause, capable, if I may so express myself, of transporting the pulmonary aspiration upon organs of an entirely different function.

4° But an abnormal activity of this nature having been thus artificially transported upon surfaces destined to feed, by their digestive elaboration, all the other systems of organs in the human body, emaciation of the non-invaded organs will be its immediate consequence: then marasmus, and even wasting away of the invaded organs; for all the products, ordinarily destined to the general nutrition, will eventually pass to the direct profit of the parasites, which will thus become prodigiously multiplied.

5° On the least interruption to the artificial action which supports the life of these abnormal developments, each of these superfœtations will sphacelate and decompose; the stationary and extravasated blood will become discoloured with pus, and the pus will undergo the putrid fermentation; gangrene will gradually attack these vegetations which life shall have ceased to support, and the death of these accessory developments will become a poison to the normal tissues which they shall have invaded.

6° The irritation of the caudal point of the *ascaris* will give rise to a disengagement of the various gases inseparable from every species of fermentation. The air, with which the irritated tissues were normally impregnated, will pass through the passage which is opened to it, and will diffuse itself in its natural state over surfaces which should receive it only when elaborated and strained through the surrounding cellular tissue; but these gases when thus imprisoned in a tube, whether distended by liquid or by solid fæces, will obey the laws of specific gravity; they will pass upwards through the solid and fluid matters, giving rise in the intestines to borborygmus, *gargouillement*, or a gurgling sound, which will e modified on auscultation, according to the modifications of the fæcal matter.

7° Hence the distension or *meteorismus* of the intestines, the mechanism of which, being already morbid, will become complicated with still graver accidents, if the gases should be composed of sulphuretted hydrogen, or of ammoniacal phosphurets and sulphurets: that is to say of gases capable of bringing about a poisoning upon sound surfaces, and still more quickly upon surfaces which are already decomposed and injured by numerous solutions of continuity.

8° While estimating the phenomena produced by the suction or irritating action of the *ascaris*, we should not fail to take into account the chemical nature and intimate structure of the invaded tissues. It is evident, in fact, that the puncture of the caudal point of the *ascaris*, when performed on a purely adipose tissue, will give rise to results very different from those of the same stimulus, when applied on a sanguineous or lymphatic tissue, or when affecting the papilla of some nervous filament. The same cause of disorder, then, will not produce the same morbid accidents, in persons possessed of *embonpoint*, as in those who are naturally thin and skinny; we may readily imagine that in the latter, in whom the nervous papillæ of the intestinal surface are more exposed, the irritation of the caudal point of the *ascaris* will induce all the symptoms of neuralgia in its various degrees of intensity; it is thus that the prick of a needle will cause such violent pain in one person, whilst in another it may penetrate unperceived almost to the very bone.

9° It is believed even in the present day, in spite of all the facts which have been urged to the contrary, that the seat of the vermicular *ascaris* is peculiarly in the *rectum*; yet the *archives* of science bear ample evidence that this worm may stray into other parts of the alimentary canal. We may conceive that this vampire shall affix itself to the surfaces of the stomach, whence it will with facility crawl up the œsophagus; and, if such be the case, we can hardly refuse to admit the possibility of its introducing itself, and living for a longer or shorter time, within the nasal cavities, the respiratory passages, and even the biliary duct and its ramifications: thus becoming a cause of gastritis or gastric derangement in one person, and of gastralgia in another, more particularly at the period when the *ascaris* shall begin to breed within the stomach;—of enteritis and diarrhœa, when its ravages shall extend along the duodenum and the surface of the small intestines;—of colic and tympanites when the worm shall germinate in the interior of the colon;—of jaundice, ascites, &c., when, affixing itself to the surface of the biliary duct, it shall, by the formation of parasitic tissues, intercept the communication between the gall-bladder and the small intestines to which the bile is directed;—of laryngeal disease, if it introduce itself within the larynx; of catarrh, bronchitis and asthma, if it advance still further within the trachea or affix itself upon the lining membrane of the bronchi; of pulmonary phthisis, if it locate itself upon the surface of the respiratory cells; and of hepatization of the lung and peripneumonia, if it penetrate within the spongy tissue of the organ;—of coryza and affections of the nasal passages, if it ascend, behind the velum of the palate, into the cavities of the nose;—lastly, of ophthalmia and diseases of the eye, if it attach itself to the conjunctiva or become introduced within the interior of this organ. Such are the consequences of the premises we have established; when once we have admitted that these worms may find their way into all the cavities of the human body, we can no longer refuse to acknowledge that they may become the authors of the whole train of morbid symptoms above described.

10° We have already shown, that by means of the spiral movements of its pointed tail, the vermicular *ascaris* has the power of penetrating with facility into the substance of our soft tissues, and of passing through them, without leaving behind the slightest trace of its perforation. If then it happen that the interior of the alimentary canal shall not present a medium favorable to its alimentation or to the circumstances of its propagation, the *ascaris* can readily emigrate into the interior of the other viscera of the human body: it may affix itself upon the surface or within the substance of the mesentery and the peritoneum, the liver, the kidneys, the spleen, the bladder, the uterus, the Fallopian tubes, &c., there occasioning, by its presence and the influence of its suction, abnormal and parasitic developments:—effects, however, which will of necessity depend entirely on the nature of the organs, the duration of invasion, and the habits and physical constitution of the authors of these multitudinous evils.*

* The following curious fact is mentioned by M. Raspail in connection with this subject; he says "I was for a long time affected with acute pains in the bowels, and more especially in the stomach, which I was satisfied were produced by the presence of *ascarides*. One day, I accidentally swallowed, during one of these fits of pain, a glassful of camphorated water; I immediately perceived, in the stomach, a sensation as of myriads of these vampires abandoning their hold, and directing themselves *en masse* towards the pylorus, to escape the action of the ingested medicine; my stomach was alternately contracted and dilated by a peristaltic movement, and the pain instantaneously ceased. But this relief was not of long duration; the pains gradually returned, commencing at the pylorus and extending towards the cardiac region. Another glassful of camphorated water dispersed them as quickly and with the same sensations as before. I continued to relieve myself in this manner, for some time, and then took a dose of castor oil which caused the evacuation of vast numbers of these worms. I was subsequently led to think that I might act on these insects, while still in the intestine, by applying upon the abdomen an alcoholic solution of camphor; I had, previously, proved with what facility a solution of this kind penetrates into the deeper-seated tissues of the body. Now, this supposition was confirmed by experience. In fact, as soon as I perceived the least titillation, in whatever locality of the abdominal region, I could immediately make it cease by the application of a compress saturated in some camphorated spirit; and I could thus, at will, chase the pain as it were from point to point. It became then evident, that with the vapour alone of camphor I could obtain the same results, when applied to organs to which it could be administered under no other form: for instance to the lungs; for the vapour possesses all the properties of the solid particles.

LECTURES ON THE ANATOMY AND PHYSIOLOGY OF THE EYE,

FORMING PART OF THE COURSE OF LECTURES ON ANATOMY AND PHYSIOLOGY, DELIVERED AT CHARING-CROSS HOSPITAL.

By T. WHARTON JONES, F.R.S.

Lecture V.—February 22, 1844.

Having now described to you,—

1° The *choroid*, with the capillary net-work on its inner surface, known by the name of the *tunica Ruyschiana*.

2°, The membrane on the inner surface of the choroid, composed of cellules, containing the black pigment, *membrana pigmenti*.

3o, The retina, with its exterior columnar stratum, which, in the state altered by water, then forms the *membrana Jacobi*,—you are now in a condition to hear an explanation of the discrepancies and contradictions which have existed among anatomists and physiologists in regard to the so-called membrane of Ruysch, the membrane of the pigment, and the membrane of Jacob.

Though these three parts are distinct and separate existences, the membrane of the pigment has been mistaken for the membrane of Ruysch.

The membrane of Ruysch in the one case, and that of Jacob in the other, having been overlooked; again, these membranes being recognized, the membrane of the pigment has been overlooked as a *membrane*. To add still farther to the confusion, the tapetum lucidum, which exists in the eye of some of the mammifera, has been described as a new and separate membrane between the choroid and retina—the membranes of Ruysch, of the pigment, and of Jacob, being wholly overlooked.

The recapitulation, to-day, included a careful demonstration of the membrane of Jacob,—Mr. Jones then proceeded to the humours of the eye.

The humours or lenses of the eye are three; the vitreous humour, the crystalline body, and the aqueous humour.

The vitreous and crystalline bodies have consistence sufficient to retain their form after they are removed from the interior of the eyeball. The aqueous humour is a mere fluid, the form of which depends altogether on that of the cavity in which it is contained.

1. *The Vitreous Body:*—

The vitreous body is situated immediately within the retina, and occupies the middle and posterior part of the interior of the eyeball, forming four-fifths of its whole contents.

Its shape is that of a reverse meniscus. The concavity which it presents in front, and which is called the *fossa hyaloidea*, serves for the reception of the crystalline body.

The vitreous body is of gelatinous consistence.

It is usually considered as being composed of a membrane called *hyaloid*; numerous processes of which extend into the interior, which enclose spaces communicating with each other. In these spaces is contained a watery fluid called the vitreous humour, and it is owing to the mode in which the watery humour is contained in the cells of the hyaloid that the vitreous body obtains its gelatinous consistency. That such is the structure of the vitreous body, however, is a matter as much of inference as of direct demonstration. Thus, when the vitreous body is punctured in different places, the watery fluid slowly drains away, but the mass which is left cannot well be shewn to be distinctly membranous. A membranous appearance, however, is presented by the vitreous body after prolonged maceration in alcohol,—the fluid being all drawn out by exosmose, the membranous basis only being left. Again, that the fluid is contained in cells, appears from the circumstance that when the vitreous body is frozen, it may be broken up into fragments of ice corresponding to the supposed cells.

The outer surface has a very delicate layer of *epithelium*.

In regard to the chemical composition of the vitreous body, it is composed of a large quantity of water about 98 per cent, a small quantity of extractive matters and salts, with a mere trace of albumen. This circumstance of the existence of so small a quantity of albuminous matter, shows that the membranous structure which remains after maceration in alcohol, is not mere coagulated albumen.

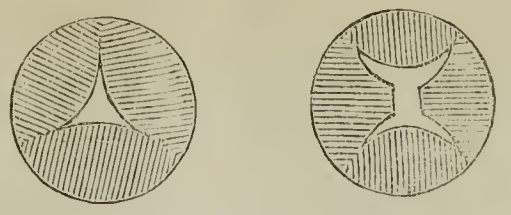
2. *The Crystalline Lens and its Capsule:—*

The crystalline body, as we have said, lies in the hyaloid fossa of the vitreous humour. It is a double convex lens. Its diameter is about 7·20ths of an inch. In thickness it is about half as much. Its axis is not exactly in the axis of the eye-ball, but a little towards the nasal side. The anterior surface is flatter than the posterior. The radius of the convexity of the anterior surface is much the same as that of the cornea—that is, 13-40ths of an inch. The radius of the convexity of the posterior surface, 9-40ths, or about two-thirds of the anterior surface.

[The capsule of the lens was here demonstrated.]

The capsule is a thin transparent structureless substance, resembling the membrane of Descemet. Its anterior wall is thicker than its posterior wall. The posterior capsule lies close upon the vitreous mass, and the union between them is intimate though capable of being dissolved by maceration. You see, when I puncture the capsule of the lens, that a liquid escapes: this is called the *liquor Morgagni*. It is thought by some to exist naturally, and, by others, to be a formation after death.

The fluid which you have just seen evacuated by puncturing the capsule of the lens, if examined microscopically, is found to contain nucleated cells, which form the outermost and softest, almost diffluent, part of the lens. After death the aqueous humour passes through the capsule by endosmose, and mixing with the soft outer part of the lens forms the so called *liquor Morgagni*. The lens becomes more and more consistent progressively from without inwards. With the exception of its outer part, which we have just said is composed of cells, it consists of fibres, the section of which is hexagonal, but elongated. They are about 1-3000th of an inch broad, and 1-19000th of an inch thick. These fibres are closely attached by denticutions to each other, side by side, a circumstance which is especially distinct in the lower animals, as first shown by Sir David Brewster.—By their union, such as I have described it, the fibres compose layers, which are situated one within the other, like the coats of an onion. In the composition of these layers, the fibres are so arranged and disposed that they extend from about the middle—say, of the anterior surface, curving round the circumferential edge towards the middle of the posterior surface; in fact, something like the lines of longitude in the maps of the world. It is to be remarked, that the fibres do not converge to points on the anterior and posterior surfaces, but to spaces of a certain size and peculiar figure—that on the anterior surface being usually like a triangle, with its angles prolonged into horns—that on the posterior surface something like a square, also having its angles prolonged into horns. The nature of the



substance contained in these spaces, has not yet been accurately made out. It seems to consist of cells, like the peripheral soft part of the lens. Leewenhœeck, who already knew this fibrous structure of the lens, thought that the fibres were wound up, like thread on a ball, in a peculiar manner.

Next we have the *ciliary zone*, or *zonula Zinnii*.

[Shown and demonstrated.]

It is about one-fifth of an inch broad, situated on the anterior part of the vitreous body, and formed of small striæ and folds, encircling the lens as it lies in the hyaloid fossa, like radii. It is the counterpart of the ciliary processes of the the choroid, with which it is dovetailed, the folds of the one being received into the interstices of the other.

On separating the connection between these two, the appearance called *halo signatus* is left. As to the structure of the *zonula*, it is composed of globules next the ciliary processes; under this globulous layer occur fibres, and between the two layers, named globulous and fibrous, are vessels. The globules are cystoblasts or nuclei, with one or two nucleoli, about 1-3000th to 1-4000th of an inch in diameter.

This globulous layer, together with the vessels, appears to be, as I remarked on a former occasion, the continuation of the globuloso-vascular layer of the retina. At the place where the ciliary processes and zone begin to be dovetailed and interlaced with each other, (*ora serrata*) the globuloso-vascular layer is included between them.

[The lecturer rendered this description very plain, by shewing the fingers of one hand interlaced with those of the other, having placed a handkerchief between the two hands.]

The fibres are very fine, about 1-20,000th of an inch in diameter.

In general, the fibres run from the outer margin of the zone towards the lens. They form the so-called *orbiculus capsulo-ciliaris* which is to the naked eye perceptible in the aggregate, although the component fibres are not so individually. Their nature is not with certainty known. They do not appear to me to be muscular, but are endowed with elasticity; and, as they are extended to the lens, they are probably concerned in effecting its accommodation to distances, as will be afterwards shewn.

Around the circumference of the lens there is a canal which may be inflated—*the canal of Petit*.

[It was here demonstrated.]

The canal of Petit is usually described as resulting from this arrangement: namely; the hyaloid membrane divides into two layers, of which one passes behind the crystalline body, lining the hyaloid fossa, the other extends, and is attached to the circumferential margin of the crystalline body. A prismatic space, Petit's canal, is thus left between them and the circumference of the lens. In regard to the first layer there can be no doubt, but that it is hyaloid membrane; but as regards the outer layer, the structure, such as I have described it, is that which composes the zonula ciliaris and orbiculus capsulo-ciliaris.

Chemical composition of the lens.--The lens, different from the vitreous and aqueous humours, contains a large quantity of albuminous matter; as much as thirty-five per cent. The remaining components being water fifty-eight per cent., alcoholic extractive, watery extractive, and salts about three per cent. The albuminous matter of the lens is not strictly speaking common albumen, but, according to Mulder, is a compound of fifteen atoms of protein, and one of sulphur.

The Aqueous Humour. — Of this there is little more to be described than the chambers in which it is contained. It is bounded in front by the cornea, behind by the lens, and at its circumference by the ciliary body and ligament. Its axis measures rather more than one tenth of an inch. Its shape is that of a meniscus. The aqueous chamber is divided by the iris into the anterior and posterior chambers.

The membrane to which I formerly referred as investing the pigment on the posterior surface of the iris, is continued on the free extremities of the ciliary processes which it invests, and is from them reflected to the circumference of the crystalline capsule. The aqueous humour of the anterior chamber has the shape of a plane convex lens, that of the posterior chamber of a plane concave lens. The chemical composition of the aqueous humour is much the same as that of the vitreous humour, only that the albumen is still less in quantity.

OBSERVATIONS ON MESMERIC AND HYPNOTIC PHENOMENA.

By JAMES BRAID, Esq., M.R.C.S., Edinburgh.

Continued from No. 238, page 32.

Of course such experiments would be of no value, unless performed on patients on whose veracity we could repose the most implicit confidence; but I have now repeated them on so many patients of both sexes, with like results, and on individuals on whose veracity I can confidently rely, that there can be no doubt of the fact. Here there is another grand source of fallacy regarding investigations into clairvoyance and mesmeric intuition. I have myself taught patients Greek, Latin, French, and Italian in this way, which they remembered quite correctly when again hypnotized, but of which they were quite ignorant when awake. Their great faculty for imitation whilst hypnotized, renders them very quick in catching the pronunciation; and the memory—that is, this double conscious, or second memory, seems to be very powerful

It, therefore, seems highly probable that much of what has been considered mesmeric intuition may be nothing more than the extraordinary conditions of memory referred to; at one stage revivifying waking impressions long forgotten, and at another this second, or double conscious memory, enabling them to remember impressions and ideas excited during this artificial sleep, of which they have never had any knowledge during the waking condition. Let these facts be kept in view, together with the extraordinary acuteness of the senses formerly pointed out, which enables them to detect physical changes, and conditions, and remarks, which all around (judging from the state of the senses in the normal condition) imagine to be impossible, and the power of detecting disease and prescribing for such, in this condition, may be far less marvellous than has hitherto been represented. In short, they may have acquired their knowledge through hints and observations dropt in their presence at different times, and of which neither the patients nor operators were aware when the impressions were made. As to patients, under such circumstances, predicting particular crises, especially spasmodic seizures, in their own individual cases, I think it highly probable that *such predications produced the results*—results which might not have happened, but for the impressions left by these predications. Many may be ready to admit this as regards a patient, who, in the vigilant state, has heard such oracular predictions regarding his future conditions. They may be ready to admit that imagination and memory might powerfully influence such patients, whilst they would deny the possibility of the somnolent patient being affected in a similar manner by such predictions. It is a well known fact, that many people can, before going to bed, determine to awake at an unusual hour (for them) in the morning, and shall awake almost to the minute. Now, it is quite as difficult to account for *this* result, as to suppose that during the state of somnambulism, an impression may be made upon the mind which shall become manifest at a fixed time, in the *waking condition*. In fact, many experiments are recorded confirmatory of this latter result—cases where patients have been made to promise, whilst asleep,

to perform some particular act, or go to some particular place at a time agreed on by both parties, and whilst the patients have entirely forgotten the circumstances when aroused, *they have had a vivid recollection of them when the particular period arrived*, and have performed their promises with care and punctuality.

It is important to remark, that in double consciousness we have a most beautiful provision, under Providence, to protect patients against the villainy which might be perpetrated against them by parties getting them to sign deeds, &c. whilst in this state; for although quite unconscious of this when awake, so soon as again rendered somnambulic, they would recollect all, and be able to give evidence against the perpetrators of such villainy.

When we consider the length of time the investigations have been prosecuted and the numbers engaged in it, I think every one must be struck with the small number of apparently satisfactory cases of clairvoyance which have been recorded. Comparatively few have met with them in their own practice. Then there is the acknowledged uncertainty of success, even the most clairvoyant patients being generally oftener wrong than right; whereas, were the answers from true perception, they ought always to be right. Then there is the vagueness of their replies, which are generally given in such prophetic language as may admit of different interpretations.

I think it is much to be desired that a series of experiments were instituted before an intelligent and respectable committee, who, fully aware of these various sources of fallacy, might investigate cases so as to ascertain what of the higher phenomena of the mesmerists may be real, and what erroneous. Of course experiments of this sort should be performed on *fresh subjects*, who should only be experimented on before the said committee, and thus the decision of such committee should set the matter at rest. It must thus arrest much of the prejudice which at present exists against a valuable curative means, owing to the alleged mysterious agency, and omniscient and omnipotent powers of this agency, as hitherto propounded by the mesmerists; for, I strongly suspect the extreme difficulty of the subject, and the numerous sources of error I have referred to, and which might be readily overlooked by those blinded by their attachment to a fascinating and mysterious theory, have led them to a belief in much more than can be fairly and truly realised by the volition—the unaided volition and simple contact of the operator. In such investigation, however, it would be quite requisite that the parties engaged in it should be as much as possible free from prejudice, candid and intelligent. Moreover, without considerable knowledge of *this* subject, they could be no more competent to test and form a correct estimate of what they witnessed (because of their knowledge of physiology and its phenomena in the normal state) than he who from being familiar with the common rules of arithmetic, should be, therefore, deemed a competent judge of the solutions of the most abstruse mathematical problems. In every other department of science, a thorough knowledge of *all* the states and conditions is considered necessary to warrant a person to give an opinion to be relied on; but, in the investigation of mesmeric phenomena, this pre-requisite qualification has been entirely and most unaccountably overlooked; and hence the conflicting statements which we continually meet with. Truth is sure ultimately to prevail, and the sooner we can determine what is true from what is erroneous, the better, whether it may accord with, or be opposed to, our preconceived notions and prejudices. I hope the proposal by the editor of *The Critic*, of forming such committee in the metropolis, may be carried into effect.

In my work on Hypnotism I have expressed the difficulty of accounting for the remarkable effects of a current of air in arousing dormant senses, and reducing the cataleptiform state, and I solicited information on this intricate point from any readers of that work. No one having ventured to hazard an opinion I beg to state what has since occurred to me as the cause.

In the normal state, whether whilst awake or passing into natural sleep, the attention is dissipated or diffused to a greater or lesser extent over the *whole* of the mental and physical functions, but, during a certain stage of hypnotism, there is a tendency to intense concentration of the attention to whatever function is called into action, and hence all the others merge rapidly into a deep state of torpor, ultimately far greater than what happens during natural sleep. Thus, only one function is active at any one time, and hence intensely active; and the rousing into activity of any dormant function must consequently be equivalent to suspending the one previously in action.

Moreover the impressibility of the sense of heat and cold *becomes exalted* whilst common sensation is *depressed*, so that whilst a limb may be insensible to pricking or pinching, it shall be slightly sensible to transitions of temperature so as to enable patients to perceive objects without actual contact. They are thus enabled, like the blind, to move about during their sleep without running against the furniture of an apartment however much disarranged. In this condition a waft of air directed against an elevated and rigid limb, by acting on the increased sensibility to heat and cold, instantly draws the attention to the function of the skin, withdraws it from the muscular sense, and thus the rigid muscles yield, and the member falls from its own gravity. The intense concentration of the vis nervosa on muscular action, which had energised and heightened this to the condition of cataleptiform rigidity, is thus arrested, a new direction given to it, and a correspondingly intense state of the cuticular function, or sensibility to pricking and pinching, as well as heat and cold, is the result of this simple waft of air. A current of air being directed against any of the other organs of sense arouses their sensibility for the same reason,—namely, that it directs the attention entirely to the function of the particular organs, which consequently becomes highly exalted, whilst that formerly in action is suspended.

When the patient has lapsed into that state in which the sense of heat and cold, as well as common feeling has become suspended, then those changes can be less efficiently and less rapidly effected. In this case the patient should be wafted over the face with cool air till partially aroused, when he may be acted on in the manner, and with results similar to those pointed out in the stage which has just been described. It ought never to be forgotten that during this condition the *patient acts under a peculiar state of consciousness and volition subject to definite laws, although, when awake, he may remember nothing of what he had done.* Even at the risk of being deemed tautological, I beg to repeat that the peculiarity I refer to is the great docility and tendency to imitation; vivid imagination and concentration of the whole attention to the subject in hand; and also the extreme acuteness of any of the organs of special sense when called into action. The consequence of all this is, that the patients perceive and obey the will of those present, by impressions on the senses which could not be perceived during the waking condition; and the intense concentration of the attention to the particular function in action, energises it to an extraordinary degree.

In the *Dublin University Magazine* for this month, I observe some remarks on the opinions and practice set forth in my work on hypnotism. I beg to thank the author of the paper for the handsome manner in which he has noticed my labours in this field of inquiry. Like many others, *he* alleges that I am naturally a powerful magnetizer, and that whilst I am holding an object for the patient to gaze at, I am unconsciously mesmerising him by the influence of my will and physical frame; and he adds, that were I to throw aside my lancet case, and mesmerise by the hand only, he has no doubt but I would produce effects which would surprise myself. In reply to this, I beg to state that, on innumerable occasions, I have operated by the ordinary mesmerising processes—including thumbing and staring, singly and combined; pointing; passes, near and at a little distance; willing the effect in the most intense manner, and at other times willing the patient should *not* sleep, but I have never witnessed any *essential* difference in the results. Nor could the patients themselves discern any, unless that my ordinary mode was more rapid and intense. We produce varieties by different processes, undoubtedly; and it seems to me that the great error with most experimenters has arisen from their not discriminating betwixt a *mere variety*, and *a distinct, or separate principle.* My ordinary mode of operating is decidedly the most rapid and intense, and the varieties which are afterwards elicited, I imagine, depend on the different modes of acting on the mind and body through impressions on the organs of sense. I have never myself produced any effect by *unaided volition*, and some of the most eminent mesmerists now make the same admission. Nor have I ever met with a case of decided clairvoyance or mesmeric intuition; but all the other phenomena of the mesmerists, and such as can be made available in the cure of disease, I can produce with much greater certainty and celerity by my own processes than by theirs; and I have tried both methods fairly. The author of the paper referred to not only alleges that I *un*-consciously mesmerise my patients during my hypnotizing processes, but he also attributes much of the benefit which patients derive from their ordinary medical attendants, to a transmission of a mesmeric influence passing, unperceived, from the body of the physician, to that of his patient, from their proximity during professional visits.

That a patient may derive much benefit from the *personal* attendance of a judicious and intelligent medical man, irrespective of the mere natural effects of the medicines he may prescribe, I am quite ready to admit; but, instead of attributing this to a *mesmeric* process, I consider it arises from the cheering influence of hope and confidence, which his presence, and manner, and conversation, may have inspired into the mind of his patient.

In like manner, the perusal of a letter may excite or depress the person who reads it, according to the purport of its contents; and, if received immediately before sitting down to a meal, for which he had a keen appetite, it may instantly destroy his appetite. Here, then, is a physical effect produced by a mental emotion. Is this the result of magnetism?—and, if so, how comes it so to act that no such effect took place from the *mere proximity of the letter*, but *only from the perusal of its contents?*

As an additional illustration, I shall here quote from your own pages a most graphic and judicious reference to the importance of psychical medicine. "The generality of medical men attach too exclusive an importance to the efficacy of the mere drug. They deal with people as if there were nothing psychical in them. If their diagnosis be correct, they write their prescription, and there is a stop to their operations. If part of the frame be diseased, there is no reason why the whole should not combine against the enemy. Faith saves physically as well as morally; and to lull the trembling mind to ease, is to stay the heart's rapid pulsations, to allay the blood's fever, and to stop life in its quickening flight, with strengthened wings, from the human tenement."

That the nervous sleep may be induced by the personal acts of the patient, irrespective of any influence, either of a mental or physical nature, from another individual, I have had abundant proof. I shall relate the particulars of three cases, all of whom hypnotized themselves, *for the first time*, at a distance of forty miles from where I was during the proceedings, and of whose intentions I knew nothing; indeed, one was a young lady whom I never saw in my life, and over whom I could not, therefore, be presumed to have any control. She proposed to hypnotize herself by a fixed stare, and abstraction of the attention. My family, who were present, urged her *not* to try such an experiment, but she reclined her head on her hand, as if fatigued, and in a very short time, to their surprise, they found she was decidedly hypnotized. The other was a young gentleman about twenty years of age, who, by a fixed stare at a point in the ceiling, speedily hypnotised himself. At a second trial, he lapsed so profoundly into the condition, and not being aroused at the proper stage, nor any of the parties present understanding

how to manage it properly, that two hours elapsed before he was restored to the waking condition. I have since operated on this gentleman, but I aroused him in a few seconds, which I accomplished by observing the progress of the case, and not suffering it to go too far. The third was a gentleman about thirty-five years of age, healthy and energetic, who hypnotized himself by gazing at a point of the ceiling of his own room, and having elevated his legs and arms, those present soon ascertained that they were rigidly cataleptiform. He has repeatedly done so since, with like results. I could adduce abundance of cases similar to these, and I would ask whose magnetic influence or volition produced the results ?

But, moreover, it is well known that there are many natural somnambulists, who become so in despite of their own will, as well as that of their friends. The same may be said of cases of catalepsy, which arise spontaneously in the course of disease. Now, as they frequently occur when no one is present with such patients, I would ask whose volition or magnetic influence is the efficient cause in *such* cases ? As already stated, that it is quite possible to produce varieties in the effects, by varying the processes resorted to for acting on the mind and body, I am quite ready to admit ; and I am equally well convinced that it is possible to act powerfully on many people by exciting their imagination, and leading them to believe that by personal contact and passes, they are being acted on *by some mysterious agency* : but, philosophically considered, they are mere varieties of the same principle. It is still an objective, or personal influence, and would not become efficient unless by the patient's belief, or compliance with certain conditions.

As many imagine that *excitement of the circulation* is a *necessary* consequence of being thrown into the hypnotic, or mesmeric state, I shall offer a few remarks in refutation of this erroneous notion. It may be made *either to excite or depress the force and frequency of the heart's action, according to the mode of management.* As a proof of its influence in *depressing* the circulation, and *promoting perspiration*, and *reducing febrile action*, I shall record the result of its application in three cases of severe scarlatina anginosa. On the 15th of Dec. 1843, I was requested to visit the family of Mr. C. I found his eldest son, who was fourteen years of age, suffering from an intense attack of scarlatina anginosa. The throat was much ulcerated, the rash partially visible, pulse about 150 strokes a minute, intense headache, considerable delirium, and a pungently hot and dry skin. His sister, four years of age, was in a very similar condition, only the pulse was a few beats a minute slower. I hypnotized both, and on arousing them, the mother, well aware of the difficulty of producing perspiration in such cases, was extremely surprised to *find both patients bathed in perspiration.* The pulse of the eldest, I found, was reduced to 110, and that of the younger to 118 ; the headache and delirium almost gone ; and the child, who had slept none for two nights, and was with difficulty kept in bed, in a quarter of an hour fell into a sound sleep, from which she did not awake for two hours. I prescribed the ordinary treatment in all other respects. The following day I found both patients with perspirable skins, the pulse of the eldest below 100, the sister's a little higher, and every other symptom satisfactory. I hypnotized them again on that and the following day, and nothing could be more satisfactory than the result, the convalescence being rapid for such severe cases of that disease ; and there was much less extensive desquamation than usual in such cases. A week after, a third member of the family, six years of age, was seized with the disease, and displayed similar symptoms to the others just recorded. I treated this patient in the same manner, and with like results ; namely, the immediate reduction of the pulse, and a flow of perspiration, with relief of headache. The case went on so much the same as the two last, that I deem it unnecessary to say more than that her convalescence was equally satisfactory.

I could easily adduce additional cases of an intensely febrile character, where an equally remarkable reduction of the pulse, and relief from headache immediately followed the operation of hypnotism, whilst the patient was made to recline and the muscular system was kept relaxed during the sleep, but I deem it unnecessary. The above were the first cases of scarlatina in which I had tried hypnotism, and I could not but feel gratified to find its extraordinary influence on the capillary circulation, so as to produce a profuse perspiration in a few minutes, in an intense case of such a disease. In fact, the force of the disease was instantly broken ; and, from being a formidable disease, by this simple process it was reduced to a mild and manageable affection.

PARISIAN INTELLIGENCE.

(FROM OUR OWN CORRESPONDENT.)

Paris, April 4th, 1844.

On Colica Pictonum.—Several patients affected with this painful disorder in the wards of Professor Piorry, furnished him with an opportunity of acquainting his audience with his ideas on so interesting and so difficult a subject : in so doing he arranged it under the following heads :—

1° *Organic Lesions.*—The accidents which take place in the digestive organs from the action of saturnine compounds, have of late days deservedly attracted the attention of practitioners; the more so as for a considerable length of time the disorder was studied only in an empirical manner ; and as pain was observed to be the most prominent symptom, it was considered to be a neuropathy. Some thought it was produced by an affection of the spinal nerves ; others by a phlegmasia generated by the leaden emanations ; but, at a later period, as it was proved not to be inflammatory, an endeavour was made to explain the symptoms from a peculiar action of the lead on the parts of the intestinal tube with which it came in contact. Such are the opinions generally received—opinions which the study of the disease will not permit my adopting ; and as it is impossible to examine it under all its faces, I will limit my observations to the phenomena which develope themselves in the digestive canal, omitting all the general ones.

As yet no one has signalized any constant anatomical lesions in this disease. M. Tanquerel des Planches, in his treatise on this subject, quotes several authors previous to Broussais, as well as the latter author himself, as having admitted the existence of inflammation of the intestine ; but they, who since that period have studied the disorder, sought in vain for signs of inflammation. Moreover, most of them affirm that not only it did not exist, but likewise that they did not discover any appreciable lesion. Some mention internal strangulation : others alternate dilatation and stricture, volvulus, ulcerations, ramollissement, redness, &c. ; but evidently these lesions are foreign to the disease, or simply concomitant. In the numerous cases where I have had opportunities of examining the body after death, I never found the intestine inflamed ; but several times I have met with the large intestines partially dilated and in other parts contracted. In the case of a man who died from a complicated affection, in which a cyst of the liver containing hydatids had burst into the pleura, the intestine was contracted throughout its whole extent, and the abdominal muscles were considerably retracted. In several observations, consigned by M. Tanquerel des Planches in his treatise, the intestines were contracted, and formed in a measure a compact mass, —but this phenomenon is far from being frequent. There was nothing apparently peculiar in the vessels, nerves, or other organs ; but as soon as the different tissues were submitted to chemical analysis, enormous quantities of lead were found in the digestive organs.

2° *Symptomatology and Etiology.*—Individuals exposed to emanations of lead present as a characteristic symptom, and sometimes the only one, a notable diminution in the number of alvine evacuations, which at first are unfrequent, and finally become entirely suppressed. This symptom generally exists several days before the development of the colics, which appear after a shorter or longer interval of time, and are sometimes very violent. They occupy chiefly the umbilical region and the situation of the large intestines ; they are sometimes permanent, at other times intermittent, and finally remittent ; in their character and mode of progression in the abdomen, recalling to mind the pains which are remarked before the alvine evacuations in dysenteria, and which are sometimes so intense as to make the patient scream aloud. It is generally affirmed that they are soothed by pressure, this is not exact, the contrary being frequently the case. Compression, it is true, sometimes gives ease to the patient ; but this is only when it favours or determines the progress of the fæces in the intestinal tube. It frequently happens that the individual makes considerable efforts to defecate without success ; while at the same time the abdominal muscles are tense, contracted, and apparently drawn like a solid envelope around the diseased intestines. These spasmodic contractions are especially developed where the colics are very intense; so that it appears as if they were intended either to protect the painful parts from external injury, or to supply the loss of power in the intestine by increasing that of the abdominal parietes. If we examine the viscera when this contraction is but slightly developed, no rumbling noise is produced ; but on requesting the patient to indicate the precise seat of the pain, we find, on percussion, a considerable degree of sonoreity, whilst all around is dull—a circumstance of the highest importance in the diagnosis. In general, the matity exists towards the inferior portion of the digestive tube, whilst the sound becomes more and more clear as we approach the pylorus. In about thirty cases which I examined attentively, I found the dulness in the cœcum or colon ascendens, whilst in the small intestines a marked sonorousness was appreciable. In other cases, the sigmoid flexure produced a dull, whilst the portions of the colon situated above gave a clear, hollow, sound. It sometimes happens that on percussing the colon throughout its whole extent, it is found to be sonorous and dull alternately, shewing that here and there the fæces are retained. These facts led me to examine the rectum, and the result obtained was as follows: —In a young man of a strong constitution it was found dilated, not contracted, for about two inches in depth, at which spot the circular fibres were so retracted that the opening resembled that of the cervix uteri, slightly dilated. I have since had frequent opportunities of observing this symptom, in patients received in my wards at the *Pitié*. As long as the alvine evacuations continue to be suppressed, the preceding symptoms persist, and often are the only ones to be observed. Sometimes vomiting takes place; anorexia, and sometimes aversion for all kinds of food; almost always the gums are tumefied, of a bluish or greyish colour, which becomes an important symptom, as it is owing to the action of the lead on the system. These local symptoms in the digestive organs are seldom accompanied by acceleration of the pulse, heat of the skin, &c.; but, on the contrary, there is frequently cephalalgia, paralysis, especially of the extensor muscles, and epileptiform paroxysms. We sometimes meet with these symptoms in patients who have never been employed in a manufactory of lead ; and we must not forget that saturnine intoxication may originate in other sources. Thus, it may be from wine containing litharge; from water which has passed through leaden pipes, or sojourned in leaden tanks; or from living in the neighbourhood of a lead manufactory. It is therefore necessary to examine attentively; to question the patients on the various causes which may have produced these colics ; and in proceeding thus I have never failed in discovering the saturnine cause. But in what way is lead carried into the economy, so as to produce a modification in the functions of the digestive canal? In several ways; the particles of lead may be introduced into the food or drink, and cause paralysis by acting directly on the alimentary canal;—or by the inspiration of air containing the dust arising from cerussa or minium;—it has likewise been asserted that a layer of lead dust on the epidermis may cause the disease; but absorption is

so difficult on the skin covered with its epidermis, that I do not think this possible. As to enteritis being the cause, the following facts are sufficient to prove that such is not the case. On examining the body after death, in general, no traces of phlegmasia are to be found in the intestines; and when a redness, more or less vivid, or venous arborizations do exist, they are the result of the congestion which takes place in the last moments, or of a complication, rather than the anatomical effects of saturnine intoxication;—the mode of development in this disease differs widely from that of phlegmasia, there being no fever unless it be produced by a complication;—finally, drastic purgatives, senna, tartar-emetic, &c., far from aggravating the disorder when administered, on the contrary often produce beneficial effects. M. Tanquerel des Planches thinks (and this opinion is that of numerous practitioners) that the disorder is a neuralgia; for my part, many reasons lead me to conclude that it is a paralysis (anervia) of part of the digestive apparatus, similar to the diminution or abolition of motion in the extensor muscles produced by this poison. These reasons are:—1°. In general, saturnine emanations cause muscular paralysis, not neuralgia.—2°. Plessimetry proves that the parts of the intestine which contain solid or liquid matter are dilated and not painful, and that these substances are generally situated in portions of the tube nearer the anus than that which is the seat of the pain.—3°. The portions of intestine which are dolorous contain almost always a gas.—4°. The rectum, even when the pain is very intense, is flaccid, and appears to have completely lost its contractility.—Thus it seems that inferiorly the intestines, being paralysed, retain the fæces, and that these last prevent the gas generated from escaping by the anus. The intestines, superiorly, being considerably dilated by their accumulation, become the seat of permaneut pain, the intensity of which varies according to the degree of contraction induced in the parts. It appears, however, that in some cases the intestinal muscular membrane, in its paralysed portiou, may retain its contractile powers, as in the case of the young man previously mentioned, in whom there had formed, as it were, a sort of second sphincter in the rectum, at the depth of about two inches. The explanation thus given, of the abdominal pain in colica pictonum, is more rational than to suppose it to be produced by a neuralgia declaring itself in the intestines from the action of lead on these organs. I coincide with M. Tanquerel as to the pain being caused by intestinal contraction, but differ from him when he says that, to produce it, the poison acts in a direct manner on the contracted muscular fibres and their corresponding nerves; as, in my opinion, it originates in the retention of the fæces aud gases, owing to the paralysis of the inferior portion of the intestinal tube. But it has been asked whether, since the extensor muscles are almost exclusively paralysed, it may not be admitted that the longitudinal fibres of the intestine are alone affected? This opinion is far from being proved; and as to the fact that the extensor appear weaker than the flexor muscles, this is not astonishing, such being the case in the physiological state of the system.

Treatment.—Hitherto, the different methods preconized for the cure of this disease, as antiphlogisties, opium in strong doses, &c., are purely empirical. What ought to be done here, as in all other affections, is to analyse first the different organo-pathological conditions presented by the patient, and from them to choose the most appropriate remedy. The principal object to be attained, is to neutralize and evacuate as completely as possible the poison which causes the accidents. 1°. To attain the former object, diluted sulphuric acid was administered, in the hope that an insoluble, and consequently inert, sulphate of lead would be formed; it has even been asserted that the workmen employed in the manufactory at Clichy, who made use of this substance, were never affected with painter's colic. But, on questioning several patients received in my wards for this disorder, I found that they had made use of this remedy; and consequently I concluded that it could not be considered as a preservative. Nay, still more, I was informed by the proprietors of the establishment above mentioned, that they had ceased to make use of it, having from experience found that it neither preserved the workmen from, nor cured, the disease. Finally, theory is contrary to the action of sulphuric acid; thus, when this disease declares itself, it must be admitted that some particles of lead, or its compounds, fix themselves in the tissues, the nerves or the vessels of the organ, preventing the performanec of its normal functions; is it not evident that if we administer a remedy by which the poison is made insoluble, instead of affording relief, we prolong indefinitely the disorder. On the contrary, being of the opinion of Professor Orfila, and numerous other authors, that a poison is less deleterious when mixed with a considerable quantity of water; and knowing that it is thrown from the economy by means of the diverse excretions, and especially by the urine, I adopted the following treatment:—A large quantity of tisanne to be drunk daily, in small quantities at a time, repeated frequently; small doses of azotic acid, in order to convert the insoluble compound into a soluble one; enemata, tepid baths, and purgatives if necessary. By this method, I have almost in every case cured the patient in the space of five or six days.—2° *Purgatives.*—The evacuation of the poison by the stools is, in the majority of cases, the chief object to be sought for; but this is not so easily attained, as is supposed; for purgatives, which, in other cases, act most powerfully, in this disease produce little or no effect, by reason of the paralysis of the intestinal muscular membrane; consequently, our treatment ought to be directed against the parts affected by the poison; and it is on this account that the theory I have just expounded, and the plessimetric facts on which it rests, become of such importance. For, if it be true that it is the portion of the intestinal tube, which produces a dull sound, that is affected with paralysis, evidently it is on it that the purgatives should act principally, and not as many practitioners suppose on the parts situated above. Thus if the inferior portion of the small intestines give a dull sound, owing to the presence of feculent matter in its interior, purgatives must be administered by the mouth; on the contrary, if this take place in the large intestines, they ought to be given by enemata. The administration of these remedies must be continued so long as plessimetry indicates the existence of fæces in the intestines; and if they exist in the large and small intestines at the same time, both methods must be united. In the majority of cases enemata are indicated, because the accumulation of the fœces and the paralysis generally take place towards the end of the intestinal tube; and because they do not act on the parts of the canal which are the seat of the pain, and consequently there is no risk of their producing inflammation, which may occur when purgatives are introduced into the stomach. Formerly, the most powerful drastic medicines were given in this disease; this is, in my opinion, highly injurious. On the contrary, I begin by administering mild cathartics: such as oleum ricini, sulphas magnesiæ, sulphas sodæ, &c., to which may be added folia vel folliculi sennæ, especially if they are given in enemata; and when these fail, I have recourse to more powerful ones: such as antimonium tartarizatum, resina jalapæ, aloes, cambogia, extractum colocynthidis comp., oleum tiglii; but this last substance ought never to be given, except when all others are unsuccessful. Some practitioners who consider this disease as caused by enteritis, recommend rubbing the abdominal parietes with croton oil, in order, as they say, to obtain alvine evacuations, without irritating the mucous membrane. But, in the first place, the remedy, thus administered, can only act after it is absorbed, and consequently it is very uncertain whether it will have any effect or not; and secondly, when it does, it produces as much irritation as if it were given by the mouth. 3° *Narcotics.*—It is certain, from the facts published by numerous authors, that narcotics, and especially opium and its diverse compounds, have been frequently given with success in this disorder. If this were constantly the case, it would be a powerful argument against the theory I have just announced; but many practitioners have found it of no utility; as to myself, I frankly own that I have never employed it in doses sufficiently large to be able to decide *pro* or *con.* In general, it is given to calm pain; and in this view it may be made to act successfully on the empty parts of the intestines, the contractions of which I consider as the cause of the colics; and if it were proved that it paralyses the intestine, would come to the support of my opinion. Theoretically speaking, if the pain be produced by the contractions of the intestinal muscular membrane, may not belladonna succeed better than opium in calming spasmodic phenomena? Finally, it must not be forgotten that opium does not neutralize the cause—does not remove the paralysis; consequently, it is useful only when the pains persist, notwithstanding the administration of purgatives, and the employment of antiphlogistic remedies. 4° *Antiphlogistics.*—These, though seldom indicated in this disease, are sometimes useful to soothe the pains. M. Renauldin, who has had repeated occasions of studying this disorder, found them very useful; but I think they ought not to be employed except when there is a considerable degree of plethora, as in the following case, which, during the space of ten years, is the only one I have found to resist the ordinary treatment.—A young man was lately received in the *Pitié* affected with this disorder; the colics, after disappearing for forty-eight hours, re-appeared two days subsequently with renewed force; purgatives were administered, and though the bowels were acted on, still the pains persisted. Suspecting the existence of phlegmasia, though the pulse was natural, I ordered forty leeches, and poultices, to be applied on the abdomen, by which the patient was permanently relieved. In almost all other cases, or where nervous accidents are to be feared, tepid baths are preferable. 5° *Regimen.*—While the stools are suppressed and gas is accumulated in the intestine, no food must be allowed,—and even when the patient is somewhat better it must be given in very small quantities and with great precaution. Finally, there is a circumstance worthy of being signalized, not only from its simplicity, but from its utility. I have remarked that frictions on the abdomen facilitate the evacuations and soothe the pain; they must be made with the hand or a soft substance dipped in a liniment containing oil or opium, taking care to make them in the direction of the descending colon and the rectum, so as to push the fæces towards the inferior portions of the intestines.

Academy of Sciences.—Sitting of the 8th April.—Baron Ch. Dupin in the chair.—Professor Dumas read a Memoir "On the Fabrication of Beet-Root Sugar," and presented two others.—1° On Sugar employed as Food for Granivora, by Dr. Letellier. The experiments of the author were performed on turtle doves; the average quantity of fat in seven birds, killed when in the normal state, was 15.85 per cent.; whilst in those fed on sugar, it was only 6.3. The quantity of sugar given daily was abont half an ounce. The birds were allowed to drink *ad libitum*, the author having remarked, in the experiments of Dr. Chassat, of Geneva, that when deprived of water they died sooner. In order to ascertain the quantity of carbonic acid expired:—1°. Two turtle-doves were placed under a glass bell, and the average quantity in an hour was found to be 0·852 carbonic acid, or 0·232 carbon.—2°. One of them, made to fast, gave only 0·429 carbonic acid, or 0·117 carbon.—3°. One, kept for three days on a sugar diet, gave 0·715 carbonic acid, or 0·195 carbon.—4°. Two, on a butter diet, gave: the one, 0·623 carbonic acid, or 0·169 carbon; the other, 0·548 carbonic acid, or 0·149 carbon. In birds fed on butter, the average quantity of fat was 7·1 per cent. Sugar of milk was still more destructive;—0·635 oz. was given daily; death took place on the third day; one bird lost 1·376 oz., the other 1·411 oz. of fat;—0·423 oz. was given; death took place on the fifth day;—0·212 oz. only was given; the bird was alive on the tenth day, when the experiment was ended. From these facts the author concludes:—1°, that sugar, extracted from the cane, does not favour the production of fat; 2°, that butter, and other

fatty substances, are not absorbed when given as food alone; 3°, that aliments, inadequate to sustain life, may prolong it, provided they are not given in too strong doses.——2°. *On a New Oxide of Copper*, by MM. Favrot and E. Maumené.—In four experiments, in which this bin-oxide was calcined, the loss of oxygen per cent. was found to be i. 8·2, ii. 8·0, iii. 8·1, iv. 8·2; according to its volume, v. 7·99, vi. 8·18. The residue of the different experiments analysed gave per cent. of oxygen, i. 12·93, ii. 13·28, iii. 13·02, iv. 12·98; or, according to its volume, v. 13·20, vi. 13·01,—which gives the formula $Cu^5 O^3 = 2 Cu^2 O + Cu O$. From their experiments the authors conclude:—1°. That the bin-oxide of copper is decomposed at a temperature nearly equal to that of the fusion of copper. It melts, then, in losing 8-100ths of its weight of oxygen, and forms a new compound which may be represented by the formula $Cu^5 O^3$.;—2°. That in mineral analyses, in which we wish to know the exact proportion of copper, in its oxides, they must be first converted into the bin-oxide ,and then melted, so as to obtain the oxide $Cu^5 O^3$.;—3. That in organic analysis no modifications are needed.

On the Compounds formed by Hydrogen and Phosphorus.—(Extract of a Memoir read by M. Paul Thenard, *Préparateur de Chimie au College de France.)*—There are three phosphurets of hydrogen:—1° *Solid*, containing 2 phosphorus, 1 hydrogen.—2° *Liquid*, containing 2 phosphorus, 2 hydrogen.—3° *Gaseous*, containing 2 phosphorus, 3 hydrogen, or phosphuretted hydrogen gas. The phosphuretted hydrogen gas loses its inflammable properties when mixed with the proto-chloruret of phosphorus, chlorhydric and bromhydric acids;—is decomposed by light, and solid phosphuretted hydrogen is deposited. In order to discover to what the spontaneous inflammability of this gas was to be attributed, several pints were collected in a tube, and submitted to a temperature of 40° F., when a colourless, limpid fluid was obtained, which remained liquid at 50° F.; took fire spontaneously when exposed to the contact of the air; burned with a bright white flame, and produced thick smoke. Exposed to the rays of the sun in a tube, it was converted into spontaneous, inflammable, phosphuretted hydrogen gas, and solid phosphuretted hydrogen. Kept in the dark, and heated to 59° F., it became gaseous without being decomposed. The smallest quantity of this liquid converts the non-inflammable phosphuretted hydrogen gas into the spontaneous inflammable kind. It is decomposed by chlorhydric and bromhydric acids, and proto-chloruret of phosphorus, into solid phosphuretted hydrogen and phosphuretted hydrogen gas, not inflammable spontaneously.

M. A. Brogniart read a report on a memoir of M. Montagne,—Observations on the Structure and Fructification of the genus *Ctenodus*, *Delisea* and *Lenormandia*, family of the *Florideæ*.

Academy of Medicine—Sitting of the 9th April—M. Ferrus in the chair.—After the reading of the *procès verbal*, M. Husson rose and said:—"It was with much pleasure that I heard our honourable colleague, M. Cornac, propose placing the busts of Dupuytren and Broussais in the assembly-room of the Academy; but I hope that this proposition will not cause one, made long since, to be forgotten —I mean that relative to the busts of Corvisart and Laënnec. Several portraits of the former are extant, and might be easily copied; and if that be impossible for the latter, could we not imitate what Napoleon did at the Hôtel Dieu, for Desault and Bichat; viz., inscribe his name and the services he rendered to the healing art? Funds not being wanting, I propose that the *Conseil d'Administration* should pay attention to this subject.—The President, in reply, said that orders had already been given to that effect.

M. Philippe Boyer requests to be placed on the list of candidates for the vacant seat.

M. Louis addressed a letter, resigning the honour of being member of the Commission named to examine M. Malgaigne's memoir. At the same time, he says that he regrets he was not present at the last sitting, in order to declare with what zeal M. J. Guerin exerted himself in giving every facility to the Commission, named by the *Conseil d'Administration des Hopitaux*, to verify the exactitude of his observations.—The President proposed naming M. Adelon, but, on the remark of M. Husson, that he thought a physician of the Children's Hospital ought to be appointed, M. Adelon proposed M. Guersant. (Adopted.)

Professor Velpeau informed the Academy that he had, conjointly with M. Melier, visited M. Prus, who was affected with phlegmasia in the iliac region, but that he was now in a fair way of recovery.

M. Chassinat addressed a letter on the Incubation of the Plague.

M. Adelon read a long memoir in reply to a pamphlet published by M. Caventou, relative to the law concerning patents. The learned Academician concludes that the prohibition of the granting of patents, for pharmaceutical compounds and secret remedies, is neither unjust, nor the violation of a right, nor useless; but, on the contrary, necessary.—M. Caventou. It is impossible for me to reply to the learned dissertation, without perusing it attentively. The only remark I will make is relative to the phrase in which the author states: that the Academy having solicited the minister not to permit individuals to vend pharmaceutical compounds, and secret remedies, the minister had introduced into the law an article to that effect. Now this is not the fact; for the article was inserted by the commission named in the Chamber of Peers, and combated by the minister while the law was under discussion. As to the prohibition: in my opinion, it will be productive of little, if any use; for, if adopted by the Chamber of Deputies, quacks will find means of overcoming the difficulty, and will perhaps cause more trouble than before; again, those who have made the largest and most rapid fortunes, had no patent. Finally, as the discussion of the law is now taking place at the Chamber of Deputies, in all probability the remarks of our learned colleague will be too late to be of use, unless they be printed, and sent in immediately.—M. Bussi. The opinion of the Academy has been long since fixed as to the necessity of prohibiting patents for pharmaceutical compounds and secret remedies. I perfectly agree with M. Adelon on the subject, but think that though a patent ought not to be granted, still, if the remedy proposed be really useful, the minister might request a remuneration to be given to the author. As to the opinions expressed by M. Caventou, I will add that the School of Pharmacy does not coincide with him.—M. Boullay proposed naming a special commission, to present to the minister and the commission of the Chamber of Deputies, the memoir just read by M. Adelon, after which he made some remarks on the pamphlet of the Vice-President of the Academy (M. Caventou), it being, in his opinion, *misplaced*.—M. Caventou not only considered the expression as un-academical, but likewise as undeserved, for he did not express his opinion as Vice-President of the Academy, but as a private individual.—M. Adelon. The pamphlet published by our honourable colleague proves that he does not wish, more than we do, to countenance quackery; but I think he goes too far when he states that the prohibition is useless. I consider it quite necessary. As to the proposition concerning a special commission, it may be voted as follows:—1°. That the Academy, after a new discussion, persists in the opinion already announced, that no patent be accorded for pharmaceutical compounds and secret remedies; 2°., that the president and *bureau*, to which I solicit the honour of being added, wait on the minister to make known this decision.—M. Naequart proposed having the memoir of M. Adelon printed immediately. These different propositions were adopted.

M. Amussat presented a seirrhus which he had removed from the breast of one of his patients, and which offered all the characteristic signs of Cruveilhier's fibrous tumours.—(This observation, accompanied by the remarks of the author, will be published shortly in the "Medical Times.")

M. Lucien Boyer presented several modifications of the instruments by which a ligature could be placed on the pedicle of a polypus, and drew the attention of the Academy to a new method by which the pedicle could be divided by the ligature instantaneously, as with a knife; this mode is useful, as it does not need drawing down the polypus.

M. Laugier presented an instrument intended to limit the action of the Vienna caustic, when employed in the treatment of varicocele.

GARLAND DE BEAUMONT, D.M.P., B.L., & S. &c.
Honorary Physician to the Spanish Embassy.

WHAT ARE THE THEORIES OF LIEBIG? AND WHAT IS THEIR VALUE?

BY THE CELEBRATED DR. FRANZ SIMON.

Translated for "The Medical Times," by SIGISMUND SUTRO, M.D., formerly pupil to TIEDEMANN, GMELIN, and BUCHNER.

(Continued from page 16.)

In the second part of his work (page 105 to 159), Liebig treats of organic transformations. He begins by observing, that a few years ago, the absolute identity of the principal constituents of blood and of azotic nutriments was considered an argument against the results of chemical analysis; for it was not known then that many azotic, as well as non-azotic bodies, are composed of the same elements, nay, even of the same number of atoms, though widely differing in their physical properties. The identity of fibrine, albumine, and caseïne, both in vegetable and animal bodies, if we except sulphur and phosphorus, from the constituents of their ashes, has been, as our readers know, established. If we follow the gradual formation of the young animal out of the egg, in which, besides the albumine, nothing but cholesteric* fat and iron is found, we must arrive at the conclusion, *that all organic animal parts, which contain azote, are derived from proteïne.*

Digestion, according to physiological researches, proceeds independently of the vital functions, and is a pure chemical action, analogous to that of fermentation. The simplest form of elementary transformation is exhibited in fermentation and putrefaction. The existing combination is there changed into one or more new combinations through the contact of certain bodies, the elementary particles of which are either in a state of motion or transformation. The gastric juice contains a substance in such a state of transformation (probably the result of some changes in the stomach itself), through contact with which the insoluble parts of food become soluble. During the process of digestion, the gastric juice contains a free mineral acid (hydrochloric acid), which prevents every further change.

The products of decomposed glutinous tissues are more capable than all the rest of producing transformation in other substances. In certain diseases, the same products are formed *in the stomach* out of sugar and amylum, as out of the stomach, through contact with animal hides, namely: lactic acid, and mucus. In the normal state, no lactic acid is formed in the stomach, but the presence of free hydrochloric acid has been confirmed by all physiologists who have made researches on the digestive process. The oxygen in the air, introduced by the saliva into the stomach, operates likewise on the food; whilst the azote, which enters with it, is exhaled through the lungs. This phenomenon is explained by the permeability to gases of moist animal membranes; which is proved in pathology by the disappearance of the air in emphysema; and also by the disappearance of the great quantity of carbonic acid and carburetted hydrogen, which is sometimes formed in the abdomen of herbivorous animals. Gases, particularly carbonic acid and azote, are eliminated by the skin or lungs. There are processes of fermentation, where, with simple transformation of elementary parts, no disengagement

* Cholesteric, from cholesterine, one of the principles found in human biliary calculi, derived from *chole* bile, and *stereos* solid, it being a pearly substance.

of gases is observed. Digestion is one of the number, which, as well as fermentation, is prevented by empyreumatic substances, chloride of mercury, &c.

The identity of composition of blood and of azotic vegetable substances explains the reason why putrified blood, flesh and cheese, produce the same changes in a solution of sugar as yeast, for yeast is nothing but a combination of vegetable proteïne entering into decomposition. The transformation of the parts of the animal body is a process performed under the influence of the vital power; putrefaction is a dissolution into more simple combinations unconnected with vital force; but though the products are different, the process is the same in both. Practical medicine has made interesting applications of this doctrine by treating malignant ulcers with empyreumatic substances. Here, at the same time, we have one metamorphosis under the influence of vitality, and another, like fermentation, independent of vital power. The latter is a chemical process immediately suppressed by the empyreumatic substances. The contrast shows the injurious effect of putrid flesh laid on fresh wounds.

Liebig now returns to his formula of proteïne, and developes the probable formulæ of glutinous tissues, chondrine, arterial membranes, urine and hair. I think I may pass over, as of less interest, his views as to the formation of the glutinous tissues, viz., whether they receive azote or oxygen, or furnish carbon; and shall shortly explain his opinions and conjectures on animal metamorphoses. Since all the constituents of the animal body are formed of blood, and transformed again by the admission of oxygen, it follows that the constituents of bile and urine united must be equal to those composing blood, so that the constituents of bile remain, if you deduct those of urine from the blood, and vice versâ. Thus Liebig shows, that if you add half the formula of choleïnic acid to the elements of the neutral urate of ammonia, you have the composition of blood, plus 1 atom of water, and 1 atom of oxygen; and if you add to the elements of proteïne, the elements of 3 atoms of water, you obtain (with the exception of 2 atoms of hydrogen) the composition of choleïnic acid, and of urate of ammonia. Hence, it follows, that all necessary elements for the formation of choleïnic acid, and of urate of ammonia, are found in the elements of the muscular fibre, with the addition of water. But this kind of metamorphosis does not refer to the transformation which takes place, in the bodies of the mammalia, in the urine in which urea is contained. The production of urea, and the disappearance of uric acid, stands, no doubt, in close connexion with the heightened respiratory process; since we know that uric acid, by receiving oxygen, separates itself into urea and alloxane; and alloxane, again, by absorbing oxygen, is separated either into oxalic acid and urea, or into carbonic acid and urea. The mulberry calculi, consisting of oxalate of lime, and those consisting of urate of ammonia, are found in those persons in whom the supply of oxygen is diminished through want of exercise and work. If the two latter be increased, the urate changes into oxalate, and lastly, into carbonate. Many objections can be raised against the opinion, that azotic victuals exert a direct influence on the formation of urinary calculi. For this purpose it is asserted, but not proved, that the kidneys remove those substances which have not been used for the organism. In starving persons, who have much exercise, more urea is secreted than in well-fed healthy men. The secretion of urea is likewise increased in fevers, and in rapid emaciation. Just as hippuric acid, in active horses, is changed into benzoate of ammonia, and carbonic acid: uric acid disappears in those who receive a sufficient quantity of oxygen; for, in animals which drink so much water as to keep the uric acid dissolved, oxygen operates upon it, and only urea is, in consequence, found in their urine. But the experience of pathologists does not, however, entirely coincide with this opinion. It cannot be doubted, that in the carnivorous animals, the constituents of urine and bile are formed out of combinations of proteïne; but the proteïne can only then be transformed when it has become a tissue. If the liver and kidneys were able to change the excessive supply of proteïne into urea, uric acid and bile, those phenomena would not take place which we observe when juices fit for the formation of blood are not received and elaborated by their peculiar organs. Processes of putrefaction, in that case, would not cause an evolution of gases, give certain specific properties to the secretions, and impair the nutritive functions. Urinary gravel and uric acid are found in persons who take little animal food. Uric concretions have never been found in the savage carnivorous animals, nor in nations who take only animal food. The great quantity of bile secreted by the herbivorous animals must not lead us to suppose that all the carbon contained in it is derived from transformed structures; other non-azotic substances, as amylum, must likewise have taken part in the formation of bile. The azote of the bile of herbivorous animals is derived from a combination of proteïne. If proteïne and amylum, with oxygen and water, are transformed, the products are (as Liebig proves by calculation) urea, choleïnic acid, ammonia, and carbonic acid. To produce bile in the animal body a certain quantity of *soda* is indispensably necessary. In its absence, fat and urea can alone be formed out of proteïne. Thus, withdrawing common salt exerts a material influence on the formation of fat. The quantity of carbon secreted in the bile of herbivorous animals amounts to more than 5 times that portion, which can be supplied to the liver, by transformation of its organs, or by the azotic food. If, by metamorphosis, a certain quantity of blood passes within the body of a carnivorous animal, into a combination of soda (bile); in the normal state, the soda contained in blood must be sufficient to form bile with the products of the transformation. The soda used in the vital functions is separated from the blood by the kidneys. As a greater quantity of bile is formed in the body of an herbivorous animal, than would correspond to that of the transformed blood, the deficient soda not supplied by the blood, must be furnished directly by the victuals. Thus the herbivorous animals must consume a much greater quantity of soda than would be requisite for their daily formation of new blood. Since the superfluous or used soda is evacuated by urine, this secretion must give the best tests concerning the proportions in the different classes of animals. The urine of carnivorous animals exhibits acid re-action, and contains besides soda, a certain quantity of ammonia. Thus, the soda of blood or bile does not suffice to neutralize the excess of acids. But in the urine of herbivorous animals we find, on the contrary, an excessive quantity of soda, not combined with sulphuric or phosphoric acid, but with carbonic, benzoic, or hippuric acids. In carnivorous animals, the rapid transformation of their structures is a condition of their existence, because it is only by this transformation that the materials necessary for combustion are generated. In man (who lives on mixed food), amylum undertakes a similar function as in the bodies of herbivorous animals; a part of the azotic products of transformation must, before being evacuated through the bladder, return into circulation from the liver in the form of bile. In the want of non-azotic victuals, the secretions must possess other properties. Thus might be explained the appearance of uric acid in urine, in certain diseases; the secretion of uric acid in joints, and the influence of an excessive quantity of animal food on the secretion of uric acid. New researches must determine, whether the elements of the non-azotic victuals (which have been shown to exert an invariable influence on the nature and properties of secretions) take a direct part in the transformation of the structures, or whether (after having been somewhat changed), they are absorbed by the abdominal veins, and introduced into the liver, helping there to form the bile, together with the transformed structures. *Liebig* considers the latter opinion not unlikely, since no sugar has been found in the arterial blood, nor has bile been proved satisfactorily to exist there.

We shall next proceed to consider the influence of medicine and of poison.

(To be continued.)

NEW INSTRUMENT FOR SUPPRESSING UTERINE HÆMORRHAGE.

To the Editor of the "Medical Times."

Sir,—Provided you deem this communication relative to my newly invented instrument for the suppression of *uterine hæmorrhage after* delivery worthy of the attention of the medical profession, I request that you will favour it with an insertion in your highly useful *Journal*. I propose to call the instrument the Uterine Hæmatite, and which is illustrated by the following diagrams:—

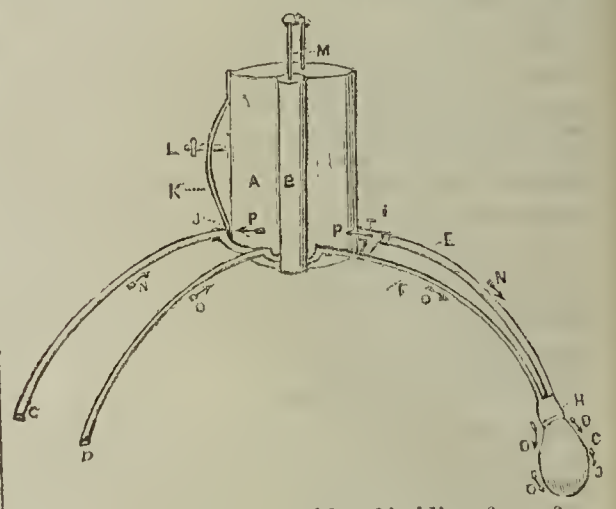


Fig. 1. A, a cylinder, capable of holding from four to six ounces of fluid.
B, a cylinder one quarter the dimensions of cylinder A.
C, a tube communicating with A, to convey cold water.
D, a tube communicating with B, to convey an astringent solution.
E, a tube leading from A to a caoutchouc bladder, G.
F, a tube leading from B to a collar, H, which being slit open towards G, and encircling its neck, allows the astringent solution to play freely in the direction of the arrows O O O O.
I, a stop-cock to establish a retrograde communication between the caoutchouc bladder G, and cylinder A, when required.
J, a valve, regulated by a spring K, and screw L.
M. The pistons of the syringes, which are made to act simultaneously.
N N, arrows showing the course of the cold water.
O O O O O O O, arrows showing the course of the astringent solution.
P P, arrows showing the retrograde course of the water when the stop-cock is opened.

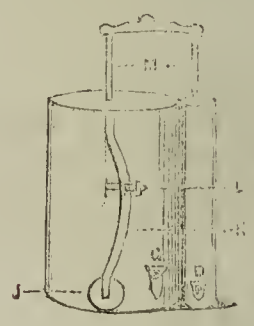


Fig. 2 represents the front and back view of the same, the tubes being disconnected.

The epigastric and iliac regions of the abdomen of the patient having been well secured by compresses and bandages, the extremity of the tube C is to be immersed into cold water, and the tube D into a vessel of whatever astringent solution may be deemed preferable. The caoutchouc bladder is then to be introduced into the uterus close up to its fundus, and retained there while an assistant works the pistons M, whereby a constant stream of the astringent solution will be kept playing against the open mouths of the bleeding vessels, causing their contraction and closure by means of the coagula formed in their extremities; the caoutchouc bladder, expanding at the same time,

will immediately secure them in that state, which being effected, and the hæmorrhage restrained, the pistons M are to be raised, and the stop-cock opened. The power of the uterus is then to be ascertained by the regulating screw L, and spring K, which, when too much relaxed, will allow the water to escape through the valve J, and which must then be tightened just beyond that point. Restoratives, or astringents, or whatever the urgency of the case may demand, being administered, the returning action of the uterus will be announced by the valve J opening and allowing the escape of water, only in the ratio of the contraction of the uterus, the valve closing immediately upon its cessation, and thereby maintaining the caoutchouc bladder still in a state of tension and approximation to the walls of the uterus. This will be repeated upon every contraction of the uterus, until the whole of the water be ejected from the caoutchouc bladder, and the uterus consequently perfectly contracted.

Should any circumstance intervene to render it unadvisable or impracticable to introduce the caoutchouc bladder directly into the uterus, the same instrument, without the cylinder B, will form an efficient and ready vaginal plug.

I am, Sir,
Your most obedient servant,
R. A. VARICAS.

29, Woburn Place, Russell Square,
April 10, 1844.

NOTICE TO CORRESPONDENTS.

"Discretion" *writes to us in terms of censure of a Lecturer at the Marylebone Institution, who offered to mesmerise every person offered to him, and thus, indirectly, made his success in an individual case the test of Mesmerism's existence. Mr. Vernon failed,—and* "Discretion" *says it is no wonder, since some are never susceptible, and scarcely anybody can be mesmerised for the first time, without several trials.*

Dr. Dodgson.—*We do not know of such a party.*

HONESTUS *is clever, but we must decline.*

Mr. STAINTHORPE *in our next.*

A Subscriber.—*The information asked for has already been given in some preceding numbers of the* MEDICAL TIMES.

J. R. R.—*The surgeon's-mate is not entitled to use M.D., and his eligibility to a charitable institution will depend wholly on the rules by which the institution is governed. M.D. is a higher grade than M.B.*

Several communications have been received, which are now under notice.

Gentlemen who have not yet forwarded their subscriptions for the current quarter, will oblige by remitting during the present week. The rule in all London offices is to be paid in advance.

A Country Friend.—*A friend, who has tried the Templar Cap, speaks very favourably of its comfort. While a far from ungraceful head-dress, it has he says the Templar characteristic, of never deserting its post. In this aspect, it has hygienic qualities that strongly recommend it.*

THE MEDICAL TIMES.

SATURDAY, APRIL 20, 1844.

Lucri bonus est odor ex re
Qualibet.

VESPASIAN.

THE Lord loveth those whom he chasteneth, and if the law follow so good an example, it must have a marvellous affection for the great bulk of Medical Practitioners. Never, indeed, existed there a class of men with stronger claims to the beatitudes promised for a patient tolerance of sufferings and persecutions. The law is aware of our existence, but has a mode of acknowledging it which no way enhances existence's enjoyments. As Burke had it, —it will only turn towards us its unclean parts. Its good it reserves for more favoured persons. The devil's children have the devil's luck, and the law has little kindness save for its lawyers. It never yet but once recognized us to do towards us a friendly turn. As if aware of the tendency which all aggregations of humanity have to shake themselves into some decent order if left utterly to their own efforts, it will not leave us to ourselves, but interfering with step-mother affection in our disfavour—has met us in our outset in professional life, by carefully providing for our initiation in Æsculapian mysteries in the worst of all possible manners. It encounters us, not with one bad system, but a dozen, each of which is an improved but yet improveable perfection of bad, whose climax is only reached when we have reached the last on the list. If we escape the worst teaching, at the highest terms and with the greatest loss of time, it is only by baffling our natural protector, and nullifying all its malevolent plannings.

Mathematics are uncertain, philosophy is folly, if the genius, adding fresh conquests to the glorious domain of science, is not his country's best benefactor. The ermine may be the advocate's guerdon of industry and talent, well earned from the State: the blue ribband, or garter, or peerage, may deservedly fall to the warrior oft laurelled by victory in his country's service: but the man whose novel successes in science are an everlasting victory to a nation, and a never-dying boon to humanity, has claims to his public's gratitude poorly (poorly, indeed!) estimated, when poised with the highest merits of either soldier or lawyer. From the first hour, then, that he devotes himself to medicine, he should be encouraged, stimulated, forced into thought —roused into action: the whole exercise of his mind, the whole play of his being, should be forestalled for his country and fame; but law—the perfection of reason, as some call it, the *injusta noverca* of our profession, as we call it—making our good its evil, taxes every aspiration of the toiling student, exacts an extra price as license money for his extra labours in the hospitals (vide dresserships)—mulcts him a heavy fine for proving his acquisitions in science (Government stamp in examination diplomas)—and when we are launched into responsible life, then, for the first time, the only time when the *concours* can be a curse, introduces that famous system of competition between us and the quack, making *popular ignorance* judge and arbitrator to decide between our rival claims to public confidence! But this is not enough. We are made to occupy the most equivocal of positions, in the most annoyingly anomalous of professions. Doctorship forming the epitome of our being, we know neither our own nor our brethren's professional standing; and the public are in equal perplexity. What the law allows us, what it forbids us, what it has done with us, or what it will—is all incertitude. A change of locality, a mere migration from one part of the country to another, may make us law-breakers before Government, black sheep before our brethren. Though science be of no country, and the medical art as universal a thing as disease, we may be unprofessionalized by a change of county! And though all we have, has been paid for in hard cash, or harder labour, a successful use of Ministerial acquaintanceship by a busy Baronet may lower for ever our *status* in society, and badge us (poor ciphers!) before our friends and the world as the half-competent! Competency, and the liberty to practice, are not exchangeable terms: we may have paid for what we dare not use; have duties to do which, discharged, would bring legal penalties: in short, we are, through the law's ingenious medding against us, in the most perfect state of disorganization it is well possible to conceive.

A capital instance of the "loving mercies" of the law to medical men is at this moment being furnished by Ireland. From what we can learn, there are about a thousand physicians and surgeons in that country who are each in hourly expectation of being proceeded against as illegal practitioners. The schools in Dublin enjoying, it may be, a low repute, these gentlemen had committed the offence of studying medicine in the more celebrated classes of Edinburgh and London. Most of them had been apprenticed to surgeons or apothecaries; many of them had been in the army or navy; others are surgeons or physicians to the public medical institutions of the land;—all of them had been instructed in all the branches of medicine, had proved themselves before legal boards to be competent surgeons, and enjoyed, to a large degree, the public confidence. Yet they are at this moment in a worse plight than the empirics who surround them! Many of them, before we again go to press, may have to pay—besides legal costs—forty guineas, because they have not paid for a non-honourable and supererogatory piece of parchment to a petty Company of Druggists or Apothecaries in Dublin! Any druggist in Dublin preparing, or even prescribing, drugs—though wholly unconnected with the Society—would be left untouched by the Dublin Apothecaries' Company; but those surgeons or physicians who have studied pharmacy as an important introductory part of a professional education, are subjected to legal assaults, if for local or personal reasons, they find it necessary to provide their patients with the medicines they prescribe!

We are not going now to enter into the question of the utility of medical men, dispensing their own drugs. If the system be bad, certainly it is not the Irish Apothecary, who in the present day plays the part of surgeon, physician, and druggist, who has the title to complain. The same law of society which has flung the whole range of diseases, with their treatment, into his hands, has forced on many surgeons and physicians a limited practice of phar-

macy. There are some usages made essential on this or that class of men, which no more depend on law, than on reason. They are created by the wants, or prejudices, or general feeling of society. We owe to this omnipotent force the existence of the general practitioner. It is idle to complain of him. He exists by a power superior both to himself and his persecutors.

For the Irish Apothecaries Company to fight against this social arrangement is at once absurd and wicked. They cannot annihilate the foe; and the serious mischief they do in the attempt to many higher members of their own profession, is a matter for a moral man to take to conscience. The law which they use is like that which entitled Shylock to his pound of flesh; it is as much away from justice as from mercy, and applied with consistent severity would reach the very parties who invocate its violence.

Suspicion naturally arises that these Corporate Apothecaries have more their own, than the public's interest in view, in their menaced litigations with the Irish general practitioners. In 1827-28, they tried the same *experimentum crucis*, and by the law's alchemy contrived to add in that short period between five and ten thousand pounds to their Exchequer. The recollection must offer strong temptations for another essay in 1844. The chief secretary for Ireland, Lord F. L. Gower, intervened on their first *iniquitous* proceedings,—iniquitous is the proper word—and there can be no doubt that the present Government will not hesitate to teach the Dublin Apothecaries that if they persist a second time in making so bad a use of their powers, the only safe thing will be to place them in the same schedule, which is probably so soon to give extinction to their London brethren.

TRANSACTIONS OF LEARNED SOCIETIES.

Westminster Medical Society, April 13—Dr. Reid in the chair.—*Internal Strangulated Hernia—Hydrophobia.*

Dr. W. Merriman narrated the case of a child, nearly ten years of age, who, after a hearty meal of potatoes, was seized with pain in the abdomen just below the umbilicus. The bowels became constipated, and when Dr. W. Merriman saw her, in spite of medicines, they had not been opened for several days. She was also troubled with vomiting of a green slime during that period to a considerable extent. The medicines which had been given her, were prescribed by a druggist. Dr. W. M. directed her to have the infusion of senna with the sulphate of magnesia, which was administered three times, but without producing any effect on the bowels. The little patient died the next day. On examining the body thirty-one hours after death, the abdomen was tympanitic, and the intestines distended with flatus and yellow fluid. The cœcum was adherent to the abdominal parietes by old adhesions, and a knuckle of the small intestines was closely constricted by a band of organized lymph. The strangulated portion was much discoloured, and gave out a fœtid odour, but it was a question whether sphacelus had taken place. The girl had had a similar attack when five months old, and in the previous September, she had symptoms of acute peritonitis, with obstinate constipation. She was treated by the application of leeches, and by the exhibition of mercury, until its constitutional effects were produced. Typhoid symptoms afterwards set in, and bark, &c. was administered. She recovered, but remained subject to sharp colicky pains occurring at intervals.

The recital of this case not giving rise to any discussion, Mr. Snow read a communication he had received from a practitioner in the country on hydrophobia. The writer, who was desirous to keep his name a secret, acknowledged that he had not any experience in the treatment of the disease, never having had a case under his care, and having only seen one instance of the malady; his suggestions were, therefore, only theoretical. He advises that the part bitten should be well washed for some time, and immediately afterwards, as some of the virus may have been absorbed, a compress of linen wet with a strong solution of corrosive sublimate to be placed on the part injured, and retained there in a wet state, until such time as the mercury is ascertained to have passed through the system, or until the gums are affected. The writer observed, that in suggesting the above, he is in hopes that the absorption of the poison so immediately and continuously after the saliva, may destroy its effect, and, he added, as there will no doubt be some danger of poisoning the patient, yet should any good be likely to result, it ought still, as in other cases, be done on the score of humanity. Brief details of three cases of the disease were appended to the communication.

Mr. Snow afterwards read some extracts from a work on hydrophobia, by Dr. Santer, of Vienna, who considers it to be a true and specific disease produced by inoculation with a peculiar virus, and in no instance to arise spontaneously, even in the dog. He has seen it occur from the bites of dogs, wolves, foxes, and cats, and it is said to have happened once from the bite of a badger. The domestic herbivorous animals are incapable of propagating it. Inoculation of animals with the saliva of human beings, when hydrophobic, has generally failed in imparting the disease; but in one instance MM. Magendie and Breschet succeeded in rendering a dog rabid by this mode of inoculation. The sole preventive Dr. Santer recommends, is washing the bitten part with a solution of caustic potash. He causes the wound to be washed every five minutes for forty-eight hours, with a solution containing half a drachm of caustic potash to two ounces of water, and afterwards every hour for fourteen days, the part to be covered with linen wet with the same. He says he has used this extensively for thirty years without finding it fail, and consequently he has great faith in it, though he is not positive it is a certain preventive. The wound becomes pale, shrivels up, does not inflame, and in almost every instance heals without suppuration. If the wounds are already healed, and the disease not yet shown itself, Dr. Santer scarifies them as deeply as the original injury, and applies the solution in a more concentrated form. He describes the disease as a sort of remittent fever with a tertian type, when it is not interfered with by violent remedies. The disease is often preceded for two or three days by some indisposition, consisting chiefly of pain like rheumatism, in the part bitten, spreading to different parts of the body, and attended with very great irritability, and some difficulty in swallowing fluids. The commencement of the disease is characterized by great anxiety and fever, difficult and very hurried breathing, and by spasmodic twitching of the throat especially, increased into violent convulsions whenever the patient attempts to quench the thirst, which is always an urgent symptom. Spasms are sometimes excited by the mere appearance of water, or of any glistening surface, and even by the fresh air blowing on the person. Dr. Santer asserts that when this attack is not interfered with by medicine, it terminates after a few hours, and is followed by prolonged perspiration, during which the patient sleeps a little, and feels almost well the next day, but that on the day following, the second attack comes on, and is more severe than the first, and is not followed by so complete a remission. If the first attack is interrupted by violent remedies, there is not much remission, and the patient generally dies in the second attack—otherwise he may survive until the third. The treatment adopted by Dr. Santer is to give eight grains of the root of belladonna at the commencement of the attack, to keep the patient in bed, and use no violence or opposition, but to try to calm him by gentle means. He gives ten grains on the second attack, which he says is usually slighter than the first, and ends like it in perspiration. During these perspirations he believes that a part of the poison is thrown out. If the patient can drink, camomile tea is also given, but no other medicine. The third attack begins forty-eight hours after the commencement of the second, is violent at first, but is not so bad, and ends sooner in perspiration. Fourteen grains of belladonna root are exhibited during this attack. Dr. Santer relates two cases of complete recovery from this disease; one case occurred four months, and the other six after the bite, and in both instances the same dog had bitten other persons who died of the disease.

Mr. Acton enquired the number of cases treated by Dr. Santer. The duration of the practice for thirty years was mentioned, but not the number of cases that had occurred during that time. The disease was of very rare occurrence, and he, (Mr. Acton) had only seen three cases during the six years he attended St. Bartholomew's Hospital.

Mr. Snow was not able to answer the question.

Dr. A. T. Thomson had been in practice for forty-four years, and had only seen two cases of the disease. He had been bitten three times, and had no faith except in excision of the injured part. From the post-mortem appearance in both these cases, and from the symptoms during life, he was led to believe that the disease was seated in the sentient track of the spinal cord. The principal symptom he thought was the extreme sensibility of the surface. His first case, which was caused by the bite of a cat, is published in the *Medico-Chirurgical Transactions*, with a plate of the appearances of the spinal cord and theca; previously to it very little attention was paid to that part, the pathologist being content with examining the trachea and bronchial tubes. Sedatives generally have been freely tried, but found to be ineffectual; for himself he despaired of any remedy being discovered, until the real pathology of the disease was better understood. He was of opinion that when a person was inoculated with the poison, it remained latent until the system had the required degree of predisposition, or until there was sufficient irritation from the local inflammation for absorption to take place. The varying period of incubation could not be otherwise accounted for. In such cases extirpation of the bitten part might be practised any time after injury before redness, pain, and itching occur in the part. The nitrate of silver might be applied afterwards, but he could not trust to it without previous excision. In one case, which occurred fifteen years ago, he had cut out the bitten part, and then applied the nitrate of silver for an hour afterwards. Great inflammation followed, but the patient was safe. When the disease is really in the habit, he believed it may be cured spontaneously, although no such cases are on record; that is to say, he thought that when the constitution is very strong, it might bear up against it, and the disease might wear itself out. In all the recorded cases nothing has succeeded in effecting a cure, when once the disease was in the system. He did not think there was any real intermission in the disease, as mentioned by Dr. Santer, although there might be a remission of the extreme sensibility of the surface, &c. In the first case he saw, this sensibility of the skin was so great, that merely drawing out the pocket-handkerchief caused convulsions. The case was that of a boy, eleven years of age, and his mother held him on her knee during part of his illness. A great source of suffering and convulsions arose from this, in consequence of his mother's breathing on him. Various sedatives were given him, and among others, hydrocyanic acid. About four or five hours before death, the convulsions ceased, and he appeared to be convalescent; but they returned in four hours, and he died soon afterwards. The seat of the disease Dr. Thomson believed to be in the spinal cord, and to show this, he referred to the action of strychnia, one of the prominent symptoms following its inges-

tion being extreme sensibility of the surface. This was so marked in a cat to whom that alcaloid had been given, that even touching the whiskers brought on convulsions.

Mr. Clarke mentioned that in a case treated at King's College Hospital, temporary benefit had been derived from the application of ice along the spine. The convulsions were arrested by it. Prussic acid was given at the same time, but it was not supposed to be of service. The patient was a boy eleven years of age.

Dr. A. T. Thomson observed that as there was inflammation of the spine and of the theca, the application of ice along the spine would no doubt be of service in abating the convulsions, but its action would be only temporary.

Mr. Chance enquired if any member had any experience of the operation of tracheotomy, which was suggested by Mr Mayo. If it could not of itself cure the disease, it might at least delay the fatal period, and thus afford time for other remedies.

Mr. Clarke observed that Dr. O'Shaughnessy had published a case in which the cannabis indica had been of service in relieving the symptoms.

Some further discussion ensued between Dr. Thomson, Dr. Chowne, Mr. Snow, and others, and the meeting then adjourned.

Royal Medical and Chirurgical Society, April 9th, 1844—Mr. Stanley, president, in the Chair.—The following communications were read.

On the oxalic acid diathesis, by H. Bence Jones, M.A., &c.

The author commences his paper with a quotation from M. Vigla, who in 1838, says, "nous avions frequemment observé dans les sediments ou les crémors de l'urine de semblables cristaux (octaedriques) que leur forme aurait pu faire supposer être formés de chlorure de sodium, si la solubilité de ce sel, et la petite quantité qui s'en trouve dans l'urine, avaient permis de s'arrêter à cette idée." Dr. Golding Bird in 1842 stated that these octohedral crystals were oxalate of lime. No chemical proof having (as far as the author knows) been given, he was led to analyse the sediment. On examining urine for this purpose, the very frequent occurrence of these crystals in rheumatism was observed. In one case, in which the rheumatism was slight, the influence of diet and exercise on the mixed deposit of urate of ammonia and oxalate of lime was made the subject of experiment. In other cases in which these crystals occurred, the symptoms were altogether different; irritation of the urinary organs being the most prominent. The concretion of the crystals into oxalate of lime-gravel seemed (in one case at least) to be the cause of this diversity of symptoms. The author observes that these crystals do not often occur in sufficient quantity to admit of analysis, but in October, 1843, he examined the urine of a patient of Mr. Cutler's, and at the same time three small renal calculi which had been passed in July, August, and September. The urine under the microscope contained multitudes of octohedra, mixed with some crystals of uric acid. All the calculi consisted of oxalate of lime mixed with uric acid. The author has also examined cases of acute rheumatism, and always found the presence of these octohedral crystals in the urine of patients labouring under this disease. This deposit is also not unusually found mixed with urate of ammonia in chronic rheumatism. In one case he was enabled to make some experiments on the effects of diet and exercise on the deposit of urate of ammonia, and in it he first observed that the octohedral crystals varied in quantity at different hours of the day. The daily results of this experiment are given very minutely, during the four weeks it lasted. The author states it would be easy to multiply examples of the connection between octohedral crystals and rheumatism, but as it indicates no variation in the treatment of the disease, the fact seems only interesting as showing the close connection between the red deposit and octohedral crystals, and thus giving additional support to the theory of Professor Liebig, regarding the origin of oxalate of lime. The presence of octohedral crystals in the urine is frequently accompanied with symptoms of a totally different kind. The patient complains of pain in the loins, frequent desire to pass urine, which is sometimes small in quantity, at other times so much as to simulate diabetes. There are sudden calls to empty the bladder, and if they are delayed, considerable pain is produced. The urine, when examined, contains only a slight cloud which does not disappear on the application of heat; when examined with the microscope, this cloud is seen to consist sometimes entirely of octohedral crystals, more frequently of these crystals mixed with globules of mucus, and sometimes there are large and small scales of epithelium. The symptoms closely resemble those produced by a small calculus in the kidney, and in one case, they ceased suddenly after sharp pain in the course of the right ureter, and slight retraction of the testicle. The author concludes by observing that the treatment which has proved most beneficial has been that which improved the general health. In two of Mr. Cutler's cases, the symptoms appeared to follow mental anxiety; medicines had little effect, but as the cause for anxiety disappeared, the symptoms ceased.

Case of aneurism of the external iliac, in which a ligature was applied to the common iliac artery, by Richard Hey, Esq., F.R.C.S., Surgeon to the York County Hospital. The patient, a gentleman aged forty, perceived on the 10th of November, a small hard tumour in his left groin, above the centre of Poupart's ligament. Three days afterwards, he had severe pain in the part, and on the following day the swelling increased in size, accompanied with pulsation. The tumour gradually enlarged, assumed at one part a conical shape, and the skin was tense and red. By moderate continued pressure, the swelling could be reduced in size, but it resumed its former magnitude, when the pressure was taken off. It was resolved in consultation to apply a ligature to the common iliac artery, which operation was performed by the author on the 3rd of December. At this time the tumour measured six inches across, in a transverse direction, six and a half in a longitudinal, and projected three inches from the plane of the abdomen; at one point it was about an inch and a half from the navel. The incision was begun two inches and three quarters above the navel, and three inches from the median line, and was carried six inches downwards in a semi-circular direction, with a prolongation of an inch and a half in a straight line outwardly. The layers of muscles and of fascia transversalis having been divided to the whole extent of the incision, the peritoneum was gently separated from the parts beneath, and the common iliac artery was easily reached. A little time was occupied in scratching through the sheath with the point of the aneurism needle, after which it was passed under the artery from within outwards, armed with a double ligature of staymaker's silk, and the operation completed. The pulsation in the tumour ceased immediately after the artery was tied. The patient proceeded on the whole favourably after the operation, except that he was in great danger at one time from an accumulation of hardened fæces in the rectum. The tumour gradually diminished in size, and both legs were nearly of the same temperature, the affected limb being kept surrounded with flannel. A week after the operation pulsation was felt in the anterior tibial artery. On the twenty-eighth day the ligature was found loose in the wound, and removed. About the 20th of January the patient was free from complaint, and was able to walk about.

Mr. Hancock enquired of Mr. Hey if any particular attention had been paid to keeping up the temperature of the limb, after the application of the ligature? He asked the question, because he had attended on the case in which Mr. Guthrie several years ago applied a ligature on the common iliac artery for a pulsating tumour, and in that instance, the temperature fell so low as to require constant friction on the limb for eight and forty hours. After the lapse of that time, pulsation could be felt in the anterior tibial artery, and the friction was no longer required. The ligature came away on the twenty-fifth day.

The President read an extract from Mr. Hey's communication in answer, to shew that the variation in temperature of the limb was very slight, and did not require any especial artificial means to maintain it at the healthy standard. He also alluded to the return of pulsation in the anterior tibial artery at an early period, as a proof of the little embarrassment experienced in the restoration of the circulation after so important an operation. He concluded, by remarking, on the facility with which the vessel was reached, there not being any embarrassment from meeting with the ureter, or from the bag of the peritoneum being pushed down by the respiratory apparatus.

Mr. Hey observed, in answer to Mr. Hancock, that there were not any artificial means used to maintain the temperature of the limb, except that which was mentioned in the paper,—the application of a piece of very fine and soft flannel, the quantity used being regulated by the temperature, which was never allowed to fall too low on the one hand, nor to be raised too high on the other, either alternative being attended with danger. The quantity of flannel which was applied was not much at any time. With regard to the case, there were one or two points of interest which he had not touched upon in the paper, as he was desirous to render it as concise as possible. One point was the extreme rapidity with which the aneurism progressed from the time when it was first observed. In three weeks it had gained the size of six inches across, and three inches in a vertical direction. The depth might be estimated at about five inches. The increase was so rapid, as to excite apprehensions that it would burst either before or during the operation; the patient being very averse to submit himself to so serious a proceeding, it was delayed so long, as greatly to endanger its success. Another point of interest was the exact form of the incision. Many of the gentlemen present would doubtless recollect the case, in which Dr. Pease operated in America: the incision in that case was much lower down, so that not only the ureter but the spermatic cord was implicated in it. By making the incision so much higher up, not only was the tumor cleared, but also the epigastric artery, the ureter and the spermatic cord. He did not experience the slightest difficulty, and by working towards the tumor, the artery was got at with great facility. On reflecting afterwards on this case, he was led to consider that by this mode of operating, a ligature could be applied to the aorta with great facility. He could easily have tied it in this case. As far as he could judge, the ligature was placed about the lower edge of the last lumbar vertebra, or between it and the last but one. The tumor rapidly diminished in size after the operation for the first two or three weeks, when it became stationary, being then about the size of half a small orange. The sinus left by the separation of the ligature did not heal up, and one day Mr. Nelson, the surgeon in attendance, observed there was more discharge than usual. This increased considerably; the small tumor ulcerated into the sinus, and discharged its contents through it. When the patient was placed in a position to favor the discharge, and pressure was made upon the tumor, blood and pus were discharged in considerable quantity. In the course of a short time the tumor emptied itself, and then the sinus healed. The patient wore a belt round the body, and a pad on the lower part of the abdomen, to prevent the protrusion of the bowels, to which there is a great tendency. He is now in better health than he was previously to the formation of the aneurism, and there is not any remarkable feebleness about the limb, except occasionally at the ancle. The chief difficulty in the operation was experienced in opening the sheath of the vessel, arising from the means employed,—a curved aneurismal needle. Although the finger was kept upon the vessel, it was impossible to fix the point, until the instrument was straightened, when the object was at once successfully attained.

Sir George Lefevre enquired if there were many cases on record, in which this operation had been successfully performed. He asked the question, because Dr. Salaman had performed the operation at St. Petersburgh, the patient recovering, and living eighteen months afterwards. At the time when he operated, Dr.

Salaman thought he was the first surgeon who had applied a ligature round the common iliac. The case was sent to this society.

Mr. Stanley's mentioned Mr. Guthrie's case, in which he had placed a ligature on the common iliac for a pulsating tumour, which afterwards proved to be a fungoid disease: he also alluded to Sir Philip Crampton's case, which terminated fatally from secondary hæmorrhage, and to Dr. Mott's case in America, which was successful.

Mr. Hey observed that several other cases had been recorded, and he believed that Mr. Liston had performed the operation for consecutive hæmorrhage, and that the patient recovered.

Mr. Paget remarked that Dr. Salaman's patient died about twelve months ago, and that a most minute account of the dissection had been published by Dr. Salaman in a Russian journal, whence it had been transcribed into the German journals. It had appeared in Muller's Archives.

Mr. Hancock observed that Mr. Hey had in his remarks pointedly dwelt upon the avoiding the internal epigastric artery. In Mr. Guthrie's case, there was no danger of wounding it. The incision was a semi-lunar one, carried from between the umbilicus and the anterior superior spinous process downwards, to the internal abdominal ring, and external to the internal epigastric artery. When the operation was commenced, it was intended to apply a ligature to the internal iliac artery, but the tumour was found to have protruded so much into the pelvis, as to throw the parts out of their relative position, and there would not have been space sufficient for the application of a ligature below the bifurcation, so that Mr. Guthrie, with the concurrence of the gentlemen present, applied the ligature on the common iliac artery, as near the aorta as possible. The only thing to be avoided was the ureter, which crossed over the artery, and that was easily effected. The incision which had been made to apply the ligature to the internal iliac artery, was quite sufficient for the performance of the operation on the common iliac, and if requisite, the aorta itself could have been tied without enlarging it.

On Obstructions of the Pulmonary Arteries, by Mr. James Paget.—The obstructions treated of are those produced by clots of blood formed during life. They occur in nearly all cases in which the capillary circulation through a part of the lung is prevented for a considerable time before death, and this in consequence of the arrangement of the pulmonary arteries, which do not anastomose, except at their smaller branches, and in the capillary system, so that whenever any part of that system is obstructed, there must be a stagnation of the blood in all the branches of the arteries leading to that part; hence branches of the pulmonary arteries are usually found filled by old coagula in cases, first, of compact pulmonary apoplexy; secondly, of extreme œdema of the lungs, especially in that form which is attended by a peculiar rottenness of their texture, and which is apt to supervene in old persons with disease of the heart, or emphysema, after repeated attacks of bronchitis; thirdly, of pneumonia, with solid deposit; fourthly, of cancer of the lung, when cancerous matter has been conveyed by the circulation into the branches of the pulmonary artery. Cases of the occurrence of such coagula in these several diseases are narrated. But, besides these cases in which the formation of the coagula is in a greater or less degree the consequence of the capillaries of the lung being obstructed; there are others in which it appears as the chief and primary disease. Three such cases are detailed. In all of them numerous branches of the pulmonary arteries, of the second and third, and more distant orders, were completely blocked up by coagula, which had evidently been formed long before death, and besides which no sufficient cause of death could be found. In one of the cases some of the coagula had become organized, and formed pale, firm bands, and loops attached to the walls of the artery. In two of these cases there was no indication whatever of inflammation of the pulmonary artery, or of its branches, having existed; they were in all respects healthy, except in having spots of yellow deposit in their coats, a change which the author states to be very common in the secondary and smaller branches of the pulmonary artery. In the last case related there were abundant fibrinous deposits on the pulmonary valves, with wart-like growths, and ulceration of the adjacent part of the artery. There were only two valves in this pulmonary artery, and the author takes this occasion to mention the fact that in the majority of cases in which only two valves have been found in the pulmonary artery or aorta, these valves have been diseased. He points it out as an example of a congenital defect in the shape of a part being accompanied by a more important congenital imperfection of its tissue, and alludes to the necessity of considering the latter imperfection as predisposing causes of disease in imperfect parts.

Mr. Prescott Hewett observed that the only remark he would venture to make, had reference to the statement that there were only two valves in the pulmonary artery, and both were diseased. It had occurred to him on two occasions, to meet with only two valves in the aorta, and in both instances the valves were diseased by the growth of vegetations. The other day, however, he had seen a case where there were only two valves, and both were in a healthy state.

Pharmaceutical Society, April 10. — Mr. Payne, President, in the chair.

The entire evening was occupied in awarding the prizes to the students in the respective classes of chemistry, materia medica, and practical pharmacy. The first prize in materia medica was gained by Mr. Charles Cracknell, the second by Mr. Saunders; the first in chemistry, by Mr. C. Cracknell, and the second by Mr. Hocken. Certificates of merits were also granted to Mr. Spencer and Mr. Huskisson. In practical pharmacy, Mr. Williams obtained the first prize, and Mr. Hornecastle the second. Mr. Baxter, Mr. Scholefield, and Mr. Humphries received certificates of merit. It was further stated that there were sixty-seven pupils attending the class on materia medica, forty-four the lectures on chemistry, and fifty-seven those on practical pharmacy. The professors expressed themselves as generally pleased with the progress made by their pupils, and the president congratulated the society on the improvements that had been already effected in accordance with the object they professed.

Ethnological Society, Wednesday.—G. B. Greenough, Esq., V.P., in the Chair.

Messrs. J. Fletcher, F. Lloyd, R. W. Rockman, M.D., J. Brown, J. S. Buckingham, T. Page. O. Jackson, and B. Vulliamy, were elected members. A short paper on the Natives of the Marquesas. by Alexander Simpson, Esq. was first read, and then the principal subject for the evening, entitled "On the Bitúchi tribes inhabiting Sindh in the lower valley of the Indus and Cutchi, by Captain Postans," the author of "Personal Observations on Sindh." The inhabitants of the Marquesan group, a cluster of small rocky islands, with no extent of soil for cultivation, and a climate very enervating to white men, do not number more than twenty-five or thirty thousand. Notwithstanding the enervating climate, in physical conformation, they will bear a comparison with any race belonging to the great human family. The women are peculiarly handsome, both in form and features, and as the people generally live in the deep valleys, among forests of the bread-fruit and cocoa nut, where there is perpetual moisture, as well as a seclusion from the rays of the sun,—their complexion is much fairer than that of the inhabitants of any other group in the Pacific. The Marquesans differ from the other nations of Polynesia, in not showing a tendency to corpulence; their frames are slender—they are nimble and active in their movements, their features are sharp, and the expression of their eyes is keen and brilliant.

Captain Postans informs us that the general term of Bitúchi is applied to a race professing the Mahommedan religion, whose country is hence called Bituchistan, and that they form a connecting link between the Persians and Affghan tribes, and mixed Rajput races, and that they are of Arabian stock. The true Bituch possesses peculiarities apart from his geographical position, which would appear to mark him as having considerable claim to an original offshoot from the Arabian family. There are no less than fifty-eight distinct tribes of Bitúchis branching from three great heads, the number of whom remains in doubt; but those located immediately about the banks of the Indus, it has been pretty well ascertained amount to forty thousand fighting men. In person they may be considered as a fine race of men, and are decidedly handsome. Those living in the hotter climate of the plains, have somewhat deteriorated from the unusually large size and muscular strength for Asiatics peculiar to the mountaineers, but they are still a portly people. The Sindhian Bitúchis are of very dark complexion, with fine oval outlines of faces, aquiline nose, and large expressive eyes. With the Cutchi tribes the women hold a higher rank than in Sindh. They are admitted to council, and in warfare share the dangers with their husbands and relatives. On several occasions these heroines presented their own bodies as shields to protect their countrymen from the fire of the British troops. The language of the Bitúchis is distinct from that of their immediate neighbours, and in sound assimilates to bad Persian. After this paper, which, from the able manner in which it was written, received the marked attention of the members present (upwards of one hundred), the President announced the formation of an Ethnological Society at New York, which was communicated in the following words in a letter addressed to Dr. King, the founder and Secretary of the London Ethnological Society.

"I have had the honour of proposing your name to our Ethnological Society, as one of its members, among whom are enrolled some of our ablest scholars. Mr. Gallatin, formerly Minister Plenipotentiary to England, and the author of a valuable essay on the Indian languages of North America, is our President. Professor Robinson, a Traveller in Palestine, and Mr. Schoolcraft, are our Vice-Presidents. A volume of our transactions is now publishing."

Royal College of Veterinary Surgeons.—A meeting of the body politic and corporate was held at the Freemasons Tavern, Great Queen Street, Lincoln's Inn Fields, on Friday, the 12th day of April, for the purpose of receiving the Royal Charter of Incorporation lately granted by Her Majesty, and electing, according to the provisions of this charter, 24 members of the body politic and corporate, to form the council. The meeting was attended by a number of highly respectable members of the corporation from all parts of the kingdom.

The president, Mr. T. Turner of Croydon, took the chair, and opened the business in a neat and appropriate speech, congratulating the members on the obtainment of the charter, the provisions of which he trusted would meet with their approbation. The charter was then formally presented to the meeting and read; after which the election of council took place, consisting of the following members:—

Mr. J. Turner, V.S., Mr. W. Pereivall, M.R.C.S.L. Veterinary Surgeon 1st Life Guards; Mr. W. Field V.S., Mr. W. J. Goodwin, M.R.C.S.L., V.S. to the Queen, Mr. T. Mayer, V.S., Mr. Alex. Henderson, V. S. to the Queen Dowager, Mr. W. Dick, V.S., Professor Veterinary College, Edinburgh, Mr. F. King, jun., V.S., Mr. T. W. Mayer, V.S., Mr. W. Sewell, V.S. Professor Royal Veterinary College, London, Mr. C. Spooner, V.S., Deputy Professor Royal Veterinary College, Messrs. W. Mavor, V.S., G. Baker, M.R.C.S.L., V.S., W. C. Spooner V.S., J. B. Simonds, V.S. Lecturer on Cattle R.V.C. London, E. Braby, V.S., J. H. Langworthy, V.S. W. Eames, V.S., J. Home, V.S., 2d Life Guards, E. N. Gabriel, M.R.C.S.L., V.S., C. Marshall, V.S. C. Pereivall, V.S. of the Ordnance, Woolwich, J. Siddall, V.S. Oxford Blues, W. Robinson, V.S.

University of London.—Since the establishment of this university, fifty-three gold medals have been awarded at the examinations in medi

cine. At the M.D. examinations, seven have been distributed, six to the students of University College, and one to a student of St. Thomas's Hospital. Of forty-six medals given at the M.B. examinations, University College had gained thirty; Guy's Hospital, six; King's College, three; Bristol Medical School, two; St. Thomas's Hospital, one; Bartholomew's Collegiate Establishment, one; Mercer's Hospital, one; Queen's College, Edinburgh, one; and London Hospital, one. Nine scholarships and eleven exhibitions have been awarded; of the former, seven have been gained by students of University College; one by a student of King's College; and one by a student of Mercer's Hospital; of the latter, eight have fallen to the possession of students of University College; one to a student of King's, one to a student of St. Thomas's, and one to a student of Guy's Hospital. The number of graduates in medicine amounts to eighty-six, of whom nineteen have proceeded to the M.D. degree; the number of under-graduates in the medical faculty is sixty-four. We understand that the senate have recently decided upon an academic uniform to be worn by the members of the university. The costume of the doctor of medicine consists of an ordinary college cap, a black silk gown, trimmed with purple velvet, and a hood of purple cloth, lined with silk of the same colour.

HOSPITAL REPORTS.

BARTHOLOMEW'S HOSPITAL.

Acute Peripneumony.—John Jennings, æt. 22, a bricklayer, of middle height, and of dark complexion, was admitted into Luke's Ward, St. Bartholomew's Hospital, under Dr. Roupell, March 7th, 1844. The countenance was pale and extremely anxious, the lips livid and surface of body cold; he complained of an obtuse pain in the epigastrium, cough, difficulty of breathing and great debility. Inspirations were 46 in the minute; the pulse 72, small and thrilling; the tongue was furred on the dorsum, but clean at the edges; the skin cool; urine high coloured; bowels relaxed; when coughing, he spat up a thick, rust coloured mucus. He stated he had generally enjoyed good health till eleven days before admission, when having been exposed to wet and cold during the day whilst following his employment, he was attacked in the evening with a violent rigor, followed by great heat of skin, thirst, hoarseness, cough, and difficulty of breathing; the next morning he had severe pains in all his joints and limbs, but which left him two days after being first attacked; he was attended by a medical man who applied leeches to the epigastrium, and attempted to bleed him, but failed in obtaining blood from the arm. He had been getting worse daily, and was admitted into the hospital on the afternoon of the seventh, when he was ordered hirudines x to the epigastrium, and to take the saline draught three times a day.

8th. Appears much the same as yesterday, with the exception of the skin being warmer and the pulse fuller and more frequent; there is crepitation, with rhonchus and sibilus extending over the greater part of the entire surface of the left lung, with almost total absence of respiratory murmur at the base: he was ordered to be bled to ten ounces, and to take the following pill:—

℞. Hydrarg. chlorid. gr. ij.
Antim. potass. tart. gr. ¼
Pulv. Opii gr. 1-6th.
Misce. ft. pilula 4ta. q. hora sumenda.

The pulse rose in frequency after bleeding; he was, therefore, ordered to be cupped from the chest to ten ounces.

9th. Better this morning; breathing easier, cough less troublesome; skin bedewed with perspiration; tongue clean, but very red; pulse 98, soft and compressible; sputa not so tenacious, and more of an amber colour; there is an abundant deposit of a lateritious sediment in the urine; to continue the pill, and to have a blister applied to the chest.

10th. Breathing easier; cough less troublesome; pulse 62, and feeble; bowels relaxed—continue the pill and the saline draught.

11th. The countenance is pale and wan this morning; the pulse 84, soft and compressible; expectoration less brown and glutinous; the air enters more freely into the lung, but he complains of a little pain in the left side—to have eight leeches applied to the side:—Pulv. ipecac. comp. gr. x, horâ somni, and to take the cal. antim. et opium only night and morning.

12th. Continues much the same as yesterday; pulse 75, and rather jerking; tongue clean and moist—to continue the pill and Dover's powder at bed-time.

14th. Feels himself much better. The breathing is now almost natural, and he has little cough; the tongue is clean; pulse 86, and soft; the gums are slightly affected by the mercury.

15th. There is still some crepitation at the base of the left lung, and there is less resonance likewise on percussion on the left side of the chest, than on the right—to have eight leeches applied to the infra-scapular region—continue the pill night and morning, and the pulv. ipecac. comp. horâ somni.

17th. Continues much the same; the air now enters the lung freely, but the left side of the chest is still less resonant on percussion than the right—to take the pill only in the morning, the gums being fully affected by the mercury, and to take the Dover's powder at bed-time.

18th. Much better; he has now very little cough; the tongue is clean; the skin cool; pulse natural: he still complains of a little pain in the epigastrium upon taking a deep inspiration; appetite improved—to have broth diet, the chest to be painted over where he feels the pain with tinct. iodini night and morning, and to take the following draught:—

℞. Tr. Hyoscyam. m. xv.
Liq. ammon. acet. et
Aq. destill. āā. ʒvj.
Misce. Ft. haustus ter die sumendus.

22d. Continues going on favourably; he can now take a full inspiration without pain: the skin where the tr. iodin. has been applied, is desquamating, and occasions him some little irritation—to have half meat diet: he continued in the hospital till the beginning of April, when he was discharged quite well,

Acute Rheumatism, treated by purgatives and Dover's powder.—Jane Kemp, æt. 19, a shoebinder, a well formed girl, of rather tall stature, and of fair complexion, was admitted under Dr. Roupell into Mary's Ward, St. Bartholomew's Hospital March 9, 1844. She complained of great pain in all her joints, with inability to move them without increasing it, pain in the back and in the limbs generally, with great thirst, loss of appetite and sleeplessness; the skin was hot and dry; the tongue furred; pulse 140 and rather full; the bowels were costive; urine high coloured; there was no affection of the heart. Three years ago she suffered from an attack of rheumatic fever which confined her to her bed for six weeks, excepting which she had generally enjoyed good health: her present attack came on six days before admission, with sickness and alternate hot and cold chills, followed by thirst, and pain in all her joints, which has been getting worse daily: she was ordered hst. sennæ comp. statim. the effervescing saline draught three times a day, and pulv. ipecac. comp. gr. x, horâ som.

March 11th. Better this morning, joints much less painful; tongue slightly furred, but moist; pulse 128, soft and compressible; repeat the hst. sennæ comp. statim., and go on with the effervescing draught and Dover's powder at bed-time.

12th. Continues much the same—to repeat the hst. sennæ comp. persistet. in usu pulv. ipecac. comp. et hst. efferves.

13th. Feels herself better; has less pain in the joints, tongue still furred; bowels freely open, pulse quiet—continue.

15th. Going on favourably, but complains of want of sleep at night—continue.

18th. Improving daily; she has now very little pain in the joints, the tongue is clean, pulse 75, bowels open once a day, lateritious deposit in urine—continue the medicines, and to have broth diet.

20th. Continues improving: she was observed to-day to have psora; she was, therefore, ordered to rub in ung. sulph. night and morning.

27th. Convalescent; scabies cured—to have a warm bath to night.

30th. Discharged to day quite well.

WESTMINSTER HOSPITAL.

Lithotomy.—George Mann, aged three years and four months, was admitted June the 25th, under the care of Mr. Guthrie. Is a scrofulous boy, fair complexion, light hair, and ruddy looks; and has been ailing for the last fourteen months. As the child is too young to be able to give a correct account of its sensations, but little of the previous history can be learned, save that he always appeared to be in great pain whenever he voided his urine, and used to pull his penis very much. He had not passed blood at any time from the urethra. He was brought several times to the hospital as an out-patient, on which occasions he was sounded, and the existence of a small calculus ascertained. The sounds in ordinary use would not pass; he required one having a smaller curve, and of the No. 3 size. The stone was considered to lie just above the pubes.

29. His bowels having been thoroughly cleared out by enemata, one given the day before, and another this morning, he was brought into the operating theatre at the usual hour. Mr. White, and Mr. W. B. Lynn both attempted to pass the staff, but were foiled: the house-surgeon was more successful, but at the same time, nearly all the water contained in the bladder escaped. In order to pass the instrument it was necessary to raise the child's body, and bend it on the pelvis. Mr. White, having taken charge of the staff, Mr. Lynn commenced the operation by making a lateral incision on the left side of the raphe with a common scalpel, repeating the cut until he had a free passage, which he ascertained by passing in the finger; at the second incision, the transversalis perinœi was divided, and bled rather freely. Some difficulty was experienced in cutting into the urethra, the staff requiring to be bulged out rather more than usual. The bladder was opened into with the aid of the bistoire caché, and the operator hooked out a small flat stone with his finger. A piece of oiled lint was then introduced into the wound, a bandage rolled round the thighs, and the child carried to bed. It was calculated that nearly half a pint of blood was lost during the operation, which lasted nearly four minutes. The child was very faint after the operation.

Towards evening he rallied, and passed a very good night. The next day he was employed with his toys, and continued going on well until the 12th of July, making water generally through the wound, but not complaining of pain. On the 2nd he had a slight attack of diarrhœa, which was soon arrested by an aromatic and cretaceous mixture. By the 12th the diarrhœa returned, with a quickened pulse, hot skin, &c., and the child was restless and uneasy. The symptoms of febrile excitement being regarded as dependant on disordered bowels, a dose of castor oil, to be followed by aromatic confection, was ordered, and he was thus effectually relieved. A similar attack was experienced on the 18th, and the same remedies were again administered with equal advantage. The boy, however, did not present the healthy look he had worn previously; the features were pale and anxious, and he moaned a good deal. The wound did not heal, and he was dismissed on the 30th of the same month, to try what change of air would do for him.

He was brought to the hospital on two or three occasions afterwards; but his health did not appear to have improved, although the wound was closing.

GOSSIP OF THE WEEK.

The proximity to the Session's close, has produced the customary increase in the number of Gentlemen entering our body. At Apothecaries' Hall, on April 12th, the following Gentlemen successfully passed examination:—Henry Augustus Hore, George Appleton, Frederick Cheesman, William Falkingham Foottit, William Cornish Northey, William Fathers Coles, Thomas Nicholas, William Pollard,

Thomas Robert Evans, Hotchkin Haynes, Samuel Thomas Badger, William Wallace Wildey, Samuel Henry Swayne, Shadrach Edward Robert Jones, Frederick Humphrys Green, George Gwillim, Thomas William Nicholls, George Henry Hopkins.

The following gentlemen were admitted Members of the Royal College of Surgeons on Friday, April 12th, 1844.—J. C. Barker, B. Eddison, R. Roe, A. C. Morse, A. P. Schuyler, E. C. Hulme, T. Oldacres, H. Fenton, J. H, Bennett, R. Hassall, T. Massey.

The *Gazette des Hospitaux* assures us that Velpeau (formerly a farrier) was by some accident called in to prescribe for a fair Countesse's horse. The lady, fearful of her favourite's fate, asking to see the veterinary surgeon, recognised the Professor. "So *you* prove to be the *Medicin des bêtes.*" "Quite at your service," was the gallant reply.

Dr. Andrew Moir died on the 6th of the last month, in the thirty-eighth year of his age. He was Lecturer on Anatomy in King's College Medical School, Aberdeen. Another loss which occurred last week, is that of Dr. Barlow, of Bath, well known for his contributions to the Cyclopædia of Practical Medicine. He died of diseased kidney.

As illustrative of the *close dependence* of medical *facts* on medical theories, we have learnt that during the last fourteen years a Commission, appointed by the French Academie des Sciences, has been sitting to try the question whether Gelatine be nutritive or not. No conclusion has yet been come to—no report drawn up. In the Hospital St. Louis, on the other hand, the patients have been for the last twenty years up to the present time, fed on Galatinous soup!

A Paris surgeon, who is ever acting on the principle, that to get business one must appear busy, and who is always in a hurry to some case or other, was invited at a party which he was honouring *for a moment* with his society, to take his place in a quadrille. He declined, of course, "Cannot upon my honour—expected this instant at an operation—the water is hot, and the instruments ready." "Est—ce que Monsieur donne des lavements?" interjected (says our French informant, M. Raimond) a French Financier, and sufficiently loud to be heard!

Dr. M. H. Lynch, of Suffolk Street, has given us an opportunity of essaying, and we may add, enjoying the qualities of a Portable Vapour Bath of his invention, which formed on the model of those of Macartnay and Denman, certainly offers advantages which we believe to belong to itself peculiarly. While capable of being used for every form of medicated vapour bath, the warmth is so regulated, that it is felt most about the feet, less about the knees, and so less proportionally to the neck—a graduated warmth which the practised physician will know how to appreciate. The temperature thus produced varies from about 100° at the clavicle to about 127° at the feet. The other advantages are greater cheapness, simplicity of structure, and greater convenience for application to the sick. The inventor, we believe, intends to make over his form of Bath to some respectable tradesman, that the Profession and Public may have the whole benefit of his ingenious labours.

At a lecture delivered by Mr. Vernon at the Marylebone Institution, on Friday, the 12th inst., Mr. Blakewell, a man of property, and it is said, a surgeon, disputed the genuineness of the pretensions advanced by the lecturer in favour of the clairvoyance of a young female, named Jane Knowles, a niece of the Rev. Jabez Burns—a girl aged about twelve years. He offered to pay £20—£10 to the Institution, and £10 to the girl—if she would read for him in public, after having her eyes covered over with sticking plaister, applied under his direction. Five or six layers—we are assured by a respectable witness—were carefully laid over the eyes: a book selected promiscuously by the Chairman from the library of the Institution, was placed before her, and to the enthusiastic amazement of an intensely excited audience, the girl, after ten minutes interval, spent in perfect quiet, took up the book, and read a line without difficulty or hesitation—

"The rocks are situated under deep water."

The same experiment, we are informed, was tried on the same young lady at the Adelaide Gallery, on Tuesday, under the superintendence of Dr. Jones, with the same *result*, before about two hundred persons. We understand that Dr. Collyer, who claims to have discovered Phreno-mesmerism in America in the year 1839, is now in London, and intends to place some singular cases of this kind before the metropolitan public; and as the subject now appears to excite very vivid and general attention, we take occasion to suggest to medical men the propriety of examining with careful, but frank vigilance, every public pretension made to the possession of this extraordinary and abnormal faculty. We ought to interest ourselves in the investigation, if it be but to set the public right. Enough of evidence has been adduced to excite inquiry, far from enough, however, to silence doubt. Thus we do not like in the case at the Marylebone Institution the ten minutes rest. The finest ray of light admitted through an almost infinitely small crevice to the eye, will suffice to allow the reading of a line; and it is easy to conceive that the movements of the facial muscles, of the eyes, nose, &c., may in ten minutes produce such a shifting of bandages or plaisters as may secure the mesmerised person the benefit of this essential circumstance.

On Tuesday evening a useful debate was opened in the House of Commons by Alderman Copeland, who moved for returns of all Commissions, and the results of the Inquiry on the working of the Anatomy Bill. Sir James Graham and Mr. Warburton opposed all publicity, and Messrs. F. French, Borthwick, and Mackinnon, expressed opinions favourable to further inquiry. The motion was not, however, pressed to a division.

The fine weather we have recently had, appears to have greatly lessened metropolitan mortality. For the week ending March 30, the mortality was 1080, that ending April 6, 923, that ending April 13, only 870. The increase of deaths recently has been caused by small-pox and scarlatina—of 21 who died of the former disease in the last week, 14 were not vaccinated. The following table is valuable:—

Deaths registered in the Metropolis in the last ten Weeks, and the Mean Temperature for the same periods:—

Deaths at all ages—

1076...1146...1115...1055...1030...989...981...1080...923...870

From Diseases of the Lungs, &c.—

415... 448... 428... 366... 375...307...309... 294...257...257

From Small Pox—

17... 29... 19... 17... 16... 21... 22... 18... 21... 21

Deaths at Sixty and upwards—

248... 295... 288... 249... 247...236...217...231...184...169

Mean Temperature—

34·6...34·7...35·5...40·3...37·3...41·1...39·7...47·2...50·9...50·3

PERISCOPE OF THE WEEK.

Mistaken Diagnosis.—This and the fourteen following articles constitute the principal contents of several recent numbers of the *Medical Gazette.*—Mr. Stafford, in a paper on irritation, states that when he was house surgeon at St. Bartholomew's Hospital, a patient was admitted who was supposed to be labouring under typhus fever. He was there not for anything wrong about the urinary organs. The nurse, however, observed that the man did not make water, and consequently, informed Mr. Stafford of that fact. He found the man in the following state. He had an excessively quick pulse, black and dry tongue, an oppressed countenance, and was delirious. On examining the pelvic region, and that of the urinary organs, he found in the perineum an immense urinary abscess, which was producing all these symptoms. It was opened, and a vast collection of putrid sloughs, and pus, and urine, let out. The typhoid symptoms gradually abated, and the man ultimately recovered. Mr. Stafford also alludes to two other cases of the unsuspected existence of large abscesses producing symptoms which were mistaken for those of typhus fever.

Gout Produced by Local Injuries.—Mr. Stafford says gout may arise from an injury. A heavy piece of wood fell upon the foot of a man subject to that disease. Leeches, evaporating lotions, fomentations, and other remedies, internal as well as external, were employed, but the inflammation did not abate. The man at last mentioned that he had been subject to gout, and suspected, from his feelings, that he had an attack of it, the hint was taken; colchicum and other remedies were given, and the inflammation soon disappeared. During Mr. Stafford's practice, he has seen three or four cases where gout has shown itself in the injured part, when the individual has been subject to the disease.

Sympathetic and Local Irritation.—When there is irritation of one organ, it is very common for another to sympathize with it, that is to say, there may be disease of one joint, and the next to it will suffer pain, although there is nothing the matter with it; for instance, in disease of the hip, the knee sympathizes with it, and there is great pain in the latter joint; so in disease of the knee-joint, the ancle is painful. In arthritic rheumatism this is peculiarly well exemplified; the disease goes from one joint to another in a most remarkable manner, and there is nothing for certain to account for it. Again, when there is stone in the bladder, there is pain at the end of the penis; in disease of the prostate gland, pain in one or both thighs. A blow on the head causing concussion of the brain, will induce vomiting; a blow on the stomach, death; a sudden cessation of a discharge from the urethra, hernia humoralis; in fact, the instances of sympathetic irritation are too numerous to mention. They are to be accounted for through the nervous system. The nerves of the limbs are connected with the medulla spinalis, and through it with the brain, and thus any injury to the limbs will account for irritation of the whole system. Likewise, any injury to an internal part will, through the sympathetic nerve, account for the same. But they both sympathize with one another, and, therefore, wherever the injury may be, the whole nervous system will be deranged. But local irritation is not always to be explained through the nervous system. In many instances local irritation takes place through the absorbents. For instance, an individual has an ulcer on the foot, a hang-nail as it is called, or an irritable sore of the leg; the absorbents inflame, and the inguina glands become enlarged, and in some instances even pus forms. It is not uncommon for a patient to present himself at a hospital with enlarged inguinal glands, not knowing the cause, there being generally an irritable ulcer on the foot, a hang-nail, or ulcer of the leg, and there has been a red line, denoting inflammation of the absorbents. Many exemplifications could be adduced. The wound received in dissection is a good instance. A gentleman opens a body, or dissects. He pricks his finger, pain at the spot supervenes, the absorbents inflame, and the glands in the axilla become enlarged. Pus forms at various spots along the absorbents, or in the glands, and is followed by concomitant symptoms. Again an individual gets a chancre; through the absorbents the glands in the groin inflame, and are enlarged, and bubo is the consequence.

Inflammation.—Mr. Earle, in a very lengthy paper, combats the views on inflammation promulgated by Dr. Copland in his dictionary of practical medicine. Dr. Copland observes that the organic nervous tissue is permanently affected in the seat of inflammations of all kinds. He contends that inflammation in its more *sthenic forms* is a result of a morbidly excited state of the organic nervous tissue surrounding the extreme vessels or capillaries of the affected part, or a derangement from an unnaturally exalted condition of these nerves, on which the function of these vessels, and indeed of the whole vascular system, has been shewn to depend. The correctness of this statement depends, Mr. Earle says, on the truth of Dr. Copland's opinion respecting the functions of the nerves. He accordingly quotes from the article on irritability, the following paragraph:—that the organic or ganglial nervous system presides over the strictly vital functions, and that all the grades and manifestations of irritability or contractility proceed from this source. This statement, which we should have thought every one understood, and gave credence to, proves a stumbling block to Mr. Earle, who remarks that by this Dr. Copland means that the power of contracting possessed by all voluntary museles is not derived from the cerebro-spinal, but from the organic or ganglial system of nerves, that this latter system bestows on muscular or fibrous tissues the power of contraction, while the spinal nerves simply conduct or convey the stimuli to contraction. This Mr. Earle combats by alleging that, while all modern anatomists notice the distribution of ganglial nerves, together with the blood-vessels, to all the thoracic and abdominal viscera, and in short to all parts concerned in maintaining what is understood by the term, organic life; nothing is said respecting the existence of ganglial nerves in that large division of the body, consisting chiefly of the simple voluntary muscles. It is scarcely possible to conceive that minute dissection can be carried further than it has been; the cerebro-spinal nerves have been traced to their ultimate distribution, in the form of loops, in the voluntary muscles; but no mention is made of any ganglial nerves in these parts, or as to their accompanying the arteries which supply them. Analogy also, Mr. Earle thinks, is not in favour of the supply of nervous action to the voluntary muscles by the ganglionic system, because the ganglia belonging to the sympathetic are never at any great distance from the parts supplied by them. This is so constantly and invariably the case, that when it becomes necessary to detach a few filaments, as it were, to an outpost, a ganglion is always found. Mr. Earle infers from the absence of ganglia in the limbs, that the great sympathetic does not send any branches to the voluntary muscles or their arteries. He considers consequently that Dr. Copland has drawn and relied upon a false inference; that, being unsupported by fact, and contradicted by analogy, he has no ground whatever for concluding that ganglial nerves exist in parts where they cannot be demonstrated by the most minute dissection; and then adds that Dr. Copland is by no means singular in this mistake, of supposing the ganglial nerves to be distributed to every part of the bodies of warm-blooded animals. Dr. Wilson Philip, among others, has fallen into the same error.

Mr. Earle further remarks that he believes that all who have adopted this opinion are *physicians*, that is to say men who cannot be received as authorities on an anatomical question.*** The italics in the concluding paragraph are not ours. Mr. Earle himself has marked the words by a change in the character of the type used, to shew his sense of their importance, and we are, therefore, authorized to believe that he means it to go forth as his deliberate opinion that physicians are not authorities on an anatomical question. And this remark is published in the *Medical Gazette*, the organ of the College of Physicians in London, unchallenged by a passing observation from the editor; Wilson Philip, the celebrated physiologist, being dragged in by main force, to make the remark more poignant. Surely anatomy, and its sister physiology, for in this question the two are inseparably connected, are not so utterly indebted to the surgeons for their existence, that no physician can lay claim to any of the honor resulting from discoveries connected with those sciences! Cannot Mr. Earle, in the long and glorious list of scientific observers, find some few names of physicians famous as anatomists, if it be only to chequer with the word 'Doctor' the long and plain array of 'Misters,' which he would imply is alone to be met with; or must we at some spare moment furbish up our memory, to supply him with what he lacks, and shew that even a physician may be a good anatomical authority.

The Bath Waters.—Dr. Granville, when suffering from the effect of concussion, caused by leaping over a narrow ditch, with his knees closed, and alighting on both heels at the same instant, with the body nearly erect, by which was produced a most singular nervous affection, from which he did not suffer when perfectly quiet, in a recumbent or semi-recumbent posture, sitting, or going up and down stairs, but which invariably came on when he attempted to change from the horizontal to the erect posture, or to walk a few steps across the floor, producing a feeling in the right inguinal region and hip, as if the limb were severed from the body, or did not belong to it, next to which came a sense of constriction at the præcordia, to which, if he persisted in progressing forwards, succeeded great anxiety, a flushing of the face, and a sense of fulness at the back of the head, when he found it absolutely necessary to stop and lie down;—after certain small abstractions of blood, and persisting in the use of low diet for several weeks, determined on trying the Bath waters, which he employed in the form of baths, and the wet douche, with exceeding benefit. By the time he had taken fifteen baths, and had applied the wet douche to the whole length of the affected limb ten successive times, he found himself equal to walk a distance of rather more than a quarter of a mile, without experiencing any inconvenience whatever. Ordinary warm baths had been previously used without advantage. Dr. Granville ultimately recovered, and he attributes his cure to the effects produced by the tellurie heat diffused through mineral waters.

Urinary Deposits.—Dr. Griffiths says with respect to these, that *blood* is recognized by the colour it imparts to the urine being destroyed by boiling, the solution then becoming colourless, or yellowish, the clot of a chocolate colour, also by the microscopic appearance of the globules in the sediment. *Semen* is recognized by the increased mucous cloud, (not always apparent, however); the urine is also albuminous. The best evidence is the presence of the spermatozoa; the odor is perfectly valueless. In every case where albumen is present in the urine of a male patient in small quantity, the deposit should be examined, to ascertain if it be caused by the presence of semen. *Pus* is recognized by its forming a yellow layer or deposit, which, if mixed with the lithate of ammonia, occupies the lowest position, the lithate forming a stratum above it, generally well contrasted by its pink or reddish colour. The urine is albuminous; the deposit is readily diffused through the urine, and has no viscidity or tenacity, but acquires it when mixed with ammonia. The presence of the numerous globules, which have been so frequently described, and the albuminous supernatant liquor, are necessary for the recognition of pus; the one can (not) be depended upon without the other. *Mucus* is recognized by its viscidity, tenacity, and glairy characters; the supernatant liquid is not albuminous; the layer formed by mucus in urine is always higher, and much less dense than that of pus; moreover, it is not diffusible through the urine like the former, (qy. latter); globules, quite as perfect both as regards nuclei and in other respects, are found in mucus, often acted upon with more difficulty by reagents, as acetic acid, &c., inasmuch as they are enveloped in a glutinous mass, which temporarily defends them.

Treatment of Cholera.—Mr. Ranking treats this very formidable disease, by placing his patients in hot baths of from 110 to 115 Fahr. and continuing them in it for a full hour or more, according to circumstances, until the restored circulation indicates the removal of that obstruction on which he conceives collapse in cholera to depend. Two cases of this disease occurring in Europeans were treated by him by hot baths, drastic purgatives daily, and blisters to the nape of the neck on the occurrence of delirium, with ice to the head, and occasionally four and six leeches to the temples. In one case the patient was evidently relapsing, but was again restored by a full hour in the bath, at 110°.

The Double Salts of Iron.—In a paper on the double salts of iron, Mr. Hemingway infers that the real constitution of the ammonio-citrate of iron is one equivalent of citrate of iron, and one equivalent of citrate of ammonia; that is, sesquioxide of iron 80, or 37.56, citric acid 116, or 54.46, and ammonia 17, or 7.98, = 213, or 100.00. The ammonio-citrate of commerce contains an average of thirty per cent of oxide. A salt having this constitution is made without much trouble as follows; take a bisalt of any third constituent (bicitrate of ammonia, for example), made by adding a known quantity of citric acid to a similar quantity exactly neutralized with ammonia. This solution, in its turn, is to be saturated with hydrated oxide, which is accomplished by mixing the oxide gradually, so long as it continues to be dissolved, avoiding any great excess. This formula admits of very general application by simply changing the acid or the third constituent, but there are exceptions. The potassio-tartrate of iron may be obtained by dissolving the hydrated bitartrate in a solution of the caustic alcali, if they be mixed in such proportion as to keep the bitartrate slightly in excess, supersaturating at the end with ammonia, a salt will be obtained, perfectly but slowly soluble in cold water, substantially consisting of tartaric acid, iron, and potash, and belonging to the superseries of double salts. The admixture of ammonia is advised, first, because it is impossible to separate any excess of potash, should there be any, and, secondly, because it is difficult to effect complete combination without such excess.

Granular disease of the kidneys.—Dr. Heaton says, that tubercle in the lungs, cirrhosis of the liver, granular degeneration of the kidney, and opacity and thickening of the valves and membranes of the heart are all regarded as the result of a deposit of lymph of a cacoplastic or imperfectly organizable character; such lymph shewing a strong tendency to induration and contraction subsequently to its deposition, the more marked as it is the further removed from the healthy standard. Lymph of this imperfect nature may be deposited as the result simply of local causes, as we see in the contracted cicatrices resulting from extensive burns, and other serious injuries of the surface; but, as affecting internal organs, it usually depends on some imperfection of the system, or constitution, analogous to that seen in persons of a scrophulous habit, and which may be either congenital, or developed in the individual *de novo*. In such individuals, it may be deposited in an organ, either in consequence of inflammation, acute, or more usually of a low and chronic character; or where the constitutional pre-disposition is strong, instead of the healthy lymph supplied for the ordinary textural nutrition of all parts, without any previous disease in the affected organ. Resulting then from the same unhealthy state of the constitution, and differing in their symptoms and physical characters, rather from the circumstances of the organ affected, than in their essential nature, a very probable opinion might be formed, *à priori*, that the diseases already mentioned—and if there are others of an analogous nature—would be found in many instances, more than one of them affecting the same individual. Dr. Heaton has seen granular disease of the kidney, which forms the essential subject of his paper, connected with tubercle of the lungs, and with a cirrhose state of the liver, one or both, in many instances; also with diseased valves of the heart, and with tubercular deposit on the peritoneum. It is, perhaps, questionable how far softening of the brain in any of its forms, can be included under the same category as the diseases already mentioned; it is, like them, an organic change, wanting the true characters of a malignant disease, but it presents none of the tendency to contract which, at one period or another, is common to the other diseases enumerated. This may, perhaps, merely depend on the great difference which exists between nervous matter, and all the other textures of the body; the fatty matter of the blood, rather than the liquor sanguinis, being, perhaps, more particularly poured out for the nutrition of this tissue. Certainly, softening of the brain is, like them, dependant on a degeneration of the healthy tissue; and probably of a constitutional origin. In two of Dr, Heaton's cases, this disease co-existed with degeneration of the kidney. *** Dr. Heaton seems to consider that the correct view of the nature of granular degeneration of the kidney is, that it depends on a deposit of lymph of an imperfect character in the texture of the kidney, affecting particularly the cortical substance, but, as the disease advances, invading also the tubular structure. That when the constitution is very imperfect, this may depend on constitutional causes merely, in which case the bad lymph is deposited in the ordinary process of textural nutrition, but that in many cases this constitutional cause may be aided, and the disease excited, by an inflammatory state of the affected organ, in which case the bad lymph may be poured out, not merely in connection with the nutritive process, but as an inflammatory effusion. Allowing to the kidneys the property which Dr. Prout supposes them to possess, of exerting a disorganizing influence on the materials to be discharged by these organs, it appears sufficiently intelligible why, when the proper texture of the kidney is supplanted by a morbid deposit, these organs should lose this property, and pour out, as through a mere filter, the fluid part of the blood, retaining more or less of its albuminous character. It seems difficult to afford a probable explanation of the great diminution in the amount of the red globules in the blood, which seems essential to this disease. Whatever this may be, it is not unlikely that the great tendency to dropsical effusion depends on this state of the blood; as in chlorosis—another disease in which there is great diminution of the colouring matter of the blood—there is a very similar tendency.

Erection of Stoves.—In an anonymous paper 'on the injuries occasioned by breathing impure air in close apartments,' it is recommended that stoves should be constructed of masonry throughout, as in many other countries, or of fire-tiles, or porcelain plates imbedded in mortar, with well-regulated flues, as they would then be far preferable to open fire-places, the substitution of imperfect conductors of heat being not only consistent with the principles of economy in the preservation of heat, and its more uniform distribution through apartments, but more salubrious than the methods usually resorted to in this country, of warming air by contact with iron stoves or pipes.

Notes on Menstruation.—Mr. Warwick concludes that the pure menstrual fluid is ordinary blood, not a secretion, but simply a sanguineous exhalation, in fact a hæmorrhage which differs in no respect from an ordinary hæmorrhage, the proximate cause being an element common to all spontaneous hæmorrhages, namely a local hyperæmia, or congested condition of the vessels of the part from which the blood is effused, the ultimate cause, or the exciting cause of the congestion, being the periodical maturation and discharge of a Graafian vesicle or ovum from the ovary. He

considers that the non-coagulation in general of the menstrual blood is owing to an impaired vitality consequent upon the slow process of its elimination, and to its mixture with the mucus of the vagina. From its mingling with this latter secretion, it acquires the odour, dull colour, turbidness, viscidity, and other qualities, which have been commonly considered as indicative of its peculiar character.

ADHESION OF THE PERICARDIUM.—Dr. Norman Chevers, in a letter specially written for that purpose, lays claim to the discovery that adhesion of the pericardial surfaces, far from producing hypertrophy and dilatation of the heart, as maintained by Dr. Hope and other writers, has a tendency to be followed by general diminution in the size of that organ and its vessels, and contraction of its cavities: providing there has not been also superadded disease of the valvular passages of the heart, or continued obstruction to the pulmonary or systemic circulation, and he remonstrates with Dr. Barlow for not in any way alluding to his labours, when speaking on this subject in the Gulstonian lectures.

DALBY'S CARMINATIVE.—A correspondent, under the signature of J. A., strongly recommends the preparation, (not the patent medicine) for which a formula, under the name of Dalby's carminative, is given in Dr. Paris' Pharmacologia. It is made with two scruples of carbonate of magnesia, one minim of oil of peppermint, two minims of oil of nutmeg, three minims of oil of aniseed, thirty minims of tincture of castor, twenty-five minims of tincture of assafœtida, fifteen minims of spirit of pennyroyal, thirty minims of compound tincture of cardamoms, and two ounces of peppermint-water. Of this extraordinary farrago, he prescribes from three to five minims as a dose, and finds it a valuable and useful carminative for the griping and flatulence, so frequently troublesome to infants in the first month after birth. Three to five minims, combined with a grain of carbonate of magnesia, and one-sixth or one-fourth of a grain of rhubarb, sweetened with syrup, form a pleasant carminative, acid and aperient mixture, which may be given with safety and advantage. In some instances, when diarrhœa prevails, from two to five minims of tinct. camph. comp. may be advantageously combined with it, whether with or without the rhubarb and magnesia. J. A., in concluding his note, mentions the case of a little girl, two years of age, who was suddenly affected with heavy, almost apopletic stupor, in consequence of a bottle of Eau de Cologne having been accidentally spilled upon her clothes.

CHALYBEATE WATERS.—Dr. Thomson says, in the *Pharmaceutical Journal*, that chalybeate waters are the most efficient of all the mineral springs; for, notwithstanding the minute quantity of carbonate of iron in some of them, they produce beneficial effects that do not follow the use of the same salt of iron prescribed in the usual form by the physician. These waters enter the circulation, change and improve the quality of blood, impart tone and vigour to the muscular tissue, and augment the secreting function. When chalybeate waters contain much carbonic acid, a few beakers taken in rapid sucession cause a transitory feeling of intoxication; they also operate as diuretics. They should be drank in the morning, and brisk exercise taken after each glass of the water. They prove hurtful to plethoric persons, and those of a rigid fibre, especially when there is any tendency to active hæmorrhage, or visceral congestion, or any organic change of structure, or tendency to apoplexy. Whatever may be the condition of the habit, a course of chalybeate waters should always be prefaced by some evacuation of the alimentary canal.

ENTERITIS SIMULATING PREGNANCY, AND LABOUR AT THE FULL TIME.—Under this extraordinary title, Mr. Barbieri, a surgeon practising in the Lime Kilns, Fifeshire, has published a case in the *London and Edinburgh Monthly Medical Journal*, of which we purpose giving an analysis. His patient was a lady, 32 years of age, the mother of two living children, and of one still-born at the eighth month. He was sent for to attend her in her fourth accouchement, and on his arrival found her suffering severe and repeated uterine pains, such as occur at the end of the first stage of natural labour. Her previous history was to the following effect:—The catamenia had been absent for nine months and two days; she quickened at the end of four months and a half; the motion of the fœtus became progressively stronger every month; she had experienced morning sickness, vomiting, heartburn, irresistible longings, aversion to wine and tea, dysuria, spots and ephiledes in the face and skin, frightful dreams, cramp and pain in the legs for the last fortnight, hæmorrhoids, varicose veins, and anasarca of the legs for the last two months. All these, with the exception of anasarca, cramp, and the aversion to wine, had occurred in her three former pregnancies. The abdomen was that of a woman at the full period of gestation; besides being hard, the uterine enlargement felt prominent and distinctly circumscribed; the entire abdomen bore the most minute and firm pressure at any point, without her experiencing the least pain or inconvenience. The breasts had secreted milk for the last two months and a half, and were so distended with it, as to render it necessary to apply breast glasses, which were emptied every quarter of an hour. The areola around the nipple was strongly marked; the nipple itself turgid and prominent; but the glandular follicles were not sufficiently conspicuous to justify the conclusion that pregnancy existed. The patient informed Mr. Barbieri that the liquor amnii had been discharged about half an hour, and that she had had a slight, offensive, sanguineous discharge for three days. On examination *per vaginam*, the external parts were found greatly relaxed, and the vagina so much dilated as easily to admit the closed hand, and from it a sanguineous discharge issued, whose odour and external characters could not be distinguished from those of the ordinary lochia, unless, perhaps, in being somewhat more offensive. The uterus was in an unimpregnated and healthy state, as regarded its body, cervix, and orifice; the os uteri retained distinctly its transverse orifice, with well-defined and firm margins. Perplexed by the peculiarity of the case, Mr. Barbieri reviewed the causes of abdominal enlargement, and found them to be, diseased liver or spleen, accumulations of fat or fœces, tympanitis, ascites, distended bladder, suppressed catamenia, dysmenorrhea, moles, hydatids, hydrometra, hydroamnios; abdominal or uterine tumours, and enlargement of the Fallopian tubes. Having dismissed many of these causes from his mind, as either unwarranted by the state of the uterus, or else wanting in the correspondence of the symptoms, he ultimately came to consider the case as one of chronic inflammation that had assumed the acute form, and that it required the most immediate and energetic treatment. He accordingly abstracted sixty-four ounces of blood from a large orifice, in the erect posture, without inducing the least approach to syncope. The effects on the pain and expulsive action were great and immediate. In about ten minutes, a state of the most profound syncope and collapse followed, which continued nearly a quarter of an hour, accompanied by an *incredible discharge of liquid fœces, amounting to at least four large chamber urinals*, with an immense quantity of flatus, more noisy than offensive. On recovering from this state, three grains of opium and eight of calomel were administered. On examining the abdomen, the enlargement and induration had disappeared, and all the vertebræ could be touched through the parietes of the abdomen. The patient was easier after this, and slept for several hours. The pain then returned in the abdomen only, where she could not bear the slightest pressure. The urine was albuminous. She was bled again to thirty-two ounces, and forty leeches applied to the ilio-cœcal region—calomel and opium were given every four hours, and a blister applied to the abdomen, and dressed with the *ung. hydr. fort.* The patient died on the sixth day after Mr. Barbieri first saw her. On examination of the body, there were found increased vascularity and thickening of the peritoneum, effusion of coagulable lymph, in the form of flocculi, with about four ounces of pus in the peritoneal cavity. The stomach presented great vascularity: two patches, the size of a half-crown piece, of softening of its coats near the pylorus; and nearly the whole of the small curvature was more or less deeply ulcerated. Great vascularity of the duodenum, ileum, and rectum; a few very small patches of softening were seen on the coats of the colon: a number of circumscribed, superficial follicular ulcerations, with one small perforating ulcer, were found in the last twelve inches of the ileum. The kidneys and other abdominal viscera were healthy. This case, which Mr. Barbieri has designated enteritis, appears to us to be nothing more than an enormous accumulation of fœces in the colon, ultimately producing irritation, a low form of inflammation, and ulceration. Such a condition is perfectly compatible with the bowels being generally open, according to the account given by patients; and many cases have been put on record which go to prove the truth of this statement. Although bleeding was indicated in this case, we can scarcely think that Mr. Barbieri was justified in abstracting the very large quantity of sixty-four ounces of blood, and soon after repeating venesection, and taking away two-and-thirty ounces more. His patient, we are inclined to believe, would have stood a better chance of recovery, had not the powers of life been so fearfully prostrated, as they must necessarily have been by the loss of so large an amount of blood. The case recorded by Mr. Barbieri is instructive in many points.

TETANUS.—A case of tetanus, following an injury to the little finger, is reported from the practice of Mr. Solly, in the treatment of which he had recourse to the exhibition of cannabis Indica, tobacco, and morphia. The man recovered. Mr. Solly thinks the Indian hemp had very little share in the relief of the symptoms, although the spasms began to abate soon after its administration, because a blister was at the same time applied the whole length of the spine.

TESTS FOR THE SEMEN.—A man of the name of Hamilton, was tried in Edinburgh in November last for an assault with intent to ravish a girl under the age of puberty, and for having communicated gonorrhœa to her. The age of the child was under seven years. The medical testimony was directed to the examination of spots upon the linen of both parties with a view to the detection of semen, and of the gonorrheal discharge: the gentlemen employed were the Messrs. John and H. D. Spens Goodsir. Their report is as follows:—On a shift, belonging to the girl, and on two coloured shirts, were observed large spots or stains of a yellow colour, entirely resembling the stains produced by purulent discharges from the genitals, and on the girl's shift, and on a white and two coloured shirts, and other linen, were observed spots characterized by their faint colour, but particularly by their stiffness, as if they had been produced by starching. On the girl's shift, which was much stained by yellow matter, the stiff spots could only be detected by the feel, but very distinctly by that. These stiff spots resembled in all respects those produced by seminal discharges. When cut out from the shift, &c., and steeped for some hours in separate portions of cold distilled water, they emitted a strong characteristic odour of seminal fluid. The two portions of muddy water, in which the two pieces of linen had been steeped, were examined microscopically, and seminal animalcules or spermatozoa were detected. The majority of them were mutilated, the greater part of the tail being broken off, and the head not so plump, as in the living state; but perfect specimens were also detected, differing in no respect or in the minutest detail from the living animalcules, except in the want of motion. From this examination the Messrs. Goodsir conclude that the stiff spots or stains on the girl's shift, and on the man's shirts, &c., were produced by the male seminal fluid. Dr. Simpson, professor of midwifery at the University, further confirmed this testimony, and also stated that by three examinations, he had satisfied himself that the prisoner had a discharge from the urethra, which had the usual characters of gonorrhœa in its latter stages. The man was convicted, and sentenced to fourteen years' transportation.

WHY ARE ACIDS REFRIGERANTS?—Dr. Murray's explanation, in his System of Materia Medica, is, that animal temperature is derived from the con-

sumption of oxygen gas by respiration; that acids containing large proportions of oxygen in a rather loose state of combination, reduce the general temperature when introduced into the stomach, if that temperature be materially increased; for acids, especially vegetable acids, are readily assimilated with the food, and the nutritious matter received into the blood, containing a larger proportion than usual, will abstract less of it from the air in the lungs, and consequently less caloric will be evolved; temperature is thus reduced as well as the power and force of the heart's contractions; Dr. Murray illustrates this by the case of the diver, Spalding, who could not remain long below the water after feeding on animal food, &c.

Microscopic Anatomy of the Spleen.—[This, and the three following articles, form the principal contents of the two last numbers of the *Lancet*.] — In a paper published by Dr. Julian Evans on the anatomy of the spleen, it is stated that that viscus consists of arteries, veins, nerves, transparent vessels, the splenic corpuscles or granules, from which the transparent vessels appear to arise, Malpighian glands, reticulated fibro-elastic tissue, cellular membrane, blood, the fluid contained in the transparent vessels and Malpighian glands, investing membrane or tunica propria, and the peritoneal covering. These structures are arranged and blended together, so as to form the entire organ, consisting of cells, and of the substance which separates them from each other. The existence of cells in the human spleen has been almost universally denied from the time of Ruysch, although it has been admitted to exist in the spleen of the graminivora. Dr. Evans avers that the human spleen is distinctly cellular; the parenchymatous texture bearing, however, a greater proportion to the cellular, than in the graminivora. There is not any means of ascertaining the size of the cells, but if the distension by coagulated blood which is occasionally found after death, be taken as the criterion of their average size, they may be described as being pretty uniform in size, pentagonal or hexagonal in form, and from one-third to half a line in diameter; but this cannot be correctly ascertained, as the elasticity of the organ may admit of a distension greatly beyond this, without exceeding its normal limits. The dilatability of the cells is greatest in the herbivora, and least in man, and seems to be in proportion to the elasticity of the entire organ. They are formed of a frame-work or skeleton of fibro-elastic tissue, and of a membrane spread over it, filling up the frame-work, and lining the cavity of the cell. This membrane completes the formation of the cell, and separates the parenchyma from its cavity. It is a continuation of the lining membrane of the vein. Nearly all the cells are traversed by filaments of the fibro-elastic tissue, imbedded in which a small artery and vein may be frequently observed; over these filaments the lining membrane is reflected in folds and in this manner each cell is incompletely divided into two or more smaller compartments. The cells communicate with each other by means of circular openings, formed by a reflection of the lining membrane upon itself, each cell having one or more of these openings. It is by means of these communications that air, or liquid, introduced into one cell, passes into all, and distends the entire organ. Besides these openings the cells communicate with the splenic vein and its branches, by means of oval or circular foramina, leading directly from the cavity of the vein into the cells. This communication is of course only found in those cells which arise immediately from the vein. There is still a third kind of communication, viz., between the cells and the small veins which return the blood from the capillaries of the organ. The splenic artery ramifies minutely over the parietes of the cells, the branches terminating in capillaries, whence arise minute, short veins, which carry the blood into the cells. M. Bourgery has also described minute, floating, glandular bodies, scattered through the cells, suspended to the extremities of minute arteries and lymphatics, to which has been given the name of *corpuscules vasculaires flottans*. These, Dr. Evans has not been able to discover. The smaller branches of the splenic vein are pierced with numerous small holes, which communicate directly with the cells, becoming longer and more elongated, the more distant they are from the principal venous trunk, until at length the coats of the vessel no longer form a continuous whole but seem separated into filaments, producing the appearance of extensive lacerations, and thus the vein is ultimately lost in the cellated structure of the organ. As the tunics of the vein split up thus, the internal one can be traced into the cells, of which it forms the lining membrane, and the falciform or curtain-like septa. The outer tunic seems to merge into the filaments of the fibro-elastic tissues. The splenic vein is very large, and unprovided with valves: injection thrown into it passes very readily into the cells. The trabecular structure is elastic; it forms an additional coat or sheath to many of the arterioles, enters into the formation of the Malpighian glands and their attachments, and forms a trellis-work, around which many lymphatic vessels are seen to twine, while others run in the interior of its structure, either alone, or in company with an arterial branch. It has been supposed to be muscular, but it does not exhibit that appearance under the microscope. It closely resembles the tunica propria, is fibrous, and similar to what have been called fibro-elastic tissues elsewhere. The contents of the cells and of the splenic vein consist of blood, which differs in no respect from venous blood taken from any other part of the portal system. A portion of the splenic parenchyma being gently pressed between two pieces of glass, an unctuous-looking fluid, of a reddish-brown colour, escapes; and the remaining portion, if shaken gently in a little water, puts on a cottony or tomentous appearance. The former is the liquid known under the name of *liquor lienis*, or *splenic blood*: the latter, viewed under the microscope, appears to consist of vessels of capillary minuteness, and granules, which are but indistinctly seen. The liquor lienis, when diluted with serum, and placed in the field of the microscope, is found to contain two kinds of organic particles, —the one kind being ordinary blood-particles; the other, smaller, globular, and nucleated, resembles exactly globules found in the lymphatic glands. The remaining substance consists of a sanguiferous capillary tissue, a set of transparent capillary vessels, the larger possessing valves and a number of corpuscles, much smaller than blood particles, partly uniform in size, spherical in shape, and usually corrugated on the surface. These bodies Dr. Evans denominates splenic corpuscles. They are about 1-6000th or 1-7000th of an inch in diameter, are strewn in innumerable quantities between the meshes of the sanguiferous capillaries; and connected with each, and apparently arising from them, are seen transparent vessels more minute in diameter than the corpuscles themselves. Several of these minute vessels soon unite and form a trunk, which in its turn unites with another of the same kind. The larger trunks are sufficiently transparent to allow valves to be distinguished, intersecting them, as in the external lymphatics. The Malpighian glands, above one-third of a line in diameter, are scattered over the surface of the trabecular structure. They are white, perfectly oval, grouped together in bunches, and attached to a common stalk, and to each other, by filaments of the fibro-elastic tissue and lymphatic vessels, and are connected with those portions of this tissue which surround the branches of the splenic artery as a sheath. The arteriole, which passes through the common stalk, sends branches to each of these bodies, some of which pass through it very superficially, and on emerging again subdivide into long pencillated branches, which soon become capillary; others ramify in the interior of each gland in all directions. The arrangement of these bodies in branches differs in different animals. In the ox and sheep they resemble somewhat a bunch of grapes, in the pig they are placed one on another, like a string of onions. They are evidently composed, like the stalk, or the sheath of the arteriole, of a web of the elastic tissue, and minute lymphatics of the parenchyma. They are firm in texture, but easily indented by pressure. When placed under water, a milky-looking fluid escapes, which falls to the bottom. Examined under the microscope, this fluid is found to be contained in part in minute vessels, or parts of vessels, and in part extravasated in consequence of injury. In it are numerous spherical nucleated particles, to which it owes its white appearance and opacity, and which are precisely similar to those contained in the milky fluid, expressed from a lymphatic gland. They are about one-third or one-half the diameter of a blood-particle, when seen in water, but by drying become smaller and shrivelled. After the escape of this fluid, the interior of a Malpighian body sometimes appears to possess a small cavity, but for the most part it is filled by a net-work of minute arteries, and the vessels which contained the fluid. In man, the Malpighian bodies are seen with great difficulty, except in certain cases, owing partly to their not being arranged in branches, as in the sheep—partly to their strong connexion with the parenchyma, and partly to their colour, which is rarely so white as in the herbivora. They are generally arranged in palmated branches, and are placed one over the other. In all other respects, except that they are smaller, they resemble those in the ox and sheep. Dr. Evans considers from their structure that they are nothing else than lymphatic glands. The splenic artery in man is of large size, compared with that of the organ itself: it is much smaller, comparatively speaking, in the herbivora. The arterioles on the parietes of the cells anastomose freely, but anastomosis between the larger divisions is not common. The sub-divisions of the artery have a sheath formed by the fibro-elastic tissue. The series of arterioles, continuing its course in the fibro-elastic tissue, again sub-divides, sending off branches, some of which penetrate the Malpighian glands, run superficially through them, and again emerge in long pencillated tufts, which are lost in the capillaries of the parenchyma: others ramify, in company with the vessels described as lymphatics, in the interior of the glands. Another set of arterial branches are sent to the cells, over the parietes of which they are seen to ramify, separated from the cavity by its lining membrane. For the most part they are observed to terminate, as elsewhere, by repeated sub-divisions, until they become capillary in size and arrangement; but they also terminate in another manner very frequently, and many such terminations may be occasionally seen in each cell, that is, by an enlarged club-shaped extremity, from which numerous minute capillaries suddenly spring, like rays from a centre. Dr. Evans is of opinion that this arterial termination is that described by Bourgery as *corpes vasculaires flottans*. When a portion of the spleen, which has been laid open after the artery has been injected, is examined, stellated spots of injection are observed scattered over it. By gently agitating it in water, these spots are found to be formed of branches of arterioles, which gradually display themselves as they become unfolded. This, Dr. Evans says, induced Ruysch to deny the existence of Malpighian bodies in the human spleen, for he evidently mistook these little bundles of convoluted arteries for these bodies. The veins of the parenchyma have an arborescent appearance, bearing the blood from the capillaries of the organ, and form a wide trunk, which empties itself into the nearest cell. The minute transparent vessels arising from, or connected with the splenic corpuscles, constituting the lymphatics of the spleen, gradually unite and form trunks, which pass into the Malpighian glands, where they form numerous convolutions, emerging thence fewer in number, but larger in size, accompanying the arteriole which supplies the gland, or assisting to form the stalk to which the glands are attached in branches. The larger lymphatics are the external and the internal, the former being seated between the peritoneal coat and the tunica propria, and the latter passing out of the spleen in company with the artery and vein. The nerves are large; they accompany the artery, and are lost in the parenchyma. From this anatomical description, Dr. Evans draws the following conclusions:—

That the spleen is a double organ, and performs two sets of functions; the cells and splenic vein performing one function—the parenchyma another, totally distinct from the former. The cellular structure may be considered as a multilocular reservoir, capable of great distention, lined with a continuation of the inner membrane of the vein; receiving blood on the one hand from the veins of the interior of the organ, and transmitting it onward to the vena portæ; and on the other hand, acting as a reservoir for the blood of the venous circulation of the abdomen, when from any cause its passage into the vena cava is obstructed, the venous character of the cellular structure permitting the blood to remain within it for some time without change. The interecellular substance, or parenchyma, is both anatomically and physiologically different from the preceding. In those animals in which it predominates, as in man, the artery is large, and performs other offices than merely throwing blood into the cells. The artery is distributed principally to the parenchyma. The office of the parenchyma would appear to be that of separating something or other, from the quantity of blood with which it is supplied. This would appear to be a transparent fluid, most probably the liquor sanguinis. This fluid passes along the smaller transparent vessels, and is carried by them to the Malpighian glands, in which it undergoes a change, for it is now found to contain numerous organic particles, which give it a white milky appearance. From these bodies it escapes by the vasa efferentia, which are ultimately traced to the lymphatic glands which surround the trunk of the splenic artery. The splenic parenchyma may be considered as a complex lymphatic tissue.

Tracheotomy.—Mr. Judd narrates a case of exceeding interest, in which he successfully performed tracheotomy, for the removal of asphyxia, caused by the pressure of an immense aneurism on the trachea. The man was a soldier, thirty-one years of age, who was suffering from symptoms of chest affection, from which the nature of the case could not be clearly determined. On the 13th January, 1826, just before daylight, he had a violent attack of dyspnœa: the eyes were staring, face and hands purple, violent struggling, sitting up in bed, loss of speech, insensibility; respiration ceased, and he lay, as the messenger reported, dead. Tracheotomy was immediately performed, but he lay motionless, and showed no indication of pain. As soon as the scalpel entered the trachea, dark blood flowed out from within in large quantity. The patient was instantly laid upon his face, with his head low, in order to drain it away.

After about thirteen ounces had escaped, he still lay inanimate. As the opening, though large enough, seemed to give no relief, an elastic gum-catheter was passed by the orifice in the throat down to the bronchi, in the hope to render the passage free. The irritation of the instrument produced spasmodic action in the respiratory muscles, which caused more blood to be expelled by the nose, mouth, catheter, and wound, followed by a feeble attempt at respiration, which recurred at long intervals; and at each, dark blood gushed out with a gurgling noise; he was at last enabled to breathe a little. The pulse became perceptible at the wrist, the circulation improved, the bleeding ceased, and the purpleness of the hands and face gradually diminished. After a little further time he recovered the power of articulation, but talked incoherently. He swallowed some warm water given to wash out his mouth and throat, and in about an hour's time, he was breathing tolerably freely through a portion of catheter upwards of seven inches in length. But a few drops of blood flowed from the incision, which was but an inch and a half in length. His breathing was occasionally somewhat obstructed during the remainder of the day; and the next, he had two frightful attacks of dyspnœa, caused by the accumulation of mucus and clotted blood in the glottis. The piece of catheter was removed, some strings of mucus drawn out by the wound, and a clean tube put in: for he felt that he could not breathe without one, nor unless it was passed low down, which was the more remarkable, as the opening in the trachea also proved insufficient to restore respiration. The respiration was from time to time interrupted after this, and the poor fellow died in the evening of the 29th from the occurrence of hæmorrhage. On examining the body, the trachea was found to be full of fluid blood, with a few clots; on a line with the seventh ring of the trachea, under the upper part of the first bone of the sternum, and above the pericardium, a large oviform tumour-like body presented itself, lying upon the windpipe, as large as the heart. The heart was healthy in its structure. An inch above the semilunar valves, the aorta was suddenly dilated into a large aneurismal sac, which commenced just within the pericardium, and extended to near the top of the sternum, pressed upon the anterior part of the trachea, and extended upwards so as to leave but three quarters of an inch between the aneurism, and the large thyroid gland. At the upper part, about an inch to the right of its centre, the sac gave off the arteria innominata; opposite to which it next gave off the left carotid, and just below this the continuation of the aorta went off abruptly from near the upper and left side of the sac, of its original calibre, and immediately gave off the left subclavian. This oval aneurismal sac was ten inches and a half in vertical, and eight inches and a half in horizontal, diameter. In the posterior portion of the sac, the inner coat had given way vertically, and formed a narrow slit, two lines in length; through it blood had extravasated, forming oval coagula, *stratum super stratum*, to about three inches in extent. In the upper and posterior part the aneurism had dilated into a second and smaller sac, about the size of a walnut; at the back part of this was a fissure, plugged up by a coagulum, communicating with the trachea. Within the trachea an irregular ulcer was found, forming the back of the opening, and out of it hung the other end of the coagulum; this irregular ulcer measured upwards of five lines in length, and four in breadth; it had made its way through three of the rings of the trachea, and their ends were denuded of membrane. The ulcer or fissure within the aneurism was more than a third less than the opposite side of the ulcer in the trachea. The exposed rings of the trachea had a vascular crimson spot on each, its cartilaginous covering having been absorbed, clearly demonstrating that the ulceration had commenced with the trachea, and not inside the aneurismal sac. Lower down, and at the back of the trachea, was found a very small recent ulceration, that had almost perforated the membranous part into the œsophagus. The latter had a blush of inflammation within it, opposite that in the trachea, and on replacing the elastic tube through the wound, its lower end fell into, and exactly filled the ulcer, which it had evidently occasioned. The post-mortem appearances then showed that an aneurism formed at the arch of the aorta,—that its internal coat gave way, but that hæmorrhage was stopped for a time by the deposit of coagulable lymph, formed probably during asphyxia: the sac subsequently opened by ulceration, commencing within the trachea: that the pressure of the aneurism upon the windpipe above the bronchi, produced the suffocation, which was relieved, and life preserved weeks after apparent death, by the tube keeping the weight of the aneurism from collapsing the trachea. The parts were removed from the body by Mr. Judd, and constitute a very valuable and unique specimen. It is well worth examination by our professional brethren. The case does Mr. Judd very great credit.

IDIOPATHIC ERYSIPELAS.—Mr. Chippendale, in allusion to Dr. Wilson's paper on idiopathic erysipelas, states that the disease is the one of constant occurrence at Farringdon Dispensary: that he does not consider it at all contagious,—that he never had a case that terminated fatally,—that it has a tendency to assume the typhoid type, and that he has found the best treatment to consist in a good purge of calomel and aloes in the first instance, and then in the administration, at intervals of four or five hours, of a mixture of from one to two ounces of infusion of senna, and six or seven of decoction of Peruvian bark. As a local application, he uses cloth, dipped in saturnine wash. The application of the nitrate of silver he utterly condemns.

FRACTURES OF THE RADIUS.—Mr. O'Shea states that, in the treatment of these fractures, he usually, having first made extension sufficient to bring the fractured portions in situ, applies two splints, one anteriorly, the other posteriorly to the fore-arm, so that when the arm is flexed, both splints are in a plane with the horizon, and, having supinated the hand as much as possible, directs his patient to keep it in that position: he thus rotates outwards, not inwards, and the consequence is a straight arm and an useful hand.

DRUG PRICE LIST FOR THE PRESENT WEEK.

DRUGS.	PRICE. £ s. d.	£ s. d.	DUTY.
Alkanet Root, bd..cwt.	0 14 0	to 0 18 0	1s. cwt.
Aloes, Barbadoes.....	5 0 0	12 10 0	per lb.
Epatica, bd.....	1 10 0	9 0 0	1d. B.P.
Cape, bd.	1 14 0	2 0 0	2d. F.
Alum, British.....ton	10 0 0	0 0 0	
Roch. .....cwt.	1 2 0	1 4 0	2s. cwt.
Ambergris, Grey...oz.	0 4 8	0 7 6	3d. oz.
Anchovies....dble. brl.	1 2 0	1 3 0	2d. lb.
Angelica Root..dpcwt.	1 0 0	1 15 0	4s. cwt.
Annatto, Flag, dp...lb.	0 0 7	0 0 9	1s. cwt.
Roll.....dp.	0 0 7	0 0 8	1s. cwt.
Antimony, Crude..cwt.	1 15 0	0 0 0	2s. cwt.
Ore, bd. .....ton	12 0 0	0 0 0	1s. ton
Regulus Cps. cwt.	2 15 0	3 3 0	4s. cwt.
Bowls	0 0 0	0 0 0	1s. B.P.
Arrow Root.....	0 0 5	0 1 4	B.P. 1s. F5s.cwt
Arsenic, White....cwt.	0 0 0	0 0 0	1s. cwt.
Red	2 7 0	2 10 0	6d. B.P.
English White	12 0 0	18 0 0	
Yellow.	32 0 0	38 0 0	
Argol, Bologna ....cwt.	2 12 0	2 16 0	
Florence White	2 0 0	2 5 0	
Red	2 4 0	2 10 0	
Naples White	2 0 0	2 3 0	
Red.....	1 12 0	1 19 0	
Sicily White	1 15 0	2 0 0	
Red	0 0 0	0 0 0	
French	1 14 0	2 6 0	6d. cwt.
Cape	1 18 0	2 16 0	
Boracic Acid.....cwt.	1 19 0	1 19 6	6d. cwt.
Balsam, Canada....lb.	0 1 0	0 1 2	1d. lb.
Capavi, bd....	0 1 4	0 1 6	4s. cwt.
Peru, bd.....	0 5 6	0 6 0	3d. lb.
Tolu, bd.....	0 1 6	0 1 9	2d.
Bark, Peruv. bd. p...lb.	0 0 6	0 0 10	
Good	0 2 3	0 2 9	
Mid do.....	0 1 3	0 1 9	
Crown.....	0 0 9	0 3 0	
Yellow, Flat.....	0 3 4	0 3 7	
Quill	0 3 3	0 3 4	
Red, Flat	0 3 6	0 6 0	
Quill.....	0 1 6	0 2 0	
Cascarilla, bd.....cwt.	1 0 0	2 10 0	1s. cwt.
Quercitron ....dp.	0 10 0	0 11 0	
Oak English, per ld	15 0 0	19 0 0	BP. 1d. c.
Foreign ,per ton	5 10 0	8 10 0	F. 3d.
New S. W. 10	0 0	12 0 0	
Berries, Bay.....cwt.	1 5 0	1 6 0	
Juniper, Italian	0 5 9	0 6 0	
German	0 11 0	0 12 0	1s. cwt.
Turkey, Yellow .	1 19 0	2 4 0	
Persian, do. .	4 2 0	8 0 0	
Black Lead, E. I. .cwt.	0 6 0	0 6 6	
Malaga.	0 10 0	0 18 0	B.P. 5s.
German ..	0 9 3	0 18 0	ton
Dust	0 0 0	0 0 0	F. 20s.
Borax, or Tincal, bd.cwt.	1 12 0	1 16 0	6d. ton.
E. I. Refined, bd.	2 8 0	2 12 0	5s. cwt.
English Refined..	2 12 0	2 14 0	
Brimstone, Rgh. bd ton	5 5 0	0 0 0	BP. 3d
Roll	8 10 0	0 10 0	F. 6d. c. 1s. 6d.
Camphor, Unref...cwt.	12 0 0	12 5 0	1s. ct.
Dutch, bd... cwt.	12 10 0	13 0 0	
Refined.....lb.	0 3 3	0 3 10	10s.
Cantharides, bd.....	0 2 1	0 2 2	3d.
Capers, French ...cwt.	4 0 0	9 10 0	6d. lb.
Capotts	0 0 0	0 0 0	3d. BP.
Cardemoms, Mal. bd.lb	0 3 8	0 4 0	
Long Longs ..	0 1 10	0 2 6	2d.
Ceylon	0 1 6	0 1 8	
Castor, America....lb.	0 19 0	1 5 0	2s. cwt.
Castor Oil, America lb.	0 0 3	0 0 6	1s. 3d.
E. I. bd. ..	0 0 6	0 0 9	cwt.
Chillies, E. I. bd.. cwt.	0 0 0	0 0 0	6d. lb.
China Root, bd.... cwt.	1 4 6	2 0 0	3d. lb.
Cochineal, bd. Black lb.	0 5 0	0 6 3	
Silver...	0 4 6	0 5 3	1s. cwt.
Foxy.. .	0 4 4	0 4 6	
Cobalt, bd.....lb.	0 0 0	0 0 0	5s. ton.
Coculus Indicus, bd. c.	0 10 0	0 13 6	7s. 6d.
Colocynth, Turkey, lpl lb.	0 1 7	0 3 5	1d.
Spanish	0 1 4	0 1 9	
Colombo Root, bd.cwt.	0 8 0	0 18 0	1s.
Conneras, Gr. bd... ton	3 17 6	0 0 0	£1 ton.

DRUGS.	PRICE. £ s. d.	£ s. d.	DUTY.
Blue	1 17 0	to 2 0 0	10s. B.P.
Cream Tart. d.p. Fr. c.	0 0 0	0 0 0	
Venetian	2 13 0	3 5 0	1s. ct.
Cubebs, bd. .....cwt.	2 3 6	2 10 0	1d. lb.
Cutch	0 13 0	0 16 3	5s. ton.
Cowries	3 3 0	3 5 0	5 per cent.
Dragon's Blood, bd....	4 10 0	8 0 0	1s.
Recd.....	6 0 0	16 0 0	
Emery Stone.....	9 10 0	11 0 0	
Essential Oils,			
Cloves, bd.....lb.	0 7 0	0 10 0	4s. lb.
Carraway, dp.	0 8 9	0 9 0	
Lavender.	0 7 6	0 0 0	2s. lb.
Peppermint, bd....	0 9 9	0 10 0	
Spike	0 4 0	0 0 0	
Anniseed, bd. ..lb.	0 7 6	0 8 0	
Cassia, bd.....	1 4 0	1 5 0	
Cajaputa, bd...oz.	0 0 4	0 0 6	
Cinnamon, bd.....	0 2 10	0 4 9	
Mace (expd.) bd..	0 0 8	0 0 10	
Nutmegs, bd.....	0 0 6	0 0 10	1s. lb.
Bergamot, dp...lb.	0 11 6	0 12 0	
Lemon	0 5 4	0 6 0	
Orange	0 4 6	0 5 6	
Rosemary	0 1 8	0 2 6	
Thyme	0 2 9	0 3 0	
Otto Roses ....oz.	0 16 6	0 17 0	
Almonds	0 1 7	0 1 11	
Galangal Root, bdcwt.	0 15 0	0 18 0	2d. lb.
Galls, in sorts ....cwt.	2 4 0	2 15 0	
Green or White	2 5 0	2 10 0	1s.
Blue	2 18 0	3 4 0	
E. I. Blue, bd.	2 15 0	2 18 0	
Gentian Root, bd..cwt.	0 18 0	1 4 0	5s. ton.
Glue, Best Town..cwt.	2 9 0	2 12 0	
Inferior	1 18 0	2 4 0	
Foreign	0 0 0	0 0 0	3s. cwt
Guinea Grains, bd.....	1 10 0	2 8 0	15s. cwt
Gums,			
Ammoniac, Lp. bd. ct.	2 0 0	4 10 0	
Drop	3 5 0	9 0 0	
Arabic, E. I. bd.....	1 0 0	3 10 0	
Cape	0 10 0	0 16 0	
Turkey, fine ..	8 0 0	9 0 0	
2nds and 3rds	4 5 0	7 0 0	
Barbary, Brown, bd	2 15 0	3 0 0	
White.....	0 0 0	0 0 0	
Gedda, bd.....	3 5 0	0 0 0	
Animi, washed, bd ..	4 5 0	10 5 0	1s. cwt.
scraped.....	7 0 0	10 15 0	
Copal..... ....lb.	0 1 0	0 2 6	
Assafœtida, bd..cwt.	1 10 0	5 0 0	
Benjamin, 3rds, bd..	5 0 0	10 12 6	
1st and 2nds...	10 15 0	50 0 0	
Gamboge, bd.....	19 0 0	23 0 0	
Galbanum.....	3 10 0	4 12 0	
Guiacum.....lb.	0 0 8	0 2 3	
Myrrh, E. I. bd.cwt.	4 0 0	15 0 0	
Turkey.....	0 0 0	0 0 0	
Mastic.....lb.	0 2 8	0 4 6	
Olibanum, bd. ..cwt.	1 0 0	2 8 0	
Sandrack, bd.....	3 10 0	4 0 0	
Senegal, garbled, bd.	5 5 0	5 10 0	
Tragacanth, Picked	14 0 0	15 15 0	1s. cwt.
Sorts	5 0 0	8 10 0	
Seedlac.....cwt.	1 0 0	1 8 0	
Lac, Sticklac, Bengal	1 10 0	1 17 0	
Siam, &c..	0 0 0	0 0 0	
Shellac, Liver...cwt.	1 16 0	2 13 0	
DT.....cwt.	1 11 0	1 15 0	
Orange.....	2 10 0	3 5 0	
Block	1 8 0	1 12 0	
Hellebore Root ...cwt.	2 0 0	2 10 0	3s. cwt.
Honey, Fine	2 10 0	4 10 0	B.P. 5s. F. 10s.
Iceland Moss ..... lb.	0 0 2	0 0 3	5s. ton.
India Rubber, solid ...	0 0 3	0 0 8	1s. cwt.
bottles..	0 0 8	0 1 0	
small...	0 1 6	0 1 9	
Indigo....bd.	floras lb. 0 5 3	0 6 0	Indigo
Guatimand	sobres.. 0 4 0	0 5 3	cwt. F. 5s.
Caracca ..	cortes.. 0 2 0	3 3 9	B.P. 1s.

DRUGS,	PRICE. £ s. d.	£ s. d.	DUTY.
Bengal fine blue	0 5 6	to 0 6 0	
Fine purple & violet	0 5 9	0 6 6	
Good ditto	0 5 0	0 5 6	
Midd ing.....	0 4 6	0 4 9	
Copper Fine	0 5 6	0 5 6	
good and middling	0 4 0	0 4 10	
Ordin. violet & copper.	0 2 9	0 3 10	
Oude, good and fine...	0 3 9	0 4 6	
low and middling	0 2 3	0 3 6	
Madras, good and fine violet and blue	0 4 0	0 5 0	
ord. and mid. do.	9 2 2	0 3 10	
Java.....	none		
Manilla good and fine..	0 0 0	0 0 0	
ordinary and mid.	0 1 0	0 2 0	
Ipecacuanha, bd....lb.	0 1 9	0 2 0	1s. cwt.
Isinglass Leaf, 1st sort	0 10 0	0 12 0	
2nd sort	0 9 0	0 10 0	5s. B.P. cwt.
Simovia	0 2 6	0 3 0	£2 7s. 6d. F.
Siberia Purse ...	0 5 0	0 6 0	
Short Staple, 1st	0 8 0	0 11 6	
Long ditto.....	0 10 0	0 11 6	
Isinglass, Brazil	0 1 0	0 5 2	
Jalap, bd.....lb.	0 2 2	0 2 3	1d. lb.
Juice of Lemon....gal.	0 2 0	0 0 0	½d. gal.
Lac Dye Fine, bd. ..lb.	0 2 2	0 2 9	
Good	0 1 6	0 2 0	1s. cwt.
Midding	0 0 10	0 1 4	
Ordinary	0 0 5	0 0 9	
Lake.....	0 0 0	0 0 0	
Liquorice, Ital. d.p.cwt.	5 5 0	5 10 0	27s. 6d. c.
Block	3 5 0	0 0 0	£1 cwt.
Madders			
Dutch Crop..dp. cwt.	3 10 0	4 0 0	
Ombro.....	3 0 0	3 8 0	
Gamene	2 10 0	2 15 0	6d. cwt.
Midl.....	0 15 0	1 15 0	
French	3 2 0	4 8 0	
Spanish	1 5 0	1 18 0	
Madder Roots, Turkey.	0 0 0	0 0 0	3d. cwt.
Munjeet, E.I. bd. ..cwt.	0 0 0	0 0 0	
Magnesia, English....	3 5 0	0 0 0	
Manna, Flakey, bd...lb.	0 1 2	0 3 6	
Sicily, bd.....	0 0 6	0 0 8	1d. lb.
Musk, good & fine, oz.	0 15 0	1 7 3	d. oz.
Nux Vomicæ, bd.. cwt.	0 10 0	0 12 0	5s. cwt.
Olives, F. hf.-bris 12 gls	3 0 0	4 0 0	
Spanish.. keg 2 gls	0 9 0	0 10 0	2s. gall
Opium, Turkey, bd..lb.	0 10 0	0 10 3	
Egyptian	0 0 0	0 0 0	1s. lb.
Orchella, Can.....ton	38 0 0	40 0 0	
Cape de Verd	35 0 0	55 0 0	1s. cwt.
Madeira.....	0 0 0	0 0 0	
Orpiment, E. India, bd	0 0 0	0 0 0	1s.
Orange Flower Water .	0 0 8	0 0 0	1s.
Peel .....cwt.	1 16 0	0 0 0	1s.
Orris Root, d.p. ..cwt.	1 0 0	2 15 0	5s.
Pelltiory Root.....lb.	0 1 0	0 1 0	1s. cwt.
Pink, Root..... lb.	0 0 7	0 5 0	1s. lb.
Pitch, Burgundy..cwt.	0 10 0	0 10 0	2s. cwt.
Pumice Stone, sorts ton	6 0 0	7 0 0	
Quassia ..... cwt.	0 15 0	0 0 0	10s. cwt.
Quicksilver .....lb.	0 4 6	0 0 0	1d. lb.
Rhatania Root .....lb.	0 0 4	0 0 6	
Rhubarb, round, bd. lb.	0 1 0	0 3 8	
flat	0 1 6	0 3 9	3d. lb.
Dutch, trimd	0 4 6	0 6 0	
Russia.....	0 11 0	0 11 6	
Saccharum Saturne, lb.	2 4 0	2 6 0	10s. cwt.
Saffron, Spanish ....lb.	2 2 0	2 4 0	1s. lb.
Sago, common, bd. cwt.	0 0 0	0 0 0	
Pearl	0 13 6	1 4 0	1s. cwt.
Sago Flour.....	1 1 0	1 3 0	
Sal Amm. E.I. bd. cwt.	2 5 0	2 10 0	1s. cwt.
English, Refined cwt.	2 2 0	2 3 0	
Salts, Glauber.....	0 6 6	0 0 0	
Epsom	0 9 6	0 10 6	
Salep .....cwt.	5 5 0	5 10 0	

DRUGS,	PRICE. £ s. d.	£ s. d.	DUTY.
Sarsaparilla, Bra. bd.lb.	0 0 10	to 0 1 8	
Honduras bd. ..	0 1 0	0 1 9	1d. lb.
Vera Cruz, bd...	0 0 8	0 1 2	
Jamaica, bd.....	0 1 0	0 2 8	
Sassafras Root.... ton	7 0 0	8 0 0	6d. cwt.
Safflower, E.I. bd... cwt.	5 10 0	9 0 0	1s. ct.
Turkey	0 0 0	0 0 0	
Shumac, d.p. Mal..cwt.	0 0 0	0 0 0	
Sicily.....	0 10 6	0 11 6	1s. ton
Trieste	0 5 6	0 6 0	
Saltpetre, Rhg. bd.	1 3 6	1 7 6	
British Refined	1 10 6	1 11 6	6d. cwt.
Nitrate of Soda	0 15 0	0 0 0	
Scammony, Smyrna lb.	0 0 0	0 0 0	
Aleppo, 2nds, bd..	0 8 0	0 14 0	6d. lb.
fine .. :..	0 15 9	1 1 0	
Seeds, Anni .....cwt.	0 0 0	0 0 0	
German, duty paid	1 5 0	1 15 0	BP 2s6d
E. I. Star, bd.....	2 10 0	3 0 0	F 5s. c.
Cummin, bd... cwt.	0 19 0	1 5 0	
Carraway, For. bd.	1 6	2 14 6	BP5sF10s
Seneka Root, bd. .. lb.	0 1 8	0 1 9	
Senna, Alexandria..lb.	0 0 7	0 0 9	
Smyrna	0 0 9	0 1 6	1d. lb.
East India, bd.	0 0 5	0 0 8	
Tinnevelly....	0 1 8	0 1 9	
Smalts, Saxon, FFFE lb.	0 0 0	0 0 0	
Danish, do. ..	0 1 6	0 1 7	2d. lb.
Other sorts in proportion.			
Snake Root, bd.... lb.	0 1 2	0 1 3	1s. lb.
Soap, Naples, soft	0 1 6	0 1 9	56s. cwt.
Castile, hard..cwt.	3 10 0	3 17 0	30s. cwt.
Soy, bd. .....gallon	0 6 0	0 7 6	20 pr. cent
Sponge, fine.....lb.	0 13 0	1 0 0	F 6d. lb.
ordinary.....	0 2 5	0 10 6	B 1d.
Sulphate of Quinine oz.	0 10 0	0 10 6	6d. oz.
Squills, dry .....lb.	0 0 2	0 0 3	1s. cwt.
undried	0 0 0	0 0 0	6d. cwt.
Spermaceti, English lb.	0 1 8	0 0 0	
American	0 1 4	0 1 6	25 cnt.
Tamarinds, W. I...cwt.	1 15 0	3 18 0	
E. I. bd. ..	0 15 0	1 5 0	BP. 1d. F 3d lb.
Tapioca, bd. ..... lb.	0 0 3	0 0 8	1s. cwt.
Turmeric, bd. Ben.cwt.	0 14 0	1 5 0	
Java	0 15 0	0 18 0	F 5s ton
Java, green ..	0 10 0	0 11 0	BP. 1d.
China.....	1 1 0	1 8 0	
Terra Japonica, black	0 14 0	0 15 0	5s. ton.
De Sienna	0 0 0	0 0 0	10s. ton.
Valonia Smyrna .. ton	17 0 0	20 0 0	
Picked Morca.	15 10 0	23 0 0	5s ton.
Vinelloes, Brazil, bd.lb.	0 10 0	0 11 0	
Vera Cruz ..	3 0 0	4 0 0	5s. lb.
Verdigrease, For. D. P.	0 0 9	0 1 3	
English..	0 1 3	0 0 0	1d. lb.
Vermillion, China, bd.lb.	0 5 3	0 5 6	
English....	0 5 6	0 5 10	3d. lb.
Vitriol, blue .....cwt.	1 16 0	1 17 0	
Foreign, white .	0 16 0	0 17 0	BP. 10s
English, do. ..	1 4 0	1 5 0	F 1s to n
Oil of..... lb.	0 0 1	0 0 0	
Wax Mogadore, bd.cwt	7 10 0	8 0 0	
American, d.p....	7 10 0	8 2 6	B.P. bleached 10s.
Russian, d.p....	9 0 0	9 5 0	do. unbl. 1s. F do.
Hambro' d.p...	8 10 0	9 0 0	2s F bl. £1 cwt.
East India, d.p..	7 5 6	8 15 0	
African, d.p....	7 10 0	8 0 0	
White Hambro' .	9 15 0	10 10 0	
English ....cwt.	9 10 0	9 15 0	
Cape	7 10 0	9 0 0	
Weld, English ....load	0 0 0	0 0 0	5s. ton
Woad .....ton	0 0 0	0 0 0	
Wood, Sapan'Bimas, bd.10	0 0	15 0 0	2s. ton
Siam	6 5 0	9 15 0	

LECTURES ON THE ANATOMY AND PHYSIOLOGY OF THE EYE,

FORMING PART OF THE COURSE OF LECTURES ON ANATOMY AND PHYSIOLOGY, DELIVERED AT CHARING-CROSS HOSPITAL.

By T. WHARTON JONES, F.R.S.

Lecture VI.—February 23, 1844.

There are two points in the physiology of an organ which require separate consideration. The first point has reference to the nutritive processes which go on in it, or other peculiar vital actions of which it may be the agent; the other, as is the case in the eye, to purely physical actions which it performs. Under the first point we may consider the vital physiology of the eye; under the second, what may be called the physical physiology. In reference to the vital physiology, we have first to consider the *innervation* of the component structures of the eye, and the channels through which blood is supplied for their nutrition. To the head of vital physiology of the eye belongs also the action of its special nervous apparatus in vision; but taking up at present the other points comprised in the vital physiology of the eye, I must defer the consideration of this latter point until I have treated of the physical physiology—that is, the action of the lenses of the eye on the rays of light which pass through them on their way to the retina.

Nerves of the Eye.—Besides the optic nerve, the special nerve of vision which expands in the retina, the ciliary nerves which go to the iris, and which being *motor*, govern the movements of the pupil, the nerves to the cornea, which, seeing the cornea is not contractile, but endowed with some degree of sensibility, are to be viewed as sensitive nerves; besides all these nerves, I say, others have been traced into the choroid, and even into the retina, as was done by Tiedemann and Ribes. Such nervous filaments, however, do not properly belong to those structures, but to the walls of the blood-vessels distributed to them.

Blood-vessels of the eyeball.—To give a perfect idea of the distribution of the blood-vessels of the eyeball, it will be necessary to make a few preliminary observations on its development.

Of the different parts of the eyeball the retina, which, along with the vitreous body, is the fundamental part of the posterior segment, is originally a diverticulum from the brain. These parts receive their supply of blood from the central vessels of the retina.

The central artery of the retina, as already said, enters the eyeball through the substance of the optic nerve, and divides into two sets of branches; one set, which is a persistent one, to the retina, as already explained; another set to the vitreous body, as well as to a structure which exists in front of the vitreous body, in the early stage of formation; namely, the vascular capsule of the lens which I will presently describe.

The latter set of branches has merely a temporary existence. Their trunk, which is the third branch of the central artery of the retina referred to on a former occasion, and which is called the central artery of the vitreous humour, divides on entering that body into the central artery, properly so called, and circumferential branches.

The ramifications of these vessels are dispersed throughout the vitreous body, anastomosing with each other.

The central artery having given off its ramifications, passes out from the vitreous body, at the middle part of the hyaloid fossa, in which you know, the crystalline body is seated. There the artery enters and ramifies in a capsule enclosing the crystalline body,—not the capsule of the lens which I formerly described to you as structureless, transparent, and non-vascular; but the vascular capsule to which I have just now referred as having a temporary existence only.

This vascular capsule appears to be originally an involution of the skin.

From the point where the artery enters this capsule, it radiates towards the circumference of the capsule, and from thence turns round to its anterior wall. At the circumference corresponding to the zonula ciliaris, these vessels anastomose with the vessels of the zonula; these again being in connection with, or derived from, the retinal vessels and the circumferential branches of the vitreous body, perhaps also in connection with the vessels of the ciliary body.

With the development of the eye, the vascular capsule of the crystalline body grows in a greater ratio than does the crystalline body itself; its anterior part coming to line, though not adhering to the walls of the aqueous chamber. The iris not having yet been developed, the aqueous chamber is not hitherto divided into anterior and posterior chambers.

When, however, the iris does sprout out, it soon comes into contact with and adheres to this vascular capsule of the crystalline, in such a way that the anterior wall of the capsule closes in the pupil, constituting what is known by the name of the pupillary membrane. The rest of the capsule, constituting what is called the capsulo-pupillary membrane, extending backwards from the pupil through the posterior chamber, to be continued into the posterior wall, which still lies between the hyaloid fossa and the crystalline body. The iris having joined the vascular capsule of the crystalline in the manner I have just now explained, its vessels shoot into that membrane, and anastomose with its original vessels.

The iris continues to grow, its pupillary or small ring shoots forth beyond the point where the first formed part of the iris, or the ciliary ring, first joined the vascular capsule of the crystalline; and this in such a way, that the point of the junction in question comes to be on the anterior surface of the iris where the ciliary joins the pupillary ring; the edge of the pupil thus exists quite free. Such is the vascular distribution of the retina and humours in the early stage of the formation of the eye. The vascular distribution in the choroid is the same as we have already described it to be in the fully formed condition.

In regard to the cornea, it owes its vascularity to ramifications from the anterior ciliary and conjunctival vessels.

We thus perceive that the parts of the eyeball, through which, when the organ is fully formed and called into use, the rays of light have to pass on their way to the retina, are in the early stage of formation interwoven with blood-vessels. These blood-vessels are necessary for the full development of the organ; but this having been accomplished, a smaller number of vessels is sufficient to minister to its nutrition, and these are dispersed in parts of it, through which the rays of light are not required to pass.

Vessels which are distributed in parts through which the rays of light are required to pass on their way to the retina, become obliterated; the cornea thus ceases to be vascular—the pupillary membrane, contingently with the obliteration of its vessels, has disappeared. This disappearance usually occurs before birth, about the eighth month. Coincident with this, the pupillary ring of the iris, which was before small, acquires its full development. The capsulo-pupillary membrane, the other part of the vascular capsule of the crystalline body, has in like manner disappeared; this disappearance having occurred before that of the pupillary membrane, no traces of it remaining.

[An injected preparation was here demonstrated, showing distinctly the vascular capsule, the connection of the rudimentary iris with it, and its division into a small anterior and a large posterior segment; the anterior segment being the pupillary, the posterior the capsulo-pupillary membrane.]

As is the case with regard to the cornea, the blood-vessels of the vitreous body become obliterated, the body itself remaining and drawing the materials for its nutrition from the blood-vessels of the neighbouring parts.

Thus the cornea, in its fully formed state, is nourished from the vessels of the neighbouring parts of the conjunctiva and sclerotica.

The aqueous humour appears to be supplied by transudation from the vessels of the ciliary processes. The lens never was vascular, but at first surrounded by a vascular membrane, and it continues to receive nourishment from the vascular network of the zonula *zinnii*.

The whole posterior surface of the vitreous body being in contact with the vascular layer of the retina, the vessels of which are persistent, is from it supplied with nourishment, as also from the ciliary zone on its lateral part, anteriorly.

The non-vascular layers of the retina are nourished from the vascular layer. The non-vascular membrane of the pigment has its supply from the capillary network on the inner surface of the choroid.

A structure may be non-vascular, as I have said, yet nearer a supply of nutritious matter than other structures reputed vascular.

A COURSE OF CLINICAL LECTURES ON SOME IMPORTANT POINTS OF SURGERY,

Delivered at St. George's Hospital, by Sir Benjamin C. Brodie, Bart.

Lecture III.

(*Lithotomy and Lithotrity.*)

It was my intention, to-day, to have lectured on fistula, but as there are now in the hospital several cases of stone in the bladder, I think it advisable to call your attention to them, as the former subject can be taken up at any future time. And, first, you will observe that the same plan of treatment is not pursued in all cases. When there is a stone in the bladder, removal is the general rule, unless the state of the parts is such as to make an operation dangerous to the patient's life. But, as I said before, all stones are not to be extracted in the same way. I shall not, however, enter into a lengthy discussion upon all the different views that have been taken of this subject, but merely make a few general observations, so as to enable the younger pupils, more especially, to form some correct notions as to the plan to be pursued in these cases. Stones are (generally speaking) formed originally in the kidneys. There is only one kind which originates in the bladder, and the base of this is phosphate of lime, mixed with the mucous secretion of the bladder. Calculi are, however, for the most part, formed first in the kidney, descending by the ureter into the bladder, but if the urine be overloaded with calcareous or other matters, and there be a nucleus in the bladder, these substances will be almost sure to form upon it. Thus, I have known a hazel-nut in the female, and part of a bougie which has been broken in, in the male bladder, form the nucleus of calculi. At times, the small stones which are formed in the kidneys, having passed down the ureters into the bladder, will be voided with the urine, and I have had a whole wafer-box brought to me filled with these small stones. You will find that the ureters will admit of the passage of a stone which is too large for the urethra. When a stone does not come away in a short time, you may always feel satisfied that it is too large to pass by the urethra whilst in its natural state; here, then, you must either diminish the size of the stone, or you must dilate the urethra, which may be done very easily by means of a bougie, these parts being very dilatable; after having done this, let the patient drink a quantity of toast and water, and, if you have sufficiently dilated the passage, the small calculi will pass away with the urine. But there may be enlargement of the prostate gland, and this may prevent them coming away. Some years ago, Sir A. Cooper supposed these stones might be removed with a pair of forceps; he, therefore, applied to Weiss, to construct a pair for this purpose, and with them he removed several. I have also employed the same instrument, and from one patient I have taken as many as sixty or seventy small calculi from the bladder. The forceps invented by Sir A. Cooper were curved about as much as an ordinary bougie, but finding them inconvenient, I had some made with a smaller curve, and these are introduced with greater facility, and when in the bladder are more manageable. I also contrived a pair of forceps with a sliding tube, like a catheter, in the centre; the inner extremity of the catheter being quite closed, so that when this was withdrawn, the stones came down the tube with the water; both these are, however, very inconvenient:

it is difficult to seize the stone with them; you cannot very well move them about in the bladder; they are also objectionable from their stretching the urethra and neck of the bladder considerably, thus causing great pain, which is frequently followed by a shivering fit. But if the stone is small, you should use a pair of sliding forceps, by means of which you will be able to crush it. You may open these to a considerable extent in the bladder; but when using all these instruments, you should be careful always to inject the bladder with tepid water, otherwise the open instrument may do considerable mischief against the parietes of the bladder. The patient should be laid on his back, and the pelvis raised, so that the fundus of the bladder may be below its neck; then introduce the forceps, and with them you will be able to detect stones so small that you could not find them at all with a catheter or sound; there are none so small that you will fail to get hold of them with these. The manner you proceed in is this:—when you introduce the forceps, rest the curved part on the bladder, where it is immediately in contact with the rectum; then press them gently, so as to make (as it were) a little well in that part; then, by gently tapping the instrument, you will shake the stones into it very readily, and if these are small, you may seize seven or eight at one time. The ends of the forceps are made hollow, like a spoon, and with this I have brought away eight or ten stones at one time, when they have been small; and you draw them through the urethra, enclosed in the forceps, without injuring it in the slightest degree. The principle is precisely the same as that proposed by Sir A. Cooper; it is simply a better-contrived instrument. This is, unquestionably, one of the greatest improvements in modern surgery. Formerly, every person was obliged to be cut, who had these formations in the bladder,—thus endangering their lives; whereas, now, they may form one after another, and be removed from time to time, without any danger, and with very little inconvenience. A gentlemen came to me about ten years ago; he was also under Dr. Prout at the same time; but nothing could be devised in the way of medicine to give him permanent, or even temporary relief. He had continually small lithic acid calculi formed in the bladder; in short, they continue to form now; but he comes to my house from time to time and has them removed, and goes away just as though nothing had happened. I have taken at least 100, or from that to 150, from this one patient. But the stone may be so large that it will not pass through the urethra; but you should bear in mind that this tube is very dilatable about the neck of the bladder; then, again, if it is beyond a certain size it will not pass through the bulb of the urethra. I have in this glass three stones, each of them, you see, about the size of a nut, all of which I took from the same patient; these I drew into the membranous part of the urethra with the forceps; then, with a common scalpel cut down upon them from the perineum, and took them out with my fingers; and this is a very good operation, and is much less dangerous than lithotomy. I have relieved several people of stones in this manner. Sometimes I have got the stone to pass the bulb as far as the anterior part of the scrotum, and I have removed them from this situation three times, even when the stone has been quite at the anterior part of the penis; but I do not recommend you to perform this operation, as in two of the cases just mentioned, the urine escaped in small quantities into the wound, and gave me a great deal of trouble. In these cases, a single drop getting into the part will produce all the mischief, and it will escape in most cases, even though you have kept a catheter in the whole time. But there is even a better method than cutting the stones out: an instrument was invented in Paris for *grinding* the stone down in the bladder; but I shall not show it you, as that form of instrument ought never to be employed. The instrument now employed, and which may be said to have superseded that, is a pair of sliding forceps having one groove and one dentated edge, and of course it is made very strong. Small grooved forceps are sufficient to remove small stones, but for larger ones, and where you wish to break them, you must have recourse to the instrument just described. I should have mentioned that the tooth-like edge of the forceps is made to slip into the groove of the other. Baron Heurteloup always has his instruments made a little different from these, but I do not think them so good as those made by Mr. Weiss, for the latter have more power; and then, while the stone is crushed in them by means of a screw, in the former it is done by striking the instrument with a mallet or hammer. If the stone is small it will drop readily into the forceps; but if large, it sometimes, by its own weight, adheres to the side of the bladder; in this case you must open the forceps, and turn them down gently till you feel it, and then grasp it; but never attempt performing this operation without first injecting the bladder with warm water. The pain of hammering the forceps to break the stone, as pursued by Baron Heurteloup, must have been very formidable to the patient. Crushing is best adapted for small stones. Those cases where crushing is required do not often occur in the hospital, but in private practice I repeatedly have them. A person comes to you, and says he has had stone in the bladder several months; you introduce your forceps, and find it will not pass; then you have merely to apply your screw, and you break it at once, and it comes away and is done with. If the stones are large, they will require breaking seven or eight times; and the irritation produced by repeating the operation so many times, sometimes excites a great deal of inflammation, and in a few cases I have known the patient die from its effects. But where the stone is only an inch or an inch and a half in diameter, you may break it into several pieces with the dentated forceps (showing them), recollecting that these bring none of it away; but afterwards you may employ these (the grooved forceps), by which you may grasp the smaller pieces, and break them up sufficiently to be lodged in the grove, so that every time you withdraw the instrument, you bring away a quantity of the stone, thus saving the patient the pain and inconvenience of passing the fragments. If the urethra is small, you will have difficulty in withdrawing the forceps when they are filled with stones; and if you dilate the urethra much, you will, perhaps, bring on a shivering fit; so that in these cases it is better to employ a very small instrument, and having broken the fragments very small, let them come away with the urine. The operation of lithotrity, then, may be said to be very applicable where the stones are of a moderate size, but not so much so when they are large. When you do perform the operation several times successively, always let the degree of inflammation, excited by one operation, entirely subside before you proceed to a second. Those portions which are left, to come away of themselves, are sometimes prevented from doing so by enlargement of the prostate gland; this gland may also come in the way of the forceps, and prevent your getting the curve into the bladder. Here you must have recourse to lithotomy. But, perhaps, you think it dangerous to cut an enlarged prostate; now the contrary is the case, as I will presently explain. There are still some other cases in which the forceps are serviceable. An aged gentlemen came to me, who had had retention of urine for some time. When I examined the bladder, I found it loaded with ropy mucus, and its cavity was apparently filled with fragments of phosphate of lime calculi, which in course of time aggregate, and on passing the catheter, it appears to be entering a quarry of small stones; and at first you would not be able to remove them all, but do this;—Inject a little tepid water into the bladder, and repeat this several times a-day for some considerable period, until the bladder loses its irritability, and then you may add to the injection each time acid. nitric. mj.; and after this you may begin to extract the calculi by introducing the forceps, when some of the fragments will fall into the groove, and this may be repeated every other day. I should also mention with respect to the last patient I spoke to you about, that his urine stunk intolerably, and when I commenced using the injection, I could not make the bladder hold more than ℥ss, but very soon I got it to hold ℥vj., and at last ℥vij. This patient was perfectly cured.

Now, in former times, cases of stone in the bladder were looked upon as hopeless; whereas now we treat them with an almost certainty of success. In children, I always prefer lithotomy to lithotrity, because the urethra is so small, that you cannot pass a forceps large enough to grasp the stone; and secondly, because children very seldom die from lithotomy, but do frequently from lithotrity. The opposite to this obtains in adults; but I may remark here, that in children the stone grows quite as fast as in a grown person. In persons above sixty years of age there is, for the most part, a thickening of the perineum and an enlargement of the prostate, and it is owing to this latter symptom that effusion is much less liable to take place in people at this age, than in those who are younger. When you have what is called the mulberry calculus in the bladder, you have to break it twenty times. The man up stairs has had a disposition to form stones in his bladder all his life; he has observed copious deposits from his urine for the last thirty years—these were lithic acid. There is a question whether the two operations, of which we have been speaking, might not be combined? As when the stone is very large, it is extremely difficult to drag it through the neck of the bladder; it is also dangerous to do this; so that if possible, it would be better, perhaps, to break the stone first, and then remove part by lithotomy and part by the urethra. You might take away many pieces from the neck of the urethra. Here is a stone taken from Sir J. Leech, late Master of the Rolls; you see it was very large, and fortunately it broke several times during the operation.

COURSE OF LECTURES ON THE THEORY AND PRACTICE OF MEDICINE.

Delivered by C. J. B. WILLIAMS, M.D., F.R.S., Professor of the Practice of Medicine, and of Clinical Medicine, at University College.

Sounds of the Heart continued.—Their Situation.—I was yesterday on the subject of the situation of the murmurs. The sounds or murmurs accompanying the systolic action, as also the impulse, must be modified greatly by the force of the current out of the ventricles. There are several circumstances to be taken into consideration in reference to this subject; for instance, the blood may flow in the usual direction, into the aorta, the murmur being caused by some irregularity in the orifice; or the sound may depend on regurgitation through the aortic, the mitral, or the tricuspid valves. It may also be produced by perforations of the heart, and communications with the sac of the pericardium, or openings existing between the two ventricles, &c. Again, the murmurs which are heard during the diastole of the heart, are produced by a flowing back of the blood into the ventricle; and they are chiefly regurgitant aortic, regurgitant mitral, or else obstructive sounds.

Now, with regard to the distinction of the situation of the sounds: we find them chiefly produced or propagated in those parts of the chest which form the best conducting media; as also in those parts corresponding to the direction in which the current flows. The obstructive aortic sound is heard best when the heart and the aorta are brought near to the surface of the chest, as is sometimes the case in consequence of enlargement of the heart. It may be heard most plainly about the middle of the sternum, or its lower part, though sometimes more on one side, sometimes more on the other. There is no certain rule with regard to position. You find obstructive aortic disease sometimes occupying one position, and sometimes another. But it is not the mere position of the sound that distinguishes the disease. It is heard where it is produced; but it is also propagated in the direction of the great arteries, and extends along the aorta, behind the sternum, up the course of the *innominata*, the left *subclavian*, and along the *carotids*. On the other hand, it may be heard pretty distinctly downwards towards the apex, but is by no means so loud nor so long as over the course of the arteries. Then, again, the

obstructive pulmonary sound is heard much in the same position; it is a very small murmur, and may be produced by constriction of these arteries. The pulmonary artery and the aorta lie so close to each other, that there is some danger of confounding these sounds. There is this difference, however, between them. When you find the murmur very loud, and when it extends along the carotids, you may generally suspect it to be seated in the aorta. The obstructive aortic, and the regurgitant mitral, are the most common murmurs accompanying the sounds of the heart. The regurgitant mitral is produced in the mitral valve. It is heard, not so much immediately over the seat of the valve (about half way between the mamilla, and the margin of the sternum), as it is at the apex of the heart, or a little below the left breast.

The radial pulse as indicative of disease of the heart.—Now, the radial pulse must be considered as a valuable index to certain conditions of the heart, in which the integrity of this organ is more or less implicated. The radial pulse depends, for its character, not only on the beat of the heart, but also on the manner in which the arterial tube vibrates those beats. Sometimes, when the heart is beating strongly, the radial pulse beats weakly; and sometimes when the heart is beating regularly, the radial pulse is irregular, and *vice versâ*. The arteries do not always propagate the pulsation of the heart; they may diminish the number of the pulsations, but they cannot increase them. The rhythm of the heart's beat is equal, but its strength is not equal: the strong beats are propagated, but the weak beats are not, and this causes the inequality. When there are several weak beats, and some strong beats, the strong beats come at regular intervals, and it is these strong ones that are propagated to the pulse. I have met some cases in which the beat of the pulse has been at 60 or 70, and regular; while the heart has been beating tumultuously at 120 in the minute, or more. We must remember, as I said before, that the radial pulse is dependent, not only on the action of the heart, but also on the condition of the arteries, the degree of elasticity and tonicity in the fibres of the arteries, and likewise on the quantity of blood which the arteries contain.

Diseases of the Heart.—Functional Maladies.—I now pass on to the consideration of the diseases of the heart; first noticing the functional diseases, which imply disorder of the proper function of the heart's action. Disordered action of the heart may be divided into increased action, defective action, and irregular action. Inordinate action of the heart is engendered by various causes, and may be produced by different pathological states. For example: undue irritation of the heart, by an over-stimulating property of the blood, as when a person has taken stimulating liquors in considerable quantity. It may also arise from other causes than the state of the blood itself: from something extraneous to the heart,—some mechanical cause interfering with the heart's action, as the stomach being over-loaded,—or from reflex irritation through the medium of the nerves, caused by various irritating matters in the stomach; also it is produced by increased irritability of the muscular fibres of the heart itself, which may depend either on a greater flow of blood through the structure of the heart, or on determination or inflammation of the lining membrane of this organ. Palpitation of the heart may be defined to be that amount of inordinate action which is perceptible to the patient himself, and is productive of more or less distress. The distress produced by the violent action of the heart is sometimes very great; the patient is conscious of the beating, which is accompanied by a hurried and violent motion, as well as by a feeling of suffocation. There may, however, be inordinate action to a considerable amount, without the patient being aware of the existence of the disturbance; many such persons being merely subject to short breath and a feeling of faintness. It is a remarkable fact, that with regard to functional diseases, generally speaking, the patient is conscious of the palpitation; but in cases of structural disease, where there is inordinate action, the patient is not invariably conscious of the existence of palpitation. The reason of this is, that in cases of functional disease, the affection is intermittent, varying in its degree at different periods; and it is during this increase in degree that the palpitation becomes distressing and uncomfortable. In these cases there is an exalted sensibility, a nervous excitability, existing in a high degree,—an undue sensibility of the nerves that renders the patient conscious of these inordinate motions of the heart. On the other hand, in structural disease, the inordinate action is developed gradually, until at last the patient becomes accustomed to it. There is, sometimes, with palpitation, a variety of distressing sensations; besides the mere consciousness of the beat, there is pain referrible to the region of the heart;—a stuffed or tightened feeling. This may occur quite independantly of organic disease. Sometimes, too, there is a severe pain, coming on in paroxysms, an aching pain, or a feeling of soreness, in the region of the heart. The pulsations and inordinate action are often felt in the head and in the vertebral arteries, more particularly. Persons going up stairs feel a very strong beating in the back of the head. This, in some cases, produces an indistinctness of articulation; it interferes with the functions of the cerebral system; and, sometimes, I have known it to produce paralysis. The same thing may be said with regard to giddiness. Palpitation in some cases brings on an attack of giddiness, and a loss of the senses: a sort of cerebral attack, and even convulsions. A throbbing is often felt in the epigastrium, as well as in the head and neck. Under a violent attack of palpitation, the face first of all becomes pale, and soon after greatly flushed, and the superficial arteries may often be felt to throb violently; the distant arteries,—the radial arteries, and those of the lower limbs, are irregularly supplied with blood, and the extremities are, in consequence, cold. With this irregular supply of blood which accompanies palpitation, there is apt to be disorder of various other functions: the action of the alimentary canal is not properly carried on. The secretion of the urine varies in different cases: sometimes it is deficient in quantity; but very commonly, after this violent palpitation, the secretion of the urine becomes very considerable. This explains why it is that, after hysterical fits, a copious flow of limpid urine takes place. From increased circulation of the blood, various organs will be stimulated to increased action; after the paroxysm, the secretion takes place from the kidneys; and from the inordinate circulation, causing determination of blood to the kidneys and other parts, the secretion eventually becomes very watery. This occurs chiefly in the case of nervous palpitation where there is no inflammatory action going on in the system. When inflammatory action does exist, this constitutes another cause of disorder in the urine. Torpidity of the functions is sometimes exhibited in persons subject to palpitation.

Physical Signs Accompanying Palpitation.—The physical signs of mere palpitation, without any structural disease, are an increase of the impulse, as well as of the natural sounds of the heart, exactly like that produced after violent exertion; violent exercise, in fact, produces palpitation, but it subsides with the cessation of the cause. With this augmented force of pulsation, the heart may be felt vigorously beating against the chest, and there is increased loudness of the first sound, in consequence of the greater vigour and abruptness with which the muscular tension is produced; but there is not augmented loudness in the second sound, for the reasons I explained yesterday: there is not enough blood forced into the arteries, at each beat, to cause a sudden increased recoil upon the valves. In addition to the greater strength of impulse, and abruptness, there is an absence of the signs of enlargement of the heart, which, although beating violently, is still in its proper place. The signs on percussion are not materially modified. If there be any trifling amount of disease at the root of the aorta, or in the aortic valves, so that there is a regurgitation of blood into the ventricle, these sounds become exaggerated during palpitation. In violent palpitation, the phenomena are strongly marked at the top of the sternum, in the carotids and arteries which are near, and in some cases of this kind the jugular veins may be seen to pulsate. Attacks of palpitation often terminate with eructation of wind, and when the palpitation subsides, there is a free flow of urine. In some cases, palpitation is excited by temporary plethora. Large quantities of fluid being drunk, become absorbed into the vascular system, and cause palpitation and a great flow of urine, which is thus an index of the system having got rid of this excess. Sometimes perspiration takes place, and the thing subsides in this way. There are various causes of congestion which may produce palpitation: the heart is sometimes active, but does not contract fully on its contents, and then it is excited to violent palpitation. This occurs not unfrequently in connexion with asthenic plethora; and in this case, there is increased dulness of sound at the region of the heart, and this organ is actually distended by the quantity of blood which it is unable to get rid of. This, likewise, often co-exists with defective action of the excretory organs, a condition which thus induces great plethora of the vascular system. Palpitation is sometimes produced by other causes which bring about internal congestion: such as long exposure to cold; insufficient clothing; or even the opposite extreme, great heat. It is very commonly produced by extraneous causes: such as pressure over the region of the heart; flatulence; accumulation of fæces in the intestines; improper food; the formation of tumors near the heart or great arteries; and disordered uterine function. In all these different cases, the palpitation is only sympathetic; it may be only temporary; but if it continue, it becomes very distressing, and tends in some instances to produce further disease, by throwing the blood irregularly into different parts of the system. Long-continued palpitation, accompanied by plethora, may cause permanent disease of the heart or of the great arteries (either *hypertrophy* or *dilatation*). This is owing to the activity of the plastic process. In cases in which it is accompanied by congestion or inflammation, it tends, by its continuance, to the production of organic disease; on the other hand, as I have said, it is produced in the opposite state from merely nervous causes: by an anemic state, or a deficiency of blood in the whole system; and this may go on for a long time without producing any structural disease, merely accompanied by considerable functional disturbance.

Treatment of Palpitation of the Heart.—The treatment of inordinate action of the heart must depend on the cause. It may sometimes be relieved by stimuli, which seem to restore the natural action of the heart, and remove the nervous palpitation. Ether, aromatic waters, ammonia, and spirits, will give great relief in some cases of palpitation, restore the balance of the heart's action, and check the nervous irritability. These are only temporary measures. In cases in which it depends on congestion, the removal of the cause of this congestion must be considered as of essential importance. In all cases in which plethora exists, it is useful to employ local depletion to relieve the heart, and take away the increased load. Bleeding from the arm is, under some circumstances, serviceable; and it is desirable to produce increased action in the excretory organs, by purgatives, and various diuretics. It is, of course, necessary in cases of palpitation, accompanied by plethora or fulness, that the patient should be abstinent; and doses of calomel, for awhile, and Dover's powder, are of great efficacy; but they must be used in a moderate degree. The best means of acting on the urinary secretion, is by colchicum, digitalis, and nitre. If the disease occur simply from nervous sensibility, without the plethoric state I have been mentioning, sedatives should be used in combination with other medicines: hydrocyanic acid, hyoscyamus, opium, and quinine, are the remedies. Sedatives, however, are but temporary measures; and for permanent good, tonics are chiefly to be depended upon. The most useful is iron, where it can be borne; bismuth, nitrate of silver, and sulphate of copper, are also good remedies. In all cases, country air is essential; an abstinence from sedentary habits; regular exercise; and the use of cold water, either by drinking it, or sponging the whole surface, which tends to im-

prove the capillary circulation; also a cold plunge bath;—these are the means which are most efficacious.

Irregular and defective action may be classed together. Irregular action is defective in its actual result. Irregularity in the rhythm of the heart, is very common in weak and nervous subjects, both young and old. It consists in an interruption of the beat, or a retardation, or else in too great an acceleration; so that instead of recurring at regular intervals, one sometimes occurs sooner than the other; then there is an interruption, and then it goes on again. A constrained posture will sometimes produce this condition: as also irregularities of diet, and so forth; this state, moreover, is usually combined with other symptoms of weak circulation, such as coldness of the extremities, or a congestive appearance of the face. Irregularity and inequality of the heart's pulsations are more commonly the effect of structural disease; but the palpitations I have been mentioning, as accompanying asthenic plethora, are often attended by irregular action, although there may be no organic disease.

CLINICAL LECTURES ON MEDICINE;

Delivered at the GREAT CHARITY HOSPITAL, Berlin, by Dr. SCHONLEIN, first Physician to the King of Prussia, founder of the Natural System of Medicine in Germany, and Professor of Pathology and Therapeutics in the University of Berlin.

Prepared from the German expressly for "The Medical Times."

LECTURE IX.

Dilatation of the left Ventricle of the Heart, with Hypertrophy and Disease of the Valves of the Aorta—Enlargement of the left Lobe of the Liver—Œdema of the Feet—Sequelæ of the Itch—Absence of marked Phenomena in Diseases of the Heart—Employment of Digitalis in Disease of the Valves of the Heart—Views on the Administration of Digitalis in general—Encouragement of the Intestinal and Urinary Secretions—Application of the Moxa—Convalescence.

Nov. 2nd, 1840.—John Schulz, weaver, 34 years of age. The patient states that he had enjoyed good health previously, and had always worked in a spacious room; about 9 years ago, however, he was attacked with the itch, which lasted for three weeks, and was then cured in this hospital by the application of the sulphur ointment. Little itching spots were, subsequently, occasionally observed by him between the fingers, especially when in bed; they, however, soon disappeared. He dates the commencement of his present disease about nine months ago; when he complained of oppression of the chest, difficulty of breathing, weariness, palpitation of the heart, &c., on more than ordinary exercise, as for instance, on running, ascending the staircase, &c. &c. During the last five months, the disease has assumed a more violent character.

On examination of the chest, which to judge from the statement of the patient seems to be the seat of the disease, it was immediately evident that the heat of the heart exteuded over a larger space than in the normal state; the cardiac region also seemed to be unnaturally distended. The jugular veins were greatly dilated. On applying the hand, the pulsation of the heart was found to be wide-spread and irregular. When I saw the patient yesterday for the first time, a peculiar purring sound was present, which to-day has disappeared. A distinct and strong bellows-murmur, too, is audible on using the stethoscope, together with a slightly increased impulse of the heart, in the mammary region, somewhat to the left of the nipple. On comparing this phenomenon with the radial pulse, which is irregular, weak, and fluttering, there can be no doubt but that we have here to deal with an affection of the valvular apparatus of the heart, that is to say, of the valves at the commencement of the aorta. We, moreover, perceive that the heart pulsates over a greater extent than natural, whilst percussion gives a dull sound, especially towards the left; this denotes an enlargement of the left ventricle; and taking the force of the pulsation into consideration, we also seem to have a simultaneous thickening of the muscular substance. An examination of the lungs likewise became necessary, on account of the cough of the patient. Nothing abnormal can, however, here be discovered. The appetite is good, but a sensation of fulness and distention is experienced in the region of the stomach after meals, (to use the expression of the patient, "he feels as if a sausage were deposited there.") Besides this, the left lobe of the liver, covering the small curvature of the stomach, is enlarged; the stools are regular; the urine limited in its quantity, and of a dark colour; slight perspiration. The feet are rather swollen, especially towards the evening. We have now given an outline of the existing malady: it consists in an affection of the aortic valves, hypertrophy of the left ventricle, with simultaneous enlargement of the left lobe of the liver, and commencing hydrops. Let us now search for the causes of this complaint. The previous history discloses no other disease than the itch. The fact of sequelæ to the itch, that old medical dogma, has, in modern days, not only been considered doubtful, but has been abandoned, and even ridiculed. Of the older physicians who have written on these sequelæ, we may especially mention Autenrieth, who published (1807) a most excellent essay on this subject; and we cannot, therefore, help wondering at Hahnemann, when he asserts that he himself was the first who directed attention to the *after*-diseases of the itch. The discovery of the acarus of the itch has thrown a doubt over this subject. That this insect exists is certain; I have seen it myself often; but I must beg to differ from the assumption, that its existence invalidates the old dogma of sequelæ in the itch. I will not take my stand solely upon old facts and observations; nor even upon the fact, that if another disease take place after the disappearance of the itch, this disease ceases to develop itself, or is even totally removed, so soon as the itch again makes its appearance. I will merely direct you to the ground taken by the antagonists of the doctrine. How does the itch develop itself? Small spots first exhibit themselves, from which the itch pustules are formed. The existence of the acarus of the itch, however, at the first appearance of the itchy spots, has not been proved; we might, then, call this a *filius ante patrem*. An evident contradiction! Again, the disciples of Raspail do not go so far as to assert that all itch pustules are provided with this insect. If the acarus be the cause of the disease, why is this insect not present in every pustule? For it is a well established fact, that it has only been found in the recent eruption of the itch, and not after it has existed for some time. The argument, that itch may be produced by the inoculation of the insect, is by no means a proof; for some of the contagious matter of the itch might have been transferred with the insect. To render the experiment conclusive, it would be necessary to bathe and cleanse this microscopical insect; for it is a well known fact, that an exceedingly small portion of contagious matter is sufficient to propagate the infection. The question, therefore, is by no means set at rest by the discovery of the acarus of the itch, as its advocates assert. I will confess, that I myself entertain no doubt respecting the existence of *after*, or *secondary* diseases of the itch; and I base this opinion upon my own observations, and on the many observations of older physicians of undoubted credibility. It may not be generally known that an ulceration of the skin, of a peculiar kind, forms itself, especially in old people, principally about the knuckles, or joints of the lower extremities, in consequence of the eruption of itch, (the secretion of which ulcerations is contagious) and which has obtained the name of *ulcus psoricum*—(no one will assert here, that this ulceration was so formed by the itch insect)—and, that if this ulceration is caused to heal up suddenly, internal diseases of a peculiar character are produced, not only such as are created by the drying up of old standing sores, but peculiar forms of disease. This fact appears to me one of the most striking features in favour of the possibility of *after*-diseases resulting from the suppression of the itch. It is by no means my intention to force any one into the adoption of my views on this subject; but I confess that the reasons, above enumerated, have given me the most perfect conviction, that itch is capable of producing *after*-diseases.

Prescription.—℞. Infus. herb digitalis (℈iss.) ℥v., potass acetat. ʒvj., mellag. taraxac ℥j. Mix. A tablespoonful to be taken every two hours.

4.—It cannot excite surprise that no decided change should have taken place in the state of our patient, at this early period. We can hardly expect the infusum digitalis and extr. taraxaci altogether to remove an affection of the valves of the heart. These remedies have, however, had an advantageous effect; they have encouraged the urinary and intestinal secretions, and have thereby had some effect on the dropsical phenomena and the liver complaint, which were within the reach of medicine. The urine is increased in quantity, as well as changed in quality; the dropsical phenomena are disappearing; there are several alvine evacuations daily; the patient has a good appetite, and there is no longer that sensation of distension and oppression at the region of the stomach. The small lobe of the liver, on the other hand, still remains enlarged, and is painful on pressure. The local symptoms of the affection of the heart continue the same, but not so the general ones: the cough is more rare; the feeling of oppression diminished; asthmatical symptoms, however, exhibit themselves on the least motion.

The original cause of the disease ought to be particularly attended to, if we wish to treat chronic maladies with any degree of success. The question as to "whether there may be diseases of internal organs in consequence of itch, which has been forcibly repelled," has recently been brought upon the *tapis*, more especially since the discovery of the itch-insect, which has been considered as the cause of the disease. The itch, then, was made a purely local complaint; and if such be the case, it certainly would be ridiculous to speak of *sequelæ* of this malady; the same as it would be with regard to an individual who had been afflicted with lice, and subsequently cleansed of these vermin, and who should then be seized with a catarrh; the catarrh, in this case, could hardly be considered as a consequence of the removal of the lice. I have, however, already explained my reasons for believing in the possibility of *after*-diseases of the itch. It becomes now, therefore, a question, in the present case, whether the probability can be proved that the itch, which existed in our patient nine years ago, may be the origin of this affection of the heart?

Many difficulties, as you may judge, will present themselves against the adoption of this view; but the following reasons may be addueed in favour of it:—1stly. The characteristic papulæ of itch have repeatedly exhibited themselves in our patient, at the usual locality between the fingers, especially when warm in bed; now, it is my opinion that this is a *sequela* of itch. I have particularly observed such eruptions in the spring of the year.—2dly. With regard to the long interval between the existence of the itch, and the appearance of the phenomena of the heart, we ought to distinguish between the existence of a disease, and the perception of it on the part of the individual affected. It has been shown by very frequent observations, that the patient may not have the slightest idea of such disease, even whilst it is clearly proved on examination; this, indeed, forms a very characteristic feature of diseases of the heart. This self-delusion, however, is not only found in the chronic, but also in acute, affections of the heart (the very opposite, therefore, to complaints of the abdominal organs). It is a known fact that sometimes in the most intense inflammations of the heart, even of its serous covering, not the slightest sensation of pain is experienced, or, if so, it is occasionally felt at quite a different locality.* It is owing to this that the ancients classed this disease among the "*inflammationes occultæ*." This peculiarity is still more frequently present in chronic affections of the heart. The existence of it is manifested only in frightful dreams, whilst all symptoms are entirely absent when the individual is awake. Thus, I have repeatedly observed that patients had not the slightest idea of their progressing disease, whilst, at the same time,

* Kreyssig particularly directed attention to this fact.

it only required some trifling incident to produce that perception. For instance, I have seen that such patients, on returning home from their labour, and being about merrily to ascend some elevated spot, were suddenly seized with asthma, and sunk under this attack; or, again, how such patients, when leaping over a ditch during a chase, have been killed by a violent asthmatic paroxysm. It is by no means clear whether our patient may not have suffered from affection of the heart previous to the period from which he dates his complaint; and the great interval which has elapsed since, cannot, therefore, form an objection to this view.—3dly. We cannot discover any other cause from which this affection of the heart may have originated. The patient states that he has never been afflicted with rheumatism. It cannot, again, be supposed that the affection of the liver was the primary cause, for disease of the heart which originates from liver-complaints, is very characteristic and well-marked; it is always found in the right side of the heart, which may be accounted for by the physiological connection of the liver with this side of the heart.—Continue the medicines already ordered.

5.—We will, in the first place, inquire into the action of the medicine. The patient has had one intestinal evacuation daily; it would, however, have been desirable if there had been more. The secretion of urine has evidently increased. There are three series of morbid symptoms to be considered:—1stly, phenomena of the heart; 2dly, those of the liver; and, 3dly, the dropsical symptoms. The latter have almost entirely disappeared; the enlargement of the liver, and the phenomena of the heart, are the same as yesterday; on the other hand, the radial pulse is more regular, as also the rhythm of the heart; the pulse, however, has become slower (54 per minute); this last symptom is no doubt an effect of the digitalis.

Objections have, recently, been made to the employment of digitalis in diseases of the heart, by the English physicians more particularly, among whom we may especially mention Dr. Stokes. This gentleman exclaims chiefly against its employment in affections of the valves of the heart. I give due weight to the opinion of this physician, especially as I myself, previous to being acquainted with his researches on the subject, had made the observation that digitalis should be used with circumspection in diseases of the heart, as it may readily have a paralysing effect upon the activity of this organ. I cannot, however, so strongly condemn the application of digitalis in diseases of the valves of the heart, as Stokes has done; for the more tumultuous the contractions of the heart, the greater the disturbance induced, and the more frequent the intermissions which take place between these beats. Nature will but rarely cause such intermissions of the pulse, if the contractions follow each other slowly. You will see, therefore, that digitalis, in rendering the pulse more slow, at the same time also renders it more regular. Let us, however, consider the question in its true point of view. The point in question is: the impediment in the circulation of the blood, and the power which the heart requires to overcome this impediment. If this impediment be very considerable—if it be a consequence of *stenosis* or constriction of the heart--of complete ossification, —then every remedy calculated to act against the energy of the heart, which alone can conquer this impediment, must have an injurious effect; in such cases, therefore, you will use exciting means; as, for instance, external irritation of the skin (sinapisms); and, internally, naphtha, and the preparations of ammonia. The whole difficulty of the question, I think, lies in this point. The only question, in fact, now is—are there phenomena, by which we may obtain, during life, such information as to judge of the magnitude of the impediment? We certainly answer in the affirmative. They consist in the degree, the quality, and the intensity of the sounds which we perceive by the stethoscope. If the simple bellows' murmur is existing, we may presume that the impediment is not a very considerable one (only partial ossification of the valves); the more the sound approaches, however, to that caused by a file or rasp, the more it has a metallic, wiry, cutting sound (which, in this instance, is not the case), the more we may calculate upon a greater degeneration of the valves; and digitalis, in this latter case, should be employed with considerable caution. Some medical men, in order to evade this difficulty, have made use of the *tinctura digitalis ætherea*, a preparation consisting of naphtha and digitalis, but which latter is contained only in very subordinate proportions. The effect of digitalis is very different in different individuals, provided always that it be genuine; it must not be imagined that large doses are required for the production of its effect. I have frequently found that the powder of digitalis, from half to one grain, administered four times a-day, very soon exhibited its positive effects. It is better, therefore, to commence with small doses, and to increase them cautiously, if the desired effect is not produced. I have also found that the effect of digitalis may manifest itself even four or six days after having discontinued the remedy. The dose employed in this instance is not a very large one, and we shall therefore continue with it. Wishing, however, to produce a stronger effect upon the bowels, we shall add tinctura rhei aquos (℥j.) to the infus. digitalis, instead of the taraxacum.

6.—The symptoms caused by the digitalis are the same as we observed yesterday, although this medicine has been continued; instead of one, we have now, however, had three alvine evacuations. The favourable effect upon the functional symptoms is evident; good appetite, without a feeling of oppression after its gratification; no sensation of anxiety; no dyspnœa, even on motion. The local symptoms, however, of the heart and liver, are the same.

The injurious influence of digitalis upon the system is attended by different phenomena; where it increases the urinary secretion, while it lowers the action of the heart, then the poisonous symptoms are generally wanting (as, for instance, dryness in the throat, giddiness, dimness of sight), and *vice versâ*. This sometimes depends upon the way in which the remedy is administered. If the extract or infusion of the perfectly fresh leaves be given, then these narcotic, secondary, effects more frequently take place. In order to diminish these disagreeable consequences, which particularly exhibit themselves in nervous persons, I have found the acetum digitalis to act very beneficially, either administered alone on sugar, or saturated with liquor potassæ.

We now, again, return to the question: whether the radical cure of the affection of the heart in our patient is still within the reach of possibility? The answer to this question depends upon the determination of the original cause of the malady. After repeated inquiries, we have now ascertained that the patient had been afflicted about a twelvemonth ago with a violent rheumatic inflammation of the eye, which exhibited a great tendency to the formation of *pannus*; this coincided with the complaint of the heart, which was first perceived some months ago. In the same way as *pannus* formed itself in the eye, so has a similar production now formed itself on the valves of the heart. We have also discovered an additional exciting cause for the affection of the liver; namely, that the patient has been obliged to endure a certain fixed position, without much exercise being allowed to him, and besides this he has by no means any aversion to the use of spirituous liquors. We have, therefore, by repeated inquiries, arrived at the originating cause of the disease; but we spoke of the possible connexion between affection of the heart and itch, since the patient had at first acknowledged only the latter complaint, and since there was no reason to suppose an idiopathical disease of the heart in this instance.

7.—On comparing the state of the patient with that exhibited by him yesterday (in as far as a change can be expected in chronic diseases in 24 hours), we find, 1stly, with regard to the medicinal symptoms: that the effect of the digitalis continues upon the urinary secretions, and that it has still further lowered the action of the heart (yesterday we counted 54, to day only 48 pulsations per minute); the pulse has, at the same time become quite regular. There have only been two motions since yesterday.—2dly. With regard to the morbid symptoms: we are satisfied in being able to say that the patient continues in the same favourable state. We certainly have not yet observed any poisonous effect from the digitalis; as it manifests itself, however, too actively upon the functions of the heart, we shall cease to use it, and administer: R. solutionis potass. tart. (℥iss.) ℥v., tinct. rhei., mellaginis taraxaci āā ℥j. Mix.; in order to increase the effect upon the intestines.

9.—Notwithstanding the discontinuance of the digitalis, since the day before yesterday, its effect continues, both upon the functions of the heart, and also upon the urinary secretion. The medicine ordered has acted too violently upon the intestines, and we shall, therefore, diminish the dose to one-half.

10.—The medicinal effect of the cathartic continues in a moderate degree. In consequence of it, we also find a considerable diminution in the symptoms of the liver. The swelling, as also the painfulness on pressure, of the small lobe of the liver, have almost entirely disappeared; the appetite has returned, and there is no longer that sensation of fulness and distension after meals. The effect of the digitalis upon the kidneys still continues; on the other hand, its action upon the functions of the heart has again decreased, and the pulse, which had been down to 34 per minute, has now again risen to 58; it does not, however, any longer exhibit the same regularity in the succession of the strokes. Some of the symptoms of the disease of the heart have entirely disappeared, but the impulse of the heart, and the bellows' murmur, remain the same. In consideration of the predisposing causes we have lately discovered, we shall institute a variation from our former treatment; and since the affection has already existed for some time, we shall adopt a rather powerful remedial application; that is to say, we shall apply the moxa at the locality where the morbid sounds are perceptible, half an inch from the nipple, in order to establish a sore at this point, after the desquamation of the eschar.

11.—The effect of the medicine upon the intestines is now diminishing; that, however, of the digitalis upon the kidneys continues in the same degree, confirming what we have stated respecting the long *after*-effects of this remedy. There is a peculiarity about the pulse; it is again remarkably slow (36 per minute), and in an equal ratio has become again perfectly regular. The two movements of the heart follow each other pretty quickly, and then we have a long pause. This decrease in the frequency of the pulse is the more remarkable, as we yesterday ordered the moxa to be applied to the cardiac region, which should rather have caused an acceleration of the pulse.

17. The medicinal effect of the digitalis has now ceased; the pulse makes 64 beats per minute; and although we can no longer observe the regularity in it, which we found during the action of the digitalis, it has by no means that degree of irregularity it possessed formerly. The morbid phenomena presented by the heart, have mostly disappeared. The effect of the remedies administered, to facilitate the intestinal secretions, continues as desired, and the liver has consequently regained its normal condition. The perspiration and urinary secretion are natural; the dropsical symptoms have disappeared. The eschar, caused by the moxa, has fallen off, and we shall keep this spot open for some time to come.

The patient was removed from the clinical ward into another division of the hospital.

Fistula in ano.—Mr. Chiley says that when operating lately for fistula in ano, instead of passing the finger into the rectum he introduced a speculum, so that the space between the blades corresponded to the track of the fistula. By means of a director and bistoury, the slitting up of a sinus in any other part of the body could not have been effected with greater ease, than that with which he was thus enabled to operate. The principal advantage of the proceeding seems to be the placing the parts in a state of tension.

SURGICAL CASES.

WITH REFLECTIONS BY M. AMUSSAT, M.D., MEMBER OF THE ACADEMY OF MEDICINE, PARIS, &c., &.

[These observations, which we owe to the kindness of the author, were presented to the Academy of Medicine, Paris, on two of its late sittings.]

Enormous lupia situated on the scalp.—Mrs. X., æt. 74, the mother of twelve children, when about eighteen years old, became affected with several indolent wens on the head, which did not, however, prevent her wearing her hair like other young persons of her age. They increased gradually so much, that when 35, she was obliged to put on a wig, in order to conceal the deformity they produced. About six months ago, the largest of these tumours, in all probability formed by the re-union of several smaller ones, became the seat of lancinating pains, and furnished an abundant suppuration: in a word, it had degenerated into a cancer of the species of fungus hematodes. It not only greatly inconvenienced the patient from its size, which was equal to that of the head of the fœtus at seven months, and from the suppuration proceeding from its ulcerated surface, but likewise might have been followed by serious, if not fatal consequences, from the hæmorrhages which took place at each dressing; situated just above the right ear, it presents an uneven surface; in some parts firm, in others soft and fluctuating; the skin is stretched, thin, and red; its pedicle offers ten inches in circumference, its anterior surface being six inches. It hangs over, and covers half the ear, and inferiorly it is the seat of two deep and large ulcerations, which secrete pus, and now and then, blood. The other tumours, twenty-three in number, were more or less voluminous, being from the size of an olive to that of an orange.

After having examined the patient alone, and in consultation with Messrs. Ribes and Recamier, it was decided that the ligature and cauterisation should be employed for its removal. Consequently, on the 17th Feb., in the presence of MM. Bancel, Bouteiller, Filhos, L. Boyer, and Le Vaillant, M. Amussat performed the operation as follows:—The hair covering the tumour having been shaved off, the pedicle was encircled with a sheet of lead, sufficiently thin and flexible to adapt itself to all the inequalities of that part. The lead forming a sort of gutter, open inferiorly, was filled with Vienna caustic. Ten minutes after its application, the cauterisation being sufficient for the end proposed, the lead was removed, and with it the remainder of the caustic. The first part of the operation being thus performed, the operator next proceeded to place a ligature round the pedicle. For this purpose, a bit of strong thread, or rather twine, was chosen, not only on account of its strength, but likewise of its thickness, which would prevent its dividing the tissues too promptly; it was then placed on the parts just cauterised. The two ends of the ligature were next passed in the articulated *serre-nœud*, and tightened, so as to exercise a slight constriction on the pedicle, and which could be increased *ad libitum*, by means of a small winch fixed to the extremity of the *serre-nœud*, and round which the ligature was made to roll. The swelling was then covered over with a powder composed of alum, charcoal, bark, and resin, on which pledgets of lint and an appropriate bandage were placed. Nothing particular occurred in respect to the patient during the subsequent days, although the compression was gradually increased; and on the 26th Feb., the tumour being mobile, and the pedicle very small, M. Amussat divided this last with a pair of scissors, and found that the aponeurosis was the principal cause of its not having been cut through by the ligature. No hæmorrhage followed this little operation. The wound thus made is of a greyish colour, and presents the remains of the divided aponeurosis; the suppuration is of a healthy nature, and every thing promises a speedy and entire cure. The tumour when removed was of the size of the fist of an adult, ovoid, soft, elastic, of a dark colour. When divided, it was found to be in some parts composed of a fibrous tissue, forming species of cysts full of black blood; in other parts, of a spongy tissue infiltrated with vitiated black blood; finally, in the midst of the tumour was an osseous kernel, of the size of a large nut.

The following practical remarks may be made on this case:—1°. That tumours, which for a considerable length of time seem to be of a benign nature, may, from causes which we cannot appreciate, become malignant and degenerate; and therefore they ought to be removed at an early stage, if we wish to avoid submitting the patient to a dangerous, and perhaps, fatal operation. 2°. That the addition of the winch to the ordinary *serre-nœud* is very useful; inasmuch as, by its medium, the constriction may be gradually and moderately increased without causing too much pain, and carried as far as needful without running the risk of changing the position of the ligature. 3°. That the degenerescence of the tumour was produced by the contusions and the reiterated friction to which it was subjected by the caps and other head-dresses worn by the patient. 4°. That, since in the actual state of medical knowledge, it is impossible to affirm, *à priori*, that such a tumour will or will not degenerate, the sooner the operation is performed the better. 5°. That the method adopted in the preceding observation, i. e., first making a circular cauterisation of the pedicle, and then applying the ligature, is the best; as it produces less pain, and causes no consecutive accidents.

Tumours of the breast.—The following facts are a proof of the exactitude of my opinion, announced in the discussion to which professor Cruveilhier's memoir gave rise, and show, conjointly with numerous other cases daily observed, that the diagnosis is often extremely difficult, if not impossible, and that fibrous tumours are far from being so frequent as professor C. asserts. They likewise prove that an operation indispensably necessary ought, notwithstanding the paradoxical opinions of certain practitioners, never to be postponed; since, according to several celebrated surgeons, scirrhus, or cancer, so frequently met with in the breast, is in general at its origin a local disease, and may be radically cured by an operation. Again, it would not be injurious to remove a fibrous tumour in the place of scirrhus; on the contrary, it would be advantageous; as we should thus acquire the certitude that it will not re-appear, and that a relapse is not to be feared, as after the removal of cancer. This event, however, will not often occur, as fibrous tumours of the breast are not very common. CASE.—Miss D——, ætat 55, strong constitution; menstruated regularly until the age of 43; had not experienced any serious illness until a few years back, when she was affected with bronchitis, which left after it a troublesome and paroxysmal cough, especially in the morning. Two years ago, Miss D. perceived above the left mamma a small gland of the size of a walnut, mobile, flat, limited, and not painful when touched. Leeches, frictions with an ointment containing calomel, homœopathy, were employed unsuccessfully. During the last twelve months the tumour increased considerably, and had become the seat of frequent lancinating pains. In other respects the health of Miss D. was good; her appetite normal; besides which, no member of her family had ever been affected with a similar disease. The tumour, when examined by me for the first time, was of the size of the fist, hard, knotty, not adherent to the deep-seated parts, over which it rolled to a certain extent; in some parts, especially in its centre, it is adherent to the skin, which, notwithstanding, appears healthy, and of a natural colour, though somewhat thinner than usual. No tumefied ganglions in the axilla, the disorder being apparently quite local. The left breast is voluminous, but offers no symptom indicative of its being the seat of scirrhous degenerescence, for it is soft, elastic, and in no part very painful when touched; the nipple is in its normal condition, so that it is not absolutely necessary to remove this organ with the swelling. The patient willing, and even desirous of having it extirpated, the operation was performed in the presence of MM. L. Boyer, Grabowski, De Bruyn, V. Bonteiller, A. Amussat, and Le Vaillant. The axillary veins having been compressed by an assistant, two horizontal semi-elliptic incisions were made, so as to comprise the greater part of the skin covering the tumour, which was removed with some difficulty on account of the adherences which had taken place between it and the pectoralis major. The parts were next carefully examined, and several granulations of a suspicious nature, and pearly appearance, removed. Several arteries were divided, one of which was of the size of the radial, and was twisted, as soon as the operation was ended; pressure having been exercised so as to stop the flow of blood during that time; as to the others, it was impossible to discover them in spite of the most careful search; the wound was therefore united by the twisted suture, and its external angle, which formed a small *cul-de-sac*, caused by the removal of a hump of fat, was kept open by means of a tent smeared with cerate. The dressing was composed of circular bands, Mayor's bandage, and another intended to keep the transversal wound united.

Examination of the Tumour.—The tumour extirpated was, when divided, found to be hard, of a yellow colour throughout, and offered granulations of various sizes and irregular shapes, separated from each other by lines of a pearly white aspect. Evidently it is a true scirrhus, which soon would have softened and changed into encephaloides, a circumstance so frequent in old standing tumours of the breast; even now on squeezing it, a true cancerous liquid flows out. Moreover, Dr. Mandl, who was good enough to examine it with the microscope, discovered all the characteristic signs of scirrhus, which are very different from those of fibrous tumours.

From this fact, to which numerous others may be added, it is evident, as I have repeatedly asserted, that scirrhus of the breast offers at its origin all the signs which are described as characteristic of fibrous tumours, a disease but seldom met with, and of which the diagnosis is still surrounded with considerable uncertainty; that the tumours of the mammæ are, in the generality of cases, incipient cancers, which ought to be extirpated as speedily as possible, even if we suppose that we might be obliged to repeat the operation at a future period on account of a relapse. In acting thus, we prevent the development of the cancerous diathesis, which exists in general at the period in which the operation is commonly performed, and which renders relapses more to be feared. It is hardly necessary to add, that I coincide in opinion with those practitioners who assert that very often incipient cancer is a local disease, which may be removed without producing a relapse. The patient whose case I have just related, and the surgeons consulted by her, did not, for a long time, consider the operation absolutely necessary, as the development of the tumour was very slow, and without pain; and really one must have witnessed numerous cases of degenerescence of tumours of the breast, ere he can decide upon operating at so early a stage in a disease which may perhaps become fatal at a later period. And here, even when the operation was performed, the swelling might have been supposed to be a fibrous tumour, for it was limited, mobile, knotty, not very painful, but from time to time only slight lancinating pains occurred; which last symptom takes place where a fibrous tumour compresses a nerve. The only difference was, that the tumour was adherent to the skin. In conclusion, I consider this case is a proof: 1°, how erroneous professor Cruveilhier's opinion is; 2°, how difficult it is to establish a positive diagnosis; and 3°, how necessary it is to operate in an early stage. The great secret of success, in cases of cancer, consists in so doing; for the disease is then local, and the tumour is easily removed without there being any risk of leaving a portion in the surrounding tissues.

2nd Case.—Mrs P——, ætat 52, never had a child, and had ceased to menstruate ten years ago. For the last ten years she had experienced much grief; and only two and a half years back she perceived, by chance, that a tumour of the size of a nut, mobile, and not painful, existed in the right mamma, which increased gradually in size; so much so, that a year and a half after, it equalled that of an egg. Though thought to be of a fibrous nature, extirpation was proposed, but not adopted; and the tumour by degrees invaded the whole breast, and became the seat of lancinating pains. When first examined by me, it was of the size of the head of a fœtus of seven months, hard, mobile, of an

unequal bosselated surface, and adherent to the skin, which, over an extent equal to the size of a crown, was of a violet, marbled colour, and on the eve of ulceration. The nipple was retracted; and in the neighbourhood of the axilla were several hard swellings, disseminated here and there, but no hypertrophied ganglions. After having unsuccessfully employed the various remedies recommended in similar cases, and finding the operation to be the only resource, Dr. Miramont confided the patient to my care, as soon as her consent was obtained; but which she had hitherto refused, as she suffered very little pain, the most disagreeable symptom being a smarting kind of itching. The operation was performed in the usual way, in the presence of MM. Miramont, Mandl, L. Boyer, De Brayne, A. Amussat, and Le Vaillant; it presented nothing worthy of remark, and gave rise to no consecutive accidents. The tumour, intimately united with the mammary gland, was of the size of the head of a fœtus, and though it presented externally all the characteristic signs of a fibrous tumour, was manifestly of a scirrhous nature; for when divided it was found to be composed of yellowish lobules, separated from each other by lamellæ of a pearly white tissue, of a fibrous appearance. Here and there were small cysts filled with a serous liquid; finally, all the anatomical characters of scirrhus were to be found, not only when examined with the naked eye, but likewise with the microscope. M. Mandl, who was present at the operation, pointed out immediately after, with his wonted lucidity and kindness, all the characters assigned by him to scirrhus, and which differ essentially from, and cannot be taken for, those of fibrous tissue.

From these facts, it may be concluded: that scirrhus of the breast is the rule, and fibrous tumours the exception; and that as tumours, in appearance the most benign, such as wens, sometimes degenerate, their removal ought not to be delayed too long. And as to the accusation brought against surgeons of operating too soon, and without examining the cases in which such a mode of proceeding may be dispensed with, the four facts (the preceding and the fourth, v. MEDICAL TIMES, vol. ix., No. 232, p. 389) prove, on the contrary, that we operate almost always too late; and that in acting thus in scirrhus of the mammæ, we run the risk of relapses, which are far less to be feared when the extirpation is performed at an earlier stage. The following case is a proof:—

Case. Mrs. D. L., ætat. 58, of a strong constitution; married at 32; the mother of two children; menstruated regularly until 48 years old; experienced of late much anxiety of mind; had been affected with a cutaneous eruption, which disappeared under an appropriate treatment; none of her family had ever suffered from tumours of the mammæ. Whilst nursing her first child, an abscess formed in the right breast, which, however, did not prevent her giving suck to her second child with this breast, though the first was brought up on the left alone. Three or four years ago, that is to say in 1840 or 1841, she perceived that her stays caused slight pain in the right breast, and on examination, she found it was owing to the presence of a small, hard, mobile tumour, of whose existence, as it was not painful, she was not previously aware. This tumour having increased, in spite of the various remedies employed to obtain its resolution, Mrs. D. L. came to Paris, in order to consult Professor Fouquier; at this period (1843), the swelling had invaded the greater part of the right breast; was hard, adherent; the skin covering it being thin, of a violet colour, and presenting an ulceration which increased visibly in size; finally, the tumour was the seat of frequent lancinating pains. Extirpation being considered absolutely necessary, the patient was confided by Professor Fouquier to my care, and the operation was performed on the 1st of August, 1843, before MM. L. Boyer and Le Vaillant, in the following manner:—The tumour was encircled by two oblique, semi-elliptic incisions, and rapidly removed; the arteries twisted as divided. The incision not having extended to the axilla, where there existed several hypertrophied ganglions, a second was made immediately above them, through which they were easily removed. A tent was then placed in the wound of the axilla; the outer part of that of the breast being united by the twisted suture, and the inner dressed with pledgets of lint, covered with simple cerate, as the edges of the wound were too distant to be brought into contact with each other. The tumour, of the size of a large lemon, when divided, was found to be composed of scirrhous tissue; in the centre were small spots, firmer, of a chalky consistence, and, when cut, producing a creaking noise. The mamma presented here and there small scirrhous granulations, which proved how needful its removal was. No hæmorrhage followed, and the cicatrization proceeded rapidly; so much so, that Mrs. D. L. left Paris two months after, with only a small spot in the centre of the wound, not yet healed, but presenting every probability of a speedy cure. Unfortunately, this did not take place; for the cicatrization remained stationary, and the central spot was covered with a thick scab, which, when removed, was soon formed again. Besides this complication, a hard swelling appeared in the axilla, which prevented the patient from making use of her arm, and which was the seat of darting pains. This circumstance having been made known to me, I advised her to come back to Paris, in order that I might remove it by a second operation with the knife, or the Vienna caustic; the more so, as the depurative treatment, recommended by me on her departure, could be productive of no beneficial results. Docile to my instructions, Mrs. D. L. arrived in Paris on the 4th March, 1844. General health good; colour of the skin does not indicate the existence of cachexia; cicatrix entire every where, with the exception of its central portion, where the skin adheres to the ribs, and where two or three dry scabs are found covering the ulcerations; near the sternum was a small tubercle, hard, mobile, very limited, of the size of a filbert; and in the axilla was a flat tumour, extending inwardly as far as the outer extremity of the cicatrix, from 2 to 2⅓ inches broad, adherent to the pectoral muscles, readily circumscribed and raised inferiorly. No axillary ganglions hypertrophied or indurated; and the disease seemed to be perfectly local. I proposed applying on the ulcer, and neighbouring tubercle, the Vienna caustic, and removing the hard tumour in the axilla with the bistoury; but before so doing, a consultation was held with MM. Recamier, J. Cloquet, Fouquier, and L. Boyer. These gentlemen, having examined the patient with the care and attention that her position, as a wife, and the mother of a family, deserved, came to the conclusion that the method I had proposed ought to be adopted without any delay. Consequently, as Mrs. D. L. herself expressed an earnest desire of having it removed immediately, I operated the next day (1st April, 1844), in the presence of MM. L. Boyer, Filhos, de Brugne, Mandl, and Le Vaillant, as follows:—

The patient placed in a recumbent position, her right arm raised as much as possible, the tumour was included in two semi-elliptic incisions, oblique from above downwards, and from before backwards; and having discovered that it was but slightly adherent to the deep seated parts, inwardly and inferiorly, I began its removal in this spot. Thus, after twisting a small artery which had been divided while incising the skin, I turned upwards the tumour, so as to finish the operation in the upper part of the axilla, because it appeared to be more adherent at this spot, and because, also, of the presence of the important vessels and nerves which exist in this region. I dissected the external fibres of the pectoralis minor, which were spread over, and adhered firmly to the tumour, and removed the latter with the utmost care by means of the finger or the bistoury, and found it, as I had anticipated, firmly adherent to the deep-seated organs in the axilla. I next extirpated or crushed several small granulations in the neighbourhood of the tumour; removed, after dividing its envelope, a large ganglion situated in the upper part of the axilla, immediately under the axillary vessels; and examined attentively (not only myself, but likewise my colleagues who were present), if any indurated part existed in the wound, or the neighbouring parts, and if any artery remained which might become the source of consecutive hæmorrhage. During the operation, I twisted seven or eight arteries, and several times was enabled to distinguish them from the nerves, and separate them before I divided them. Ere the wound was dressed, M. Filhos applied the solidified Vienna caustic to the ulceration, after removing the scabs which covered it, and destroyed entirely, by several applications of the same caustic, the tubercle.

The operation was long and tedious, on account of the importance of the parts situated in this region, which necessitated my ascertaining with certainty that I ran no risk of dividing an artery, a vein, or a nerve. Notwithstanding, the patient not only supported it with heroic fortitude, but likewise requested me to remove all that inspired the least doubt, or that might compromise the success of this second operation. I did not think it right to unite the lips of the wound by the twisted, or any other suture, for fear of the production of a purulent infiltration, and the accidents to which such a complication might give rise; but filled the wound with dry lint, on which several compresses were placed, and kept in place by a bandage. No accident followed, though seven or eight arteries (and some voluminous) were divided and twisted.

Examination of the tumour when extirpated.—It was hard, flattened, and offered here and there, in the midst of an adipose tissue, small, greyish, scirrhous tubercles, which were in some parts softened, and of a pale red colour; the skin covering it was adherent at the point corresponding to the cicatrix in the axilla, resulting from the incision made at the first operation; in other respects, quite healthy, and presenting only several varicose veins.

From these facts it is evident that the first operation was performed *too late* for scirrhus of the breast, which, for a considerable length of time, offered all the characters assigned to tumours of far less frequent occurrence: that is, to fibrous tumours; and that, by reason of this delay, and though I am certain that the entire swelling in the breast and the diseased glands in the axilla were extirpated, the whole system had become affected, and a relapse produced, which necessitated a second operation. Will this last be more successful than the former? It is to be hoped so, though it is impossible to affirm that such will be the case; the more so, as the tumour removed by the second operation was of a scirrhous nature. But, in admitting what sometimes occurs, that a cancer of the breast does not always relapse, we may hope for a permanent cure in the present instance, when we consider that the constitution of the patient is not impaired, and her moral condition not affected: circumstances which must never be omitted in forming our prognosis in diseases of this description.

The mode of operating adopted by me for the removal of the tumour in the axilla, the second time, ought always to be preferred, as being much more easily executed, and as not exposing the patient to serious consecutive accidents. This method seems to me of sufficient interest to merit repetition; it may thus be summed up:—1°. Circumscribe the tumour by two semi-elliptic incisions, or, if you wish to preserve the skin, or think it easier, by two in the shape of a T; 2°. Twist the sub-cutaneous arteries divided; 3°. Detach the tumour from the deep-seated parts by small incisions with the bistoury, taking care to keep its edge as near the tumour as possible, in order to leave the extremities of the divided arteries longer; 4°. Twist the arteries as cut, and even before; 5°. Commence the extirpation inferiorly and inwardly, and, as you proceed, draw the tumour upwards and outwards, so as to terminate in the axilla; 6°. Finally, if you fear cutting any large vein or artery towards the close of the operation, the pedicle you have formed may be tied or crushed by means of a strong pincers.

This operation convinced me, as well as the other persons present, of the utility of experimental surgery in teaching us to distinguish an artery from a nerve, and in showing us the best means to be adopted to obliterate the former when divided—advantages, which operations on the dead

body do not present; whilst, on the contrary, vivisections enable us to recognise an artery from a nerve by its colour, which is the more important, as most eminent surgeons have committed errors in tying nerves for arteries; and to attain the degree of firmness so requisite in an operator. But it must never be forgotten, that in removing a cancer of the breast, after extirpating it as rapidly as possible, the different granulations or ganglions which are so often met with below the tumour, and on the edges of the wound, must be attentively sought for, and removed or crushed, so as not to leave the seat (to employ the quaint expression of M. Recamier) of a future cancer; taking care not to confound small lumps of adipose tissue with these granulations.

To resume: this case proves that the first operation was performed too late, and that in all probability had it been done sooner, and especially before the development of the ganglions in the axilla, the relapse would not have taken place;—that, in its first stage, scirrhus offers all the pathognomonic symptoms assigned by Professor Cruveilhier to fibrous tumours of the mammæ; and consequently surgeons are authorised to remove them at an early period. But in giving this opinion, it must not be supposed that I advise operating indiscriminately on all tumours, without endeavouring to establish their diagnosis, as Professor Cruveilhier seemed to think, by erroneously attributing to me an opinion which I never entertained; all I said, and which I now repeat, was that every species of benign tumour ought to be removed, when from their size they inconvenience the patient, or when they present a tendency to degenerate. I never said that all tumours of the mammæ degenerate into cancer; on the contrary, I think that fibrous tumours are not susceptible of becoming cancerous. Were it necessary to give a proof that I do not operate always, I could relate a case now under treatment, in which, in order to comply with the wishes of the patient (an English lady), I employ discutient applications conjointly with compression, contrary to the opinion of Sir B. Brodie, M. Recamier, and Professor Cruveilhier himself, who recommends the operation. Thus, since the commencement of the discussion of Professor Cruveilhier's memoir in the Academy, I have operated on three patients affected with scirrhus of the breast, and one of a wen, which had degenerated; whereas not one case of *fibrous tumour of the mammæ* has been presented by the author in favour of his doctrine. To what is this to be attributed? The only answer that can be given to this question is, *because scirrhus of the breast is the rule, and fibrous tumours the exception.* Doubtless this discussion will not be lost on the profession, for in it the question has been examined with as much attention as the present state of medical knowledge permits; and it will show how far the opinions, announced by Professor Cruveilhier in his memoir, are correct; as with these opinions practitioners will find others just the reverse, and in comparing them, be enabled to form their convictions, decide what they ought to do, and appreciate how advantageous and useful academical discussions are; for without them ideas founded on doubtful and exceptional facts might be admitted, and produce a bad effect, which the medical press would be unable in some cases to eradicate with sufficient promptitude. But enough has been said on this question, for the future I purpose noting all the cases of scirrhus and cancer which I extirpate, and with these facts will establish a statistical table, in order to elucidate it as far as lies in my power. This mode of proceeding appears to me to be the best and the most useful; it being by facts alone, better than by all the arguments in the world, that it can be proved whether I was wrong in combating the opinions of Professor Cruveilhier as erroneous in a scientific, and disastrous in a practical, light. If all surgeons of every nation and clime were to adopt the same plan, we should promptly be enabled to prove that the conclusions of the learned author of the memoir on fibrous tumours, are too arbitrary;—that they are founded upon very few facts, not at all conclusive, and extremely uncommon;—and that we ought not to change the method of treatment hitherto adopted for tumours of the mammæ.

PARISIAN INTELLIGENCE.

(FROM OUR OWN CORRESPONDENT.)

On Diseases of the Eye. By Professor Velpeau.—If it be important to point out the necessity of the study of diseases of the eye, it is not less so to examine the mode in which this ought to be performed. These diseases may be included under two heads: 1°. Inflammatory disorders, known by the generic denomination of *ophthalmia;* 2°. Non-inflammatory, or chronic organic disorders. The latter class contains a greater number of affections of a very different nature: such as cataracta, glaucoma, amaurosis, cancer, certain tumours of the orbit, aneurysma, varix, &c.; in short, all the lesions which are not inflammatory. I shall not say much relative to the second class, having but little modification to present concerning the ideas already prevalent; the former, however, are sufficiently numerous and interesting to be attentively studied. But before proceeding to the history of ophthalmia, let us form some definition of this affection. Now, this is no easy matter. According to some authors, it is an inflammation of the conjunctiva; others consider it an organic augmentation of the vascular system. Fortunately, this is not the most important point; it being far more essential, in my opinion, to establish a precise division of the various inflammations which may affect this organ. But how ought they to be divided? Evidently under two heads—1°. Inflammations occupying the eye-lids,—palpebritis, or blepharitis; 2°. Inflammations seated in the eye itself,—ophthalmia; each of which present numerous sub-divisions, which will be studied in their proper place.

It may here be seen that I am in direct opposition with the majority of oculists, who distinguish the diseases of the eye, according to the constitution of the patient; and when they say that the ophthalmia is of a catarrhal, rheumatic, scorbutic, scrofulous, syphilitic, rubeolic, variolic, hæmorrhoidal, or any other nature, they mean that the patient is of this or that constitution indicated by the form presented by the disease. For such persons the affected tissue is but of secondary interest, the constitution of the patient being, in their opinion, the principal object; this I have already said is erroneous, and I will now explain why. Let it, however, be understood that I do not say an ophthalmia may not be complicated with gout, rheumatism, scrofula, and other disorders, but that it is impossible to affirm that the person is attacked with such or such a disease from the nature of the symptoms presented by the affection of the eye. Thus, by this doctrine, you might diagnosticate a rheumatismal ophthalmia, without the patient ever having been subject to, or even affected with, rheumatism! What value, then, has such a diagnosis? None whatever. Again, by this mode of proceeding, a disease of the eye, which ought to be of very uncommon occurrence in the hospitals, is, on the contrary, very frequent. I mean arthritic ophthalmia. Now, it is a well known fact that gout does not often attack that class of individuals who apply for relief in the public hospitals; it is a disorder which affects almost exclusively persons in easy circumstances, accustomed to good living; and yet arthritic ophthalmia is very frequent in the lower classes. Similar facts exist in all the other species of ophthalmia. I should not have insisted so much on these points, if the only inconvenience which resulted from them, was the replacing one denomination by another; but another far more serious result exists. Thus, practitioners have been led to neglect the real disease, and to direct their treatment against gout, syphilis, &c., affections which, perhaps, the patient has never experienced, and which exist no where but in their imaginations.

Such is not the plan I propose adopting in studying these diseases. I think that, in the first place, the different tissues susceptible of being inflamed, and the different layers of which they are formed, ought to be examined. Is it because this study is difficult on account of the number or the tenuity of these tissues, that it ought not to be attempted? I am not of that opinion; on the contrary, it should rather act as a stimulus to further exertions. Let us therefore examine the various parts which may become the seat of disease. 1° *The eye-lids.*—In proceeding from the exterior to the interior, we meet with *skin*, which being very supple, and very extensible in this part, inflammation is accompanied by considerable swelling; but as it does not offer any very material difference from that of the face, it is not necessary to classify it as a separate form of disease. *Cellular tissue*,—very supple also, consequently inflammation will go through its phases with rapidity, ending in suppuration if not checked; but being similar to that of all analogous tissues, it need not be considered separately. *Orbicularis palpebrarum.*—Their phlegmasia is so seldom, if ever met with, that it may be omitted altogether. Hitherto, as you may perceive, the inflammation of these parts presents nothing peculiar, but it is not so with the other component elements: namely, the conjunctiva, the tarsus, the glandulæ Meibomiæ. For instance, the edge of the tarsal cartilage presents three regions—a posterior, on which open the glandulæ Meibomiæ; an anterior or cutaneous, on which the lashes are implanted; and a median between the two. The eye-lashes themselves are, moreover, of so complicated a nature as to claim our serious attention. All these, it is true, belong rather to microscopical anatomy, but as each of these parts exist, and may become the seat of disease, it is indispensably necessary to become acquainted with them. Here the study is not carried further than is absolutely necessary; for I might have examined whether these tissues themselves are not composed of numerous others; and if so, whether the inflammation does not begin in one in preference to the rest. 2°. *Eye.*—The same remarks are applicable here; thus, inflammation may commence with the conjunctiva, cornea, or any other of its component parts. These preliminary ideas well understood, when I speak of conjunctivitis palpebralis, or any other, the seat of the disease will be known; and it is thus that I wish to produce a change in the mode followed in studying these diseases. I consider that there are as many different species of inflammations as there are elements in the organ, but this will not prevent my paying proper attention to the peculiar constitution of the patient. These inflammations must here, as in all other parts of the human frame, be divided into two classes, according as they are, or are not complicated. But there is a difficulty in the study of these affections which ought never to be lost sight of; if it is exact to say that the inflammation begins generally in one of the tissues; it is not less so, that it gives rise, in a very short time, to other affections, so that the physician finds it impossible to say in which it originated, unless called in at a very early stage, thus enabling him to follow step by step the progress of the malady. In these, as in diseases of the skin, the inflammation not only quickly propagates itself from one tissue to the remainder, but likewise presents a greater difficulty on account of the smallness of the organ, &c.

Inflammation of the Eye-lids.—They may be classed under the following heads:—1°, Inflammation of the conjunctiva and its dependencies; 2°, inflammation of the eye-lashes and their appendages; 3°, inflammation of the edge of the lids.

1°, *Inflammation of the conjunctiva;* three subdivisions.—A. *Inflammation of the conjunctiva alone, or blepharitis mucosa*—affects the palpebral mucous membrane only. B. *Inflammation of the glandulæ Meibomiæ, blepharitis glandulosa.* C. *Blepharitis granulosa*, in which the inflammation commences with the papillæ; the organ offering a granular aspect as if covered with sand.

2°, *Inflammation of the eye-lashes;* three subdivisions.—A. *Blepharitis furfuracea*, characterised by a slight efflorescence of the epidermis like small scales or spangles. B. *Blepharitis folliculosa*, because it affects the follicles. C. *Blepharitis ciliaria*, characterised by an abundant exudation which causes the lashes to unite together.

3°, *Inflammation of the edge of the lids*; two subdivisions.—A. *Blepharitis exulcerosa*, characterised by ulcerations commencing on the edge. B. *Blepharitis diphtericosa*, characterised by the presence of greyish streaks crossing the edge.

Blepharitis furfuracea is very frequent, often exists without the patient being aware of its presence, and offers great analogy with the *dartre furfuracée* (herpes farinosus, Bell), observed in young persons of fair complexion, and which presents a recrudescence each spring. This disorder is so slight, that it would be hardly worth our while mentioning it, were it not that the itching that it produces makes the patient rub his eye, which, when frequently repeated, gives rise to small red spots at the root of the lashes, and becomes a cause of their falling off. This condition ought to be attended to; for though it may last for months and years without causing any serious accident, yet it may not only make the lashes fall off, but likewise favours the development of other diseases of the lids. Thus, whenever the patient says the disorder is not in the eye, but on the edge of the lid, an attentive examination must be made in order to discover if the characteristic sign (small scales) of this affection does not exist. *Blepharitis folliculosa* differs from the preceding, because it commences here and there on the edge of the lids, whereas the former invades from the commencement the whole extent. It is likewise accompanied with inflammation of the affected parts; itching; pain, increased by friction; exudation of a viscid liquid during the night, which, on drying, causes the lids to adhere, sometimes so closely, that the patient is obliged to wash his eyes ere he can open them. This is more dangerous than the former;—may disappear spontaneously, though in general it extends more and more, causing the lashes to fall off rapidly, and not unfrequently is followed by fungous swellings, which constitute a serious affection. *Blepharitis ciliaria* has its seat in the follicles of the lashes, causing them to secrete a liquid which agglutinates the ciliæ together, by four or five, like a paint brush. The two last may be called general and partial blepharitis. *Blepharitis exulcerosa;* in this species, besides the itching, the patient experiences a burning pain; in the morning the lids are adherent; all that is perceptible on the lashes is a small drop of matter at its extremity, showing that it had merely flowed down on the lash, but did not originate in its follicle; in many cases even this does not exist. On separating the lids, small, yellowish, reddish violet, or bright red spots are to be seen disseminated here and there; in other respects the eye-lid is healthy, unless the other species of blepharitis complicate it. It may last a considerable length of time without giving rise to any serious accidents; but as it may cause a granular ulcer, and be followed by ficus, sycoma, &c., often diagnosticated with difficulty from cancer, it ought not to be neglected.

Recapitulation of the different patients received in M. Bricheteau's wards, hospice Necker, and of the diseases with which they were affected, from the 1st January to the 1st July, 1843.—The number of beds 75; 54 men's ward, and only 21 in the female. The diseases were, 1°, *typhoid fever*, 32 cases; the greater part (16 cases) took place from the 20th Jan. to the 20th Feb.; nervous persons newly arrived in Paris specially affected. In general it developed itself gradually, but sometimes suddenly, and in two cases, which ended fatally, insidiously; in one it commenced with cynanche, in the other with meningitis. The symptoms were *stupor;* frequent hæmorrhage, especially epistaxis, easily stopped; tongue at first coated, afterwards dry and red; pain in the abdomen, especially in the right fossa iliaca, with rumbling noise; in most cases diarrhœa; sometimes obstipatio; typhoid rhonchus in the chest; predominance of nervous phenomena in general, but in some the disease presented the adynamic, and in others the ataxo-adynamic form. In one case, instead of the typhoid spots, large ecchymoses or subcutaneous hæmorrhages were observed, as if the capillary vessels were incapable of retaining the blood; and in another there was a complication of otitis, with suppuration and erysipelas. Deaths, 8 in 32, or one-fourth, which is not so unsatisfactory as may appear at first sight, since only confirmed cases are included in the list. The average duration was, for the cases which were cured, 25 days; that of the fatal ones much shorter. The treatment consisted in the beginning of an emeto-cathartic, followed by a purgative (a bottle, or one or two tumblers of seidlitz water every second day, or oftener if needful): diarrhœa was not a counter-indication; camphor ℈j. or ℈ij. in an enema, when delirium and other nervous symptoms were predominant; blood was drawn in only two cases; tonics, when adynamia was the principal symptom; the other means employed were blisters and mustard poultices to the lower extremities. 2°. *Colluvies gastrica.*—Under this head are included all the mild cases of typhoid fever; 30 patients; 16 men, 14 women; average duration of the disease 10 or 11 days; treatment, an emeto-cathartic, followed, if necessary, by a gentle purgative; no deaths. 3°. *Pneumonia.*—26 cases; 24 men and 2 women; cause, in general, sudden transition from heat to cold; were most frequent towards the end of January and beginning of February; 8 deaths; one a few hours after his entry: the disease had reached the third stage, occupied the whole of one lung, and was complicated with emphysema; in a second, the whole of the right lung was affected with pneumonia, in the third stage, and there was complication of cerebral disease; death took place suddenly. A third came in the eleventh day after the commencement, and was only three days in the hospital; previous to his entry he had been twice bled, leeched, blistered, and had taken antimon. tartarizat. at the dose of grs. iv. in a draught. The last remedy was given at the dose of grs. x. and grs. xij. In the five others, the disease in all except one, had reached the tenth day ere they came to the hospital, and though none were affected with double pneumonia, in almost all it had affected the whole lung, and had reached the third stage. Of the remaining 18 who recovered, the average duration of the disease was from fifteen to sixteen days; the shortest being four days, the longest forty-four; this last, owing to the reduced state of the patient, who was naturally of a weak constitution. The principal remedies were, in the commencement of the disease, one or more bleedings, followed by antimon. tartarizat. at the dose of from grs. viij. to grs. xij.; but if it had lasted several days, or if the patient was feeble, the latter alone was employed. An important remark may here be made, for it shows how the constitution is affected by the state of the weather; venesection failed in every case during the last ten days of the month of March, whilst tartar emetic was productive of the most beneficial results. 4°. *Gangrene of the lungs.*—Three cases, all fatal. 5°. *Pleuritis.*—Ten cases: 7 men, 3 women; two deaths, both women; in one there was complication of phthisis, and caries of the os petrosum; and in the other of pneumonia. The remaining eight recovered; two were affected with acute pleuritis, one of which was complicated with serious cerebral symptoms, which yielded to the administration of camphor and musk; the others were chronic, and were followed by an effusion of liquid in the pleura; the treatment in these cases consisted of blisters to the chest, and diuretic tisannes. The average duration was twenty-two days. 6° *Bronchitis:* fifty-one cases—thirty men, twenty-one women;—all recovered. 7° *Phthisis:* sixty-two cases—forty-six men, sixteen women; thirty-two deaths, remaining thirty only ameliorated. Treatment—opiates to procure rest: blisters or cautery under the clavicles: and the syrup iodur.ferri* at the dose of from ℥ss. to ℥vi; this last was frequently suspended on account of the nausea it inspired; in general it was supported much longer, and produced greater benefit when employed at an early stage of the disease, than when commenced at a late period. 8° *Diseases of the heart:* twelve cases—five men, seven women; seven deaths—two men, five women. In almost all the seat of the disease was at the aurieulo-ventricular orifice; simple hypertrophy in three. Death in one case was caused by a sanguineous infiltration of the lungs. 9° *Rheumatismus*: twenty-four cases—all men, and almost all chronic. Treatment—of the acute, antiphlogistics; of the chronic, opium, sulphas quininæ, vapour baths. 10° *Meningitis:* five cases, only one recovered; after thirteen days treatment he was affected with an abscess in the knee, which may be considered as a favourable crisis. Of the four deaths: in one it took place three hours after his entrance, in a second in less than three days; a third came to the hospital for colica pictonum, and the next day was affected with meningitis, and soon after died; in a fourth, death took place two days after his entry. 11° *Paralysis; administration of brucine:* nine cases—six men, three women; of this number three must be deducted, as they remained but a very short time in the hospital; the other six were affected with—paraplegia, one; paralysis of the flexor muscles of the left hand, one; hemiplegia, four. In all brueine was administered, beginning at the dose gr. ij. to gr. iv. This remedy produced a jerking motion in the paralysed parts, and as soon as it ceased, the dose was increased by the addition of from gr. ij. to gr. iv. more, gradually augmenting it thus till some patients took as much as gr. xxij. per diem. The effect was extraordinary; patients bed ridden, and incapable of retaining their fæces, experienced so great an amelioration, as to be able to move about without help. In one case in which it did not cause the jerking motion, it produced little or no benefit. 12° *Variola and varicella:* seventeen cases—ten men, seven women; all recovered; two variola confluens—the one lasted thirty-seven, the other fifty-two days; the remaining fifteen from five to twenty days. Treatment—enemata, gentle purgatives; soothing gargles if cynanche was intense: towards the close, tepid baths. 13° *Cancer:* ten cases—nine deaths;—five of the stomach (two men, three women); one of the uterus; one of the liver; one of the cerebellum; one of the pancreas; one of the eye, left the hospital. 14° *Saturnine disorders:* eleven cases—nine of colica pictonum (eight men, one woman); two of pains in the limbs, consecutive to colics. In all the disease was slight, and easily cured. Treatment of the nine—opium combined with purgatives: in the two others, opium combined with sulphur baths. 15° Under this head are included various disorders; viz.—*intestinal strangulation:* one case, caused by an abnormal fold of the peritonæum, extending from the bladder to the lumbar vertebræ. This woman presented another anomaly, a double uterus; she had six children, among them twins. *Tabes mesenterica:* one case, interesting from the age of the patient, a young man ætat. seventeen; *Ramollissement of the brain:* one case—woman; *Cirrhosis:* one case—man; *Adynamia senilis:* three cases—two men, one woman; *Peritonitis tuberculosa:* two cases—one man, one woman; *Ophthalmia:* three cases (women), one followed by the loss of the eye; *Hypochondriasis:* two cases—men; *Cynanche:* sixteen cases—eleven men, five women, all recovered:—treatment—mustard pediluvia, purgative enemata, leeches if necessary. *Erysipelas:* of the face—three men, four women; *Chloro-anæmia:* seven cases—one man, six women; *Sciatica:* three cases—two men, one woman; *Chronic bronchitis:* twenty cases—four complicated with emphysema pulmonaris—were considerably relieved by smoking the leaves of the datura stramonium; *Ascites:* two cases—one man, one woman. *Diseases consecutive to syphilis:* exostosis of the tibia, one case; cutaneous eruption, one case, cured by the administration of the syrupus sarsaparillæ compos.* (*Sirop de cuisinier*) given during five weeks, at the dose of ℥j. per diem; excrescences on the thighs, genital organs, anus—one case: same syrup, combined with excision, cauterization, and a lotion composed of hydrargyr. bichloridi gr. liv., aquæ puræ lb. ij.; *Purpura hæmorrhagica:* two cases. Finally, one hundred and forty others were received, affected with diverse diseases, so slight, that a few days' rest was sufficient to cure them. Total—522 patients received during the six months.

Academy of Sciences—Sitting of the 15th April, 1844. Baron Ch. Dupin in the chair.—Professor Dumas presented the following memoirs. 1° On the crystallisation of sulphate of magnesia and soda, and some other salts, by M. Malapert, professor at the Preparatory School of Medicine,

* *Syrupus ioduri ferri.* ℞. proto-iodur. ferri ℈iv. Syrup. simpl. lb. j. M.

* Syrup. sarsapar. compos. is composed of sarsaparillæ rad. lb. j. flor. boraginis off., petal. rosæ centifoliæ, sennæ fol., anisi semin. ää ℥ij. Saechari purificati, Mel ää lb. ij.—(*Codex Francais.*)

Poitiers. 2° On the essential oil of Sassafras, by M. St. Evre. Distilled at 253° F, this oil disengages vapours; the heat may gradually be raised to 294° F., but never goes beyond. Analysed, the result was—

	Oil gave.	Water.	Carbonic acid.
I. ..	0·365	0·213	0·965
II. ..	0·355	0·2045	0·9415
III. ..	0·3935	0·227	0·0415

Or		I.	II.	III.
	C. ..	72·07	72·32	72·17
	H. ..	6·40	6·39	6·40
	O. ..	21.53	21·29	21·43
		100·00	100·00	100·00

Whence the formula C^{18}, H^{10}, O^2, or—

C^{18}	54	72·0
H^{10}	5	6·6
O^2	16	21·4
	75	100·00

Submitted to a very low temperature, produced by mixing twelve parts of ice, with five of common salt, and five of nitrate of ammonia, crystals were obtained, which by analysis were found to be of the following composition:—

	Crystals gave.	Water.	Carbonic acid.
I. ..	0·2815	0·1675	0·7625
II. ..	0·2445	0·	0·665
III. ..	0·2563	0·140	0·605
IV. ..	0·383	0·217	0·0365

Or		I.	II.	III.	IV.
	C. ..	73·86	73·87	73·94	73·83
	H. ..	6.61	....	6·24	6·29
	O. ..	19·53	....	19·82	19·88
		100·00		100·00	100·00

Whence the formula C^{20}, H^{10}, O^2, or—

			Density.
C^{20} ..	60	74·07	8·44
H^{10} ..	5	6·17	0·688
O^2 ..	16	19·76	2·210
	81	100·00	11·338

$$\frac{11.338}{2} = 5.669$$

If a certain quantity of brome were poured on the essence of sassafras, a violent re-action took place; abundant vapours of hydro-bromic acid were disengaged, and as soon as it ceased, the essential oil was solidified, and was found on analysis to be composed of:—

	Oil gave.	Water.	Carbonic acid.
I. ..	0·668	0·084	0·5398
II. ..	1·2635	0·1515	0·986
III. ..	0·3285	0·004	0·2605
IV. ..	0·177	0·028	0·1415

Or		I.	II.	III.	IV.
	C. ..	22·03	21·28	21·62	21·8
	H. ..	1·39	1·33	1·35	1·15
	Br. ..	58·65	58·17	59·24	
	O. ..	17·93	19·22	17·79	

Mixed with ether, the viscous and incrystallizable matter was removed, and crystals soluble in boiling ether obtained; analysis:—

	Parts gave.	Water.	Carbonic acid.
I. ..	0·333	0·008	0·018
II. ..	0·450	0·010	0·024

Or		I.	II.
	C. ..	14·74	14·54
	H. ..	0·26	0·24
	Br. ..	79·84	
	O. ..	5·16	

Whence the formula C^{20}, H_2, Br_8, O_2—

C^{20} ..	60	15·42
H ..	1	0·25
B^2 ..	312	80·20
O ..	16	4·13
	389	100·00

3°. *On the cause of diabetes mellitus or glucosuria*; by M. L. Mialhe.—All the morbid affections to which organised beings are subject, are, according to M. M., produced by a chemical perturbation, or an abnormal chemical reaction. "My researches," says the author, "seem to prove that all alimentary hydro-carbonized substances, such as grape-sugar, gum, starch, dextrine, &c., cannot be assimilated before being transformed by the alcalis contained in the blood into new compounds; among which there is one of which the disoxygenating powers are so great that it changes the peroxide of lead into protoxide, the salts of peroxide of iron into those of protoxide, &c. Now, this decomposition taking place in the normal state of the economy, it is evident that sugar cannot exist in the urine; but, in persons affected with diabetes, the cutaneous perspiration being suppressed, the acidity which thus escapes, is retained, and therefore the blood ceases to be alcaline; consequently the chemical reaction by which sugar is converted into an assimilable substance cannot take place, and nature throws it off by the urine. As to the treatment: that hitherto employed, should this theory be correct, is purely palliative; and it is rather by the simultaneous administration of sudorifics and alcalis, that we can hope to cure it."

4°. *On the transformation of fibrine into butyric acid*, by M. A. Wurtz. Fibrine when exposed during eight days to the air, in summer, becomes liquid; smells like rotten cheese; and is composed of albumine, ammonia, carbonic, acetic, and butyric acids. To obtain this last, one part of the liquid was mixed with two of water; then heated, and an excess of sulphuric acid added: the precipitated albumine was separated by the filter, and the liquid obtained reduced, by boiling to one-half; the solution being very acid was neutralized by the carbonate of lead; and by continuing the evaporation, butyrate of lead was obtained as a thick oil, which, on cooling, was changed into a soft resinous mass, soluble in alcohol. The alcoholic solution was decomposed by a sufficient quantity of caustic potass, then filtered, and concentrated phosphoric acid added, by which an oily liquid was separated; being then distilled, it produced a colourless liquid, offering all the characters of butyric acid. The different compounds formed were with barytes, lime, lead, copper, and silver.

5°. Two memoirs by the same author on *soluble albumine* and on *hydruret of copper*.

On eburnated tumours of the breast, by M. Le Sauvages, of Caen.—One of the most obscure points in pathologieal anatomy is the diagnosis of tumours, and a recent discussion proves how true this assertion is. Hitherto, authors have contented themselves with describing the morbid lesions, so different from each other, omitting the nature of the tissue in which they are formed, without which it is impossible to preconise the physiological act which presides over their production. Alibert erroneously described this disease under the name of *eburnated cancer* (*cancrum eburneum*), for it never degenerates. It affects exclusively the cellular tissue of the female breast, and may readily be taken for scirrhus; for both affect the cellular tissue, invade it by a sort of attraction, and in a measure solidify and cause the organ to undergo a special transformation; but *eburnation* differs from scirrhus; inasmuch as it is not painful, is harder, round inferiorly, and does not degenerate. From its not being painful, it produces no accidents, so long as it affects only the mamma, where it often exists unknown to the patient; and it is only when it propagates itself towards the axilla and neck, that it becomes the cause of serious complications, from the pressure it exercises on the nerves, arteries, veins, &c., in these regions. As to the treatment, all is at present very vague; remedial means are of little, if any use, and great doubt exists as to when extirpation ought to be performed. Should it be at an early stage?—but the patient has little fear as to the result of the disease, and does not experience pain—the two great reasons why they submit to operations. Should it be at later periods?—but the tumour is scarcely ever defined, and consequently it is impossible to say whether it is entirely removed or not. It is in this state of doubt that the author finds himself, and consequently leaves his readers, also.

On diseases of the Eustachian tube, by M. Bonafonds.—The diseases studied by the author are acute and chronic inflammations. These last present several varieties: 1° characterised by dryness of the mucous membrane, without obstruction of the tube with mucosities; 2° characterised by the thickening and swelling of the mucous membrane, with or without obstruction of the tube; 3° characterised by obstruction of the tube, with diminution of its calibre. In another memoir, the author purposes studying the obstruction resulting from catarrhus of the Eustachian tube.

On the localization of poisons.—Messrs. Danger and Flandin addressed a note, in reply to one from Professor Orfila, in which, after quoting the words of this celebrated toxicologist, to shew that he sought for the poisons in all the organs indiscriminately, they add "We consider ourselves justified in saying that we first pointed out: that in a dog poisoned by antimony, no matter what mode be adopted, the metal cannot be found in the lungs, the heart, the muscles, or the bones, even when the poison was introduced by the lungs under the form of antimoniated hydrogen gas; it is especially in the *liver*, *spleen*, *kidneys*, and *urine*, that the poison is to be met with. That in poisoning by copper, this metal is not to be found in the heart, lungs, kidneys, urine, muscles, bones, or nervous system; but in the *liver*, *spleen*, and *intestines*. That in poisoning by lead, the metal is to be found in the *liver*, *spleen*, *kidneys*, *urine*, and *lungs*; not in the heart, muscles, bones, or nervous system."

Academy of Medicine—Sitting of the 16th April. M. Ferrus in the Chair.—M. Jobert de Lamballe addressed a letter, tendering his resignation as member of the commission for M. Malgaigne's memoir, on account of his forming part of that named by the *Conseil des Hopitaux*. — M. Guersant addressed another, resigning likewise, because M. Guerin refused to accept him as member of the commission named by the *Conseil des Hopitaux*, under the plea that he proposed suppressing the orthopedie wards. This is not the fact; all he opposed was the increase in the number of these wards, as M. Guerin desired.—M. Husson proposed naming some of the principal surgeons of the hospitals. —The President proposed Professor J. Cloquet and M. Baudelocque, instead of Messrs. Jobert and Guersant, (adopted)—and as members of the commission for Dupuytren's bust, Messrs. Husson, Cruveilhier, and Begin. —M. Cornac, though he did not object to the nomination of the gentlemen mentioned, still thought it should be done by scrutiny. After some further remarks from Messrs. Royer Collard, and Dupuis, (the latter proposing that the busts of Vauquelin, Deyeux, Pelletier, Tessier, and Hussard, be added) the Academy decided that the nomination should take place at a future sitting.—The president then related what had taken place between the Conseil d'Administration and the ministers of commerce and publie instruction, and afterwards informed the Academy that the new locality will be ready on the 30th April.

M. Capuron read a report in reply to a letter addressed by Dr. Tarsitani, of Naples, giving the description of a new forceps of his invention, intended to obviate the difficulty presented in uniting the two branches. After pointing out the different cases in which this instrument is indispensable, the reporter describes the new forceps thus: "It is the same as that of Levret; of the same length, the same curves, the same mode of articulation, and one of the branches is male or female *ad libitum*; it moreover presents not only the simplicity and solidity of those hitherto employed, but is likewise far more advantageous; consequently, he purposes; 1° to write an answer to Dr. Tarsitani to thank him for his communication, and 2° to inscribe his name on the list of candidates for the title of corresponding members.—(Adopted.)

Professor Blandin read a report on the composition of some anatomical preparations of the invention of Dr. Auzoux. After pointing out the numerous advantages to be derived from them where the scarcity of subjects, the heat of the season, or that of the climate, forms a drawback to the study of anatomy, the reporter concludes: 1° to thank Dr. Auzoux for his communication, 2° to advise him to continue the work he has so ably begun, 3° to place his name on the list of candidates as resident members.—M. Villerme presented some remarks on the morality of the workmen employed in the establishment of Dr. Auzoux, and the exactitude of their replies on subjects unknown to the generality of persons of their class. —Professor Velpeau regretted that the report did

not mention the precision with which Dr. Auzoux has represented subjects relative to embryology. M. Virey made a similar remark with respect to the circulation, nervous and digestive organs, in the lower orders of animated beings. After some further remarks from Messrs. Nacquart and Begin, and a reply from the reporter, the conclusions were adopted.

Professor Gerdy read a memoir on retraction of albuginous tissues.

Dr. Auzoux presented to the examination of the Academy the model of a horse, where, as for man, are represented all the muscles, vessels, nerves, and viscera. The horse is composed of upwards of 200 parts, which may be removed separately, from the skin to the deep-seated organs, as would be done were the animal to be dissected. At the same time Dr. A. mentioned that he had presented already not only the representation of the human frame of four different sizes, but likewise a series of preparations, shewing how digestion, respiration, circulation, innervation, audition, vision, reproduction, &c.; are performed in the different mammiferæ, birds, reptiles, fishes, mollusca, insects, zoophytes, &c., that he chose the shark as the type of cartilaginous fishes, the cockchafer as that of insects, the snail as that of the mollusca, and that to-day he presented the horse as that of the large mammiferæ. A few minutes were sufficient for the removal of the various parts which cover the skeleton, and to shew the analogy and the differences which exist between man and the horse; after which the different organs contained in the abdominal and thoracic cavities, and the *rapports* they present one with another, were exposed to view; and finally their mode of performing their functions was explained, and their texture and organisation was exhibited. This communication was received with the attention it merited, and a commission was named to present a report.

GARLAND DE BEAUMONT, D.M.P., B.L., & S. &c.
Honorary Physician to the Spanish Embassy.

NOTICE TO CORRESPONDENTS.

GENTLEMEN *who have not yet forwarded* THEIR SUBSCRIPTIONS, *will much oblige* Mr. CARFRAE *by so doing, during the present week.*

A.—*The instrument recommended by* Mr. Varicas, *in our last number, is made by Mr. Weiss, of the Strand.*

Our correspondent who sends us the very clever letter from the "Lincolnshire Herald," would much favour us if, continuing his attention to the subject, he would give us the result of his investigations. We shall notice the letter.

Will Mr. H. D. *excuse us for another week? We are in arrears with more than one correspondent, but shall endeavour to square accounts with all during the present week.*

We are obliged to postpone, till next week, "Dr. Simon on the nature and value of Liebig's Theories," our Extracts from French and German Journals, a brilliant Pencilling of the celebrated Orfila, with some other valuable papers.

We shall next week publish a clever letter of Dr. Carpenter, the Comparative Anatomist, giving his opinions on Mesmerism. We have also received a Report on Dr. Collier's Mesmeric Experiments, drawn up by several scrutineers, seven of them being Physicians. We shall abstract it in our next Number.

We are sorry that the various claims on our space preclude our publishing Mr. Hallam's really clever paper. It is this day returned to him.

Communications have been received from Dr. Upton, of Paris—a Subscriber, noticing Mr. Braid's paper—from Mr. Edward Wilson, of Edinburgh—from Dr. Armstrong, of Moate—from Mr. Rendell, of Westbury—from Mr. Stanthorp, of Bankhead House—from Mr. Samuel, of Llandillo—from Mr. King, of Manchester. Several anonymous notes have also been received.

Mr. Rutherford Alcock.—*We do not think the matter requires a moment's notice.*

"One of the Duped" *should lay his case fully before either examining body, and there can be little doubt that he will be allowed to present himself.*

We have endeavoured to find room for Mr. R.'s valuable statistical tables, but unsuccessfully. We therefore return the MS. We think they would be welcome to the Statistical Society.

Other correspondents next week.

A PHARMACEUTICAL NUMBER OF THE MEDICAL TIMES, devoted wholly to Chemistry and Pharmacy, and consisting of 96 Quarto Columns of closely printed matter, will be published on 18th of May next. This Number will contain all the new Facts and Improvements recently recorded in Pharmacy, with everything of assistance to the Pharmaceutist and Chemist which have appeared in all the Scientific Journals during the last three months.
Price 5d.—Stamped 6d.
Orders received by all Newsmen and Booksellers.

ROYAL COLLEGE OF SURGEONS OF ENGLAND.

THE JACKSONIAN PRIZE for the Year 1843, has been awarded to Mr. JOHN WILLIAM GRIFFITH, of St. John's-square, for a Dissertation on "Derangements in the Secretion of Urine, their Causes, Consequences, and Treatment."
EDMUND BELFOUR, Secretary.

THE MEDICAL TIMES.

SATURDAY, APRIL 27, 1844.

"Ah! my son, thou little knowest with how little wisdom the world is governed!"

A CERTAIN elaborate fool, who has clearly as much self-conceit as he has monstrously little cause for it, has lately had his organ of imitativeness excited by our remonstrance to the College of Surgeons, and has rushed into print just to shew us how such feats of literary emprize should be achieved. We are obliged to him for his pains. We survey his panting labours with much the same satisfaction as the staid ox looked on those of the ambitious frog. We have more pleasure than pity, more pity than contempt. If the worthy impersonation of verbose inflation fail to reach our proportions, the fault is clearly in his unfortunate organization. He would be somebody—poor animal—*if he could!*

The writer has the boldness, if not the modesty, of genius. Newton did not know his own deserts better, nor value them by a higher scale. The document estimated generously in the balance of justice, would be pronounced worth its weight—in waste-paper, Yet what bluntly tells us the modest author? "It ought to be signed by every member of the College whose *physical* or *moral* infirmities do not *prevent him from* the momentary use of his pen!" Moral infirmities! "Flat lunacy," exclaims our reader. No such thing. "*Moral* infirmities can't preclude the member's momentary use of a pen?" Can't they? So much the more ingenious he, who could conceive so apt a contingency! What is the excellence of a penny-a-liner, if not that of writing things which require no meaning to go with them, and yet fill up space! Any other mode of procedure would involve the compliment that readers are reasonable beings. Besides physical on one side, and moral on the other—sound so imposingly in unmeaning sentences!

And now to see what ought to be signed by so large a mass of civilized creation. First paragraph:—

GENTLEMEN,—In addressing you, at this vitally important juncture, as the *governing body* of the College of which *we* are members, we shall not offer to you *either* the language of remonstrance or complaint; *but* we feel it to be a duty which we *alike* owe to the public, to the Crown, to the members of the medical profession, *and* to ourselves, to remind you of the *power* which you have *authority* to exercise *under* the provisions of the Charter, which her gracious Majesty granted to *our* College in the month of September, 1843.

The benevolent writer seems resolved to let us be ignorant of nothing that we don't want to know. He acquaints us, in starting, what he won't do, and what he will—what sort of day he writes on—when the Charter was granted (precise date),—to whom, by whom (and the Charter appears to have been positively granted by the sovereign!)—tells us that it has "powers" which there is "authority" to "exercise" under "provisions:" that he has a duty about it; that this duty refers to four distinct classes of persons, distinctly enumerated for us, the members of the profession *and* surgeons (res omnes *et* quædam aliæ!) forming two of them: in short, if he had tried for a month to exclude, in this sentence, all words that could convey an idea, and admit all that could not, he could not have succeeded more admirably. The grammar and literary composition are in keeping with the prolixity. If there be any truth in syntax, the members "addressing," are the governing body addressed,—a very clumsy blunder. "*Either*" when used *before* "*language*," requires a correlative for *that* word, and there is none; and evidently the author's meaning required that "either" should occur, not before "language," but before "remonstrance." The same thing of "alike." It is not "alike *owe*," but "owe alike *to the public and*," &c. The "*but* we feel" is no *opposite* to "we shall not offer," &c. In short, this sentence is unique; it has as many blunders as words; and the unfortunate idea so strangely blundered about, if even correctly expressed, was not worth being put on paper.

Now for a second elegant sentence, that every body—whose moral infirmities do not inhibit pen-holding for a moment—ought to sign:—

In the *second* section of *that royal decree* you were *empowered* to *elect*, *within three months* from the date of the *sign manual of the Sovereign*, not less than two hundred and fifty, nor more than three hundred MEMBERS, who *should*, *from* thenceforth, become FELLOWS of our College. In the same section it is also provided that *after* the expiration of three calendar months, and *within one year* from the date of the Charter, "any *other persons* whom the Council shall *think fit and appoint*, shall be FELLOWS of the College."

"You were empowered to elect Fellows who *should* become! and "*from thenceforth!*" A writer of English for a scholarly profession, ignorant that "thenceforth" means *from* that time! And then the *preciseness!* As Hamlet suggests, "How absolute the knave is! How he speaks by the card, lest equivocation undo him!"

And now our prolix friend "requests your *attention* to the *fourth* section of the *said* charter, which we here *present to your notice* verbatim," and which merely shows what was before shown, and what no soul on earth ever doubted, that the Council could elect more fellows than 250 during the first twelve months after getting their charter. He then tells the Council that "within the period prescribed by law," they really have chosen "300 members of our body;" and in a long rigmarole

stating, as a thing "to be remembered," that "fellows *are to be future* electors!" that the *non*-creation of more than 300 fellows "is *rather* an alarming *result* of a seven months' *exercise* of your creative power," the writer amplifies and amplifies on some imperative duty of reminding the Council that they can appoint more than 300 fellows, and that, too, whether the members reside "*within the limits of this kingdom, or live beyond those limits!*"

We give the two last paragraphs verbatim :—

"Thus, the power to enfranchise us, *to bestow upon us the* RIGHT *of electing the future Councillors of the College, now exists* WITH *you.* It will *expire* (the right or power?) on the 14th of September next. We think, *then*, that we are justified in demanding at your hands that *it* shall be exercised promptly, *comprehensively, liberally, justly;* and we venture to express an anxious hope that the employment of *it, by you*, will not be tainted either by prejudices or *dishonest* partialities.

We refer to this new *Charter*, which has invested you with so much authority, as to a highly important *sign* in the present crisis of our affairs. We respectfully remind you that as *you* are now empowered by law to bestow upon us the right of enfranchisement, so upon *you will* fall the whole *weight, responsibility, and* disgrace, which *would* attend an unconstitutional, illiberal, unjust, exercise of the unusual functions with which you have been invested *by the Crown.* We have the honour to be, Gentlemen, your's, &c. &c.

"Upon you will fall the *weight* which *would attend* an unconstitutional exercise of unusual functions!" But we pass all this, as grammatically below criticism; so wordy, wishy-washy, trashy, childish, in sense, sound, and order so absurd and blundering, as to be unworthy of a vulgar school-boy. No gentleman *can* both read and sign it. It would be just as easy for a *gentleman* to have written it.

We come then to the writer's drift. Will it be believed?—can it be thought for an instant?—Yes! this document, written by a public character, and gravely propounded to the profession for its general adoption by a medical journal, is, in fact, but a grave attempt to induce the College Council to violate their oaths—to do the dishonest and perjurious thing under cover of a verbal quibble! Incredible as it may appear, such is its drift—if it be not something even more vile—an insincere and vulgar hoax on the body of surgeons. We proceed to proofs :—

The address asks the Council to make every member of the College a Fellow; insisting that, by a *certain* use of the Charter, they can manage this business very nicely. Now, it is not disputed that if section 4 formed the whole Charter, the Council would have a discretionary power of making all members Fellows, provided they were so made during the first twelve months following the grant of the Charter. Such a power, so given, could not only be used, and used beneficially,—but it could be used with the greatest honour and consistency. But, unfortunately—and as the writer of this stupid address knew—there are other parts in the Charter which restrict and limit section 4, explaining its meaning and intent in the clearest manner. They show that the Council under the present Charter can no more make all the members Fellows, than they could make them all Presidents. The thing may nominally be done—as every other absurd thing may—but it would be done at the peril of the Council, would be utterly invalid in law, and while it would be a violation of every engagement by which the Counceillors hold their corporate trusts, would be one of the most dishonourable pieces of immorality perpetrated under cover of a merely verbal equivocation, it is well possible to conceive. The Charter, so far from allowing all the members to be equalized in one class of "Fellows," expressly provides for two classes—*that of Members*, and *that of Fellows*. The latter are thus marked out in the preamble :—

And whereas, *in order more effectually to promote and encourage the study and practice of the said art and science of surgery*, it appears to us expedient that *a new class of members* of the said College, to be called Fellows, should be created, and (with the exception of the first Fellows hereafter named, and directed and authorized respectively to be appointed) be required, in order to obtain the diploma of their Fellowship, to have attained a greater age than is at present necessary in the case of ordinary members of the said College, and to have complied with such rules and regulations, and passed such examinations as hereinafter mentioned.

Elsewhere in the Charter it is arranged that the Councillors shall be chosen not out of the class of Members, *but* out of that of Fellows, that a "PORTION" of the Members shall henceforth be Fellows, that the register of them in the order of their seniority shall be open to the inspection of any Member, whether Fellow or not: in short, from the fact that they are a "new class;" from the alleged special motive for making the "new class"—that of more effectually encouraging surgery; from the greater age, and higher attainments, glanced at, and every mention, indeed, of the two classes in the Charter, not the slightest doubt can remain as to the plain intention of those framing it, and consequently of the clear duties of those administering it. As long as the Charter is in force, the Members of the Council must administer it—not by taking a pettifogging advantage of one of its verbal technicalities, but in the spirit in which its general provisions are obviously framed, and are bound, there can be no doubt, as honourable men, to keep up rigidly a marked distinction between those higher and lower classes of Members which the Charter so distinctly, and so unfortunately provides for. The interpretation of public documents would be in an unsatisfactory state, indeed, if the obvious meaning of a whole Charter or Statute might, with impunity, be disregarded—when the words of one clause (we will not say bear, but) can be made to bear, if you choose, some opposite meaning. In the instance before us, however, there is this additional difficulty for the unfortunate writer, that the section relied on is quite in harmony with the rest of the document, provided it be not unnecessarily wrested to the purposes which he so clumsily advocates. By making a limited number of Fellows, not only is that section satisfied, but every other clause in the Charter.

We need not say that we are no friends to the Charter, under any of its interpretations. Our hostility has been neither "silent," nor (we are proud to think) ineffective. Whatever opposition has as yet been shewn, we may without dispute assume the credit of having aroused and marshalled. But the warfare, however, which *we* will wage, must be a fair one. Heaven forbid that the battle of right shall be compromised by the use, on our side, of one discreditable weapon. We would not even win it at such a price. Shall it be said that scholars, gentlemen, and men of science, instead of honestly insisting on the promised revision of the Charter, advanced "with bated breath, and whispering humbleness," praying, in low, bad English, the body of sworn Councillors —they are opposed to—to take a mean verbal advantage of their Sovereign, and kindly achieve that for them, by a perjurious piece of low trickery, which the petitioners themselves could honourably accomplish if they manfully, and in a proper spirit, essayed! We trust we are not doomed to hear any such seathing rebuke. Anxious for our brethren's high standing, wishing well to all their noble aspirations for improvement, we should be sorry indeed to find that such a monstrous request as this, couched in such monstrous language, could be signed by any number of us that could justify its being charged on our profession for a moment. The damning circumstance would be our ruin in society's estimate of our standing as gentlemen: would furnish the more rampant of corporate exclusives with the strongest argument ever yet brought against us: and the Council's crushing answer to an address from Medical *Reformers*, seriously and sincerely praying them to become pettifoggers, and perjure themselves, would be Misrule's triumph for half a century.

We crave a minute's loan of the attention of the Members of the Provincial Medical Association. In these days of *fancies* and *fallacies*, they will no doubt welcome a *fact:* and a fact we have for them worth their active notice if justice be a pleasure to them; and in any case, worth their learning, if they retain Eve's propensity for eating of the tree of knowledge. Be it known, then, that we have, during the last two years, made a fair bevy of good friends in the Association; and that we have been well enough gratified with our good luck in the circumstance, to have acquired a very flattering longing to extend our acquaintance. About a month since, therefore, we forwarded to Worcester for the *Provincial Medical Journal*, an advertisement, setting forth our letters of recommendation to the hearths and hearts of the additional members with whom it was their misfortune —and ours—that we were strangers. We received a civil reply, assuring us that for an unexplained reason, our handsome advances were to be denied access to the journal. Our advertisement was as

innocent as a bookseller's catalogue, and we felt doubly disappointed at the strange refusal. The Association's funds lost a guinea, and we lost the consciousness of having performed a good act. On Tuesday last our old fit of benevolence returned, and we expedited a messenger to the London office, with a three or four guinea advertisement for our interesting contemporary. That also was declined—peremptorily declined. And now for the explanation. It appears that Mr. Churchill, (who though so swimming a publisher, seems to show the hands of Briarens in catching at any straw of a publication within his reach) is the London publisher of all sorts of conflicting and opposing journals, and, among the rest, of the *Provincial Journal*. Being also publisher of the *Lancet* (happy conjunction!) it seems that he was instructed, not only to make the Association's journal do all the drudgery of the M.P.'s journal, but to monopolize it in that exclusive service, so that under his driving, the *Provincial*, would, as a principal duty, occupy itself in pulling the *Lancet* along after the fashion that a well-harnessed dog dogs along with his cart of cat's meat, or a tug steam-boat pulls up against wind and tide some old unseaworthy collier.

Now, what we would like to know, is—have the members any opinion of their own? If so, can they enforce it? If so, do they relish this appropriation of their journal to the special *uses*, not the cleanest in the world, a 'cute tradesman in London finds it convenient to devote it to: and do they think that their benevolent fund, and the funds of the Association generally, are so prosperous, that they can suffer him *pro arbitrio suo*, to fling guineas, and three guineas, as Macbeth did physic—to the dogs. If we are not misinformed, the Association's organ lost some of its most musical barrels lately, on the plea that there were not funds to keep them a-going. Is it likely they can be restored?—is it likely more will not follow, if private individuals are invested with such convenient powers for the general injury, and can use them after so convenient a fashion for the *private* good? When a large Association becomes a job, it is very well for a few, and very ill for a many.

We distinctly wish to state, however, that we make no charge against Mr. Churchill. He is Mr. Wakley's servant: is paid by that person: is not allowed to receive his hire for nothing; nor can he forego the connexion, although he knows that in the long run it would be to his advantage to forego it. The same reason that forced him to form it at all hazards, operates still to make him keep it. He is, as it is well known, poor, and since his bankruptcy has never failed to show the most praiseworthy anxiety to lose no opportunity of turning in an honest penny. But though we exonerate Mr. Churchill on the ground that he is obliged to obey his employer's instructions, we not the less strongly submit it to the Association, whether they will suffer such a misuse of their journal to serve the purposes of one who has constantly attacked both them and it. If they resolve that their journal shall be but the puffing circular of this publisher, or that journal proprietor—a kind of cock-boat at another's stern—of course it is their property; and our duty being discharged, we can offer no objection. If they, however, conclude that it befits their respectability and their organ's independance, that it shall be the partizan of no journal, still more the satellite of no journal, they will, without doubt, feel no difficulty in efficiently making known their sentiments in head quarters.

A REPORT UPON SOME LATE STATEMENTS IN THERAPEUTICS.

By N. HUGHES WILLSHIRE, M.D., M.B.S., Physician to the Royal Infirmary for Children, and to the Surrey Dispensary, &c.
(For the "Medical Times.")

Of Inflammation in general.—According to Dr. Watson, the general opinion, that MERCURY has a peculiar power in arresting inflammation and controuling the deposition of lymph from it, is still to be upheld, although it is only to be regarded as auxiliary to blood-letting, and not as a substitute for it. Moreover, it is likely to do harm in those cases where the morbid action approximates to its own action: in cases of erysipelatous inflammation, having a disposition to gangrene; in scrofulous affections; inflammations co-existing with considerable general debility, and with irritable conditions of the nervous system. Previous bleeding renders the body more readily susceptible to its influence. For urgent cases, calomel is the best form: two or three grains, given every four or six hours, generally sufficing to touch the gums in thirty-six or forty-eight hours.

Dr. Alison admits that such a power is excited by mercury over some cases of inflammatory action—such as that of the iris; but that a similar one is excited in a degree adequate to the object required in any inflammation of internal parts, is much more doubtful. The main question as regards any specific virtue of mercury is this—Do the symptoms of inflammatory diseases subside more rapidly, and more certainly, when the drug has affected the mouth, than without that occurrence? Under this point observations are somewhat at variance. Dr. Alison thinks it may be stated in general terms, that the cases in which mercury, combined with opium, has seemed most useful, have been most frequently those in which the symptoms having subsided, it was withdrawn without the mouth being touched, and therefore without any proof being given of its specific virtue.

Dr. Watson advises, when mercury has induced annoying salivation, with much external swelling, eight or ten leeches beneath the edges of the jaw-bones, and a poultice round the neck; when the flow of saliva and soreness of gums form the chief annoyance, a gargle of brandy and water. A writer in Dr. Johnson's review, advises a blister to the throat, and a gargle of brandy and water.

M. Lombard recommends a gargle made with alum, or camphorated spirits of wine; mild saline aperients being administered at the same time.

The author has found that in those cases in which the narcotic is admissable, opium has succeeded in arresting the discharge, when not much influenced by other remedies.

Professor Trousseau has shewn that although children are more refractory to the action of mercury than adults, yet they may still be salivated. In one case, after calomel lozenges, and frictions with mercurial ointment, had been employed for fifteen days, the gums were so swollen as to necessitate the discontinuance of the medicine. The author believes that in many of the instances in which the mouth has been supposed to be affected in children from the use of mercury, stomatitis, in certain of its modifications, has been mistaken for it.

Professor Lallemand supports, by the experience of hospital practice more particularly, the administration of large doses of the tartrate of antimony, when the object is to subdue inflammation, without permanently impairing the strength of the patient; he states some instances in which this treatment was attended with very favourable results, even after the use of mercury had been pushed to a great extent without avail.

According to Forget the phenomenon called antimonial salivation is purely accidental, and offers no affinity with the progress or termination of disease.—(See pneumonia)

Dr. Copland has affirmed that since 1827, diseases in London have presented less of the inflammatory character than before, and assumed the intermittent or remittent type; or at least patients do not bear depletion so well now as they did formerly. There is even less toleration of loss of blood in inflammation of the chest. This, although very marked in the outskirts of the metropolis, is elsewhere applicable. In the midland counties a similar change has occurred; periodic diseases have taken the place of those of an inflammatory character.

Pneumonia.—Professor Andral has given the tartrate of antimony on the Rasorian principle, by which a cure was obtained with rapidity although venesection had failed. The patient was bled copiously three times in an interval of two days without benefit; the antimony was then given in doses of four grains and continued for three days, it purged but produced no vomiting.

From a great number of observations related by Forget, it is to be deduced that tartrate of antimony, when given on the Rasorian principle, in thoracic affections, generally acts first upwards and downwards, and then on the lungs, and that immediate toleration is the exception; since in twenty-nine cases of pneumonia this was observed only thrice. Even if toleration does at once ensue, it does not follow that a salutary effect will be exercised on the duration of the disease; even death may ensue with rapidity notwithstanding. The disease may be cured quite as certainly when the stomach and bowels are acted on, as when they are not so. The phenomenon called antimonial saturation is to be regarded as purely accidental, and offers no affinity with the progress or termination of the thoracic inflammation; nor does this drug according to Forget possess any specific influence over the disease, or at least it requires to be confirmed by many more authenticated facts. Although in some few cases it may be given in preference, and in others employed conjointly with blood-letting, yet in the generality of cases venesection is the chief resource.

Canstatt, whose labours in connexion with the diseases of old age are so valuable, lays it down as a rule, that if the pneumonia be at all hyper-acute, bleeding should not be neglected however old the patient may be;—that octogenarians bear bleeding well, and that spare old men bear it better than corpulent subjects. He however warns us that the pulse is not to be regarded as a criterion for its operation. This writer believes that although large doses of the tartrate of antimony are useful in young people, they are very dangerous in old ones, inducing colliquative diarrhœa and general prostration; and that the white oxide of antimony, as recommended before by Recamier, is better than this form of the drug. He also considers the hydro-chlorate of ammonia preferable to the nitrate of potassa, as it diminishes vascular action, and assists expectoration without inducing debility.

With respect to the treatment of pneumonia occurring in children, a good deal has been written and said: the following is the more important:—

Dr. Copland has stated, that amongst the poorer classes he never had occasion to order bleeding from the arm, when the child was under ten years of age; that amongst this class of patients cupping and leeching are to be preferred; and that many cases not only get better without any abstraction of blood, but that some forms of the disease are aggravated by it. The complication of it with measles, amongst the badly-fed poor, requires very careful management in this respect.

Dr. Chowne corroborates, to a great extent, the above statements; and Mr. Hird, although believing in the value of general bleeding, is of opinion it should not be had recourse to before the second year; bleeding by leeches being preferable.

Rilliet and Barthez think depletion of less avail in that variety of pneumonia developed out of catarrh, than in the purely idiopathic form of the disease; and Dr. West is of the same opinion: but states that local bleeding at the outset is often beneficial.

We may remark that M. Becquerel having stated that depletion, whether general or local, invariably debilitates the organism and accelerates the fatal event, Dr. West affirms such statement is inapplicable to the affection, as it is seen in this country; and that in children above two years, venesection is to be had recourse to, four ounces of blood being taken away, and four or six leeches applied beneath the scapula. This, however, is less heroic than the practice of Dr. Hunt, who, in

his country practice, binds up the arm, places it in hot water, and afterwards opens the vein, allowing the blood to flow until faintness follows.

Drs. West, Copland, and from what the author can glean, he believes Mr. Hird, all agree that antimony is a remedy of great value in the treatment of this disease, but refuse to subscribe to the unqualified recommendation of it by some French physicians, in all forms and stages of the disease. Dr. Copland believes he has seen as much mischief caused in young children by the use of it, as by the incautious employment of blood-letting. It very often depresses the powers of life too much.

Dr. West assigns a very high rank to calomel for the treatment of the idiopathic form of the malady; he being accustomed, after due depletion, to administer it in doses of two grains combined with one quarter of a grain of tartar emetic, and half a grain of Dover's powder, every four hours for children of four years of age. The author can state from experience that the combination of antimony with calomel is of great avail. Mr. Hird, although using the above combination, relies more upon the calomel; but yet draws a distinction between vesicular pneumonia, where the disease is preceded by catarrhal symptoms, and where it occurs without previous indications of catarrh; in the former he prefers the antimony.

The value of rubefacient, and even highly stimulating, embrocations to the chest, has been extolled by most writers; that of blisters is yet a disputed point, perhaps the balance is rather against them. The author believes that the condition in life of the patient should decide the question. In children of poor parents, badly fed, and ill attended to, mustard cataplasms are preferable—(as regards any *injury* blisters may do, instead of good, this no doubt is the case; but from the bad and wretched mustard they buy, and the mess they make of it, the positive good they do is often nothing at all); inasmuch as they cause no bad sloughing sore, which, from the constitutional irritation it gives rise to, may kill the child; and which blisters, amongst this class of children, will sometimes do.

Croup.—Arnold praises the sulphate of zinc as an emetic, for its efficacy in detaching false membranes,—an effect which tartar emetic and ipecacuanha often fail of accomplishing.

Valleix praises free vomiting; and states that in thirty-one cases out of fifty-three, antimony and ipecacuanha were employed in large doses as emetics, and that fifteen out of the thirty-one recovered. In the remaining twenty-two their use was but sparingly resorted to, and only one recovered.

Abeile and Schwabe have indicated the value of the sulphate of copper: the latter having administered it in more than fifty cases; they regard its value as distinct from its emetic power. Dr. West, however, states that it is probably as an emetic that its use is to be regarded, and thinks that among many of the cases in which Schwabe used it so successfully, there existed no other symptoms than such as were *premonitory* of the disease, or those constituting the pseudo-croup.

Copeman, Guersant, and other writers, recommend painting the throat externally, twice a day, with a strong tincture of iodine, for preventing the formation of false membrane.

Catarrh.—Canstatt strongly recommends the extract of the blessed thistle in the chronic catarrhs of old people, accompanied with debility of the digestive organs; in fact, he regards the substance as almost a specific.

Dr. C. J. B. Williams has proposed the *dry* plan of cure, which consists in abstinence from every kind of drink. No liquid, or next to none, is to be swallowed until the disorder is gone. The principle is that of cutting off the supply of watery materials to the blood; the wants of the system exhaust from the circulating fluid all that can be spared for the natural evacuations, and there is nothing left to feed the unnatural secretion from the inflamed mucous membrane. Its capillary vessels cease to be congested, the morbid flux is diverted, and the inflammation starved away. Dr. Williams assures us that a cure may be achieved in this way in forty-eight hours.

Dr. Watson recommends the habitual use of the shower bath, as an excellent preventive for those who are liable to colds; or where that cannot be readily obtained, cold sponging.

MM. Dassit and Bau have eulogised the employment of emetics in the pulmonary catarrh of children; the former attributes the value derived from them to the general collapse into which the entire system is thrown, and not to their influence on absorption and the secretions.

Stomatitis.—Rilliet and Barthez recommend the chloride of lime in substance to be applied to the foul ulcerations, and continued for some time after the apparent cure. Mr. Dendy has found the tincture of iodine, the best application in such cases, and it has with him entirely superseded the solution of the nitrate of silver which he had been previously much in the habit of employing. Dr. Hunt, who with a great many others has confounded this affection with cancrum oris and the gangrenous erosion, has strongly recommended the administration of the chlorate of potassa. The quantity of the salt he has been in the habit of employing, varies from twenty to sixty grains according to the age of the child, in divided doses, in twenty-four hours, dissolved in water; a purgative is to precede its use, and it is sometimes advisable, indeed necessary, that it should be occasionally repeated. Mr. Cæsar Hawkins relates a case in which it was tried successfully, and Dr. Golding Bird speaks of five cases in which three grains three times a day effected a cure very rapidly.

The author has had considerable experience in the use of this chlorate, and thinks very highly indeed of it.

Muguet.—Trousseau states that the local applications, both in the idiopathic and symptomatic forms, should be the same; one part of hydrochloric acid to ten of water; one of the nitrate of silver to ten of water; one of alum to three of honey.

Dysentery.—Turclutti states he has seen upwards of 200 cases of epidemic, and fifty of sporadic, dysentery cured in the space of from twenty-four to forty-eight hours by the use of the following remedy: a decoction of from ℥ij. to ℥iij. of tamarinds in lb. j. of water, poured while hot on from grains xv. to ʒj. of powdered ipecacuanha; the dose being a table spoonful every twenty minutes.

Fahnestoek has treated from sixty to eighty cases of an endemic form of the malady, occurring at Pittsburgh, in the following way. To adults, from grains 6 to 15 of pulverised opium, with from 20 to 30 grains of calomel were given, sometimes premised by general blood-letting, or leeches to the anus. In from six to eight hours afterwards, the following was prescribed:—olei ricini ℥iss., terebinth ℥ss. M.; and after its operation, calomel and Dover's powder, in small doses, with gum water, rice, and arrowroot, as diet. To children, six or eight years old, four or five grs. of opium were given, and without producing more than a few hours sleep.

Hydrocephalus.—Christie and Wöniger have brought forward cases in which the value of iodine is shewn in the paralytic stage of the acute affection, and this after all other means had been tried in vain; the mode of administration by Christie was:

℞. Potass. iod. gr. xvi.
Iodinii gr. iv.
Aquæ ʒj. M. ʒj. 4tâ. q. q. h.

the scalp being rubbed at the same time with an ointment of the biniodide of mercury; that by Wöniger was:

℞. Pot. iod. ʒj.
Aquæ ℥ss. M. m. xl. ad. l. 2ndâ. q. q. h.

Dr. Hannay relates a case of the chronic form successfully treated by the following application:

℞ Ipecacuanhæ pulv. ʒii.
Olei oliv. ʒii.
Adipis ℥ss. m. bene.

this, rubbed upon the scalp three or four times a day, is followed in about 36 hours by a papular and vesicular eruption, and which is far more manageable than that produced by the tartrate of antimony.

Dr. Kleneke has employed successfully the cod liver oil.

Menengitis.—When confined to the base of the brain in children, Brockman advises that the depletion in most cases should be local; that cold be applied to the scalp, and calomel freely administered. The latter may still be given in the stage of effusion, though ammonia be necessary at the same time; wine may even be necessary to support the strength. The most powerful counter-irritants, as large blisters, and the actual cautery, are recommended as sometimes very useful.

Metritis.—In this affection, occurring after delivery, Dr. Lever is decidedly averse to the administration of mercury, stating that, as far as his experience goes, it seldom appears to exercise any salutary influence over the disease; and when it is administered so as to affect the system rapidly, it seems to hasten the patient's dissolution, and provoke diarrhœa. In the sub-acute form, it will often be found of great utility to draw blood from the affected organ itself, either by means of leeches applied to the cervix of the uterus, or by scarifying it as recommended by the late Mr. Fenner. Cupping over the loins is an excellent remedy, and will often supersede the methods now mentioned.

Orchitis.—In the consecutive form, according to Mr. Curling, the value of mercury has scarcely been appreciated by the profession; whilst his reviewer in Forbes' Journal thinks it is often given where it might be with advantage dispensed with. Both agree, however, that in acute cases, given until the mouth is slightly affected, it often materially abridges the duration of the disease, and what is of more importance, according to the latter writer, causes it to be succeeded by much less induration and thickening of the epidydimis.

Ophthalmia.—Professor Lallemand recommends the tartrate of antimony, in large doses, in the purulent form, at the same time that blisters are applied to the nape of the neck.

M. Larrer has drawn attention to the value of the local employment of calomel in ophthalmia neonatorum as originally practised by Dupuytren, and afterwards by Kluge and Siebold. The manner of introducing the calomel into the eye is by means of a camel's hair pencil loaded with the powder, which is shaken from it, while an assistant separates the lids. It may be had recourse to as soon as the first traces of the disease appear, and its employment once daily is then in general sufficient. After the lapse of from half an hour to two hours, according to the quantity of the secretion, the eye may be washed from the powder, and the ordinary rules as to cleanliness be attended to. In severe cases, the application may be repeated twice every day; but when the disease is mild, a single application daily suffices to effect a cure, in from four to ten days, if the remedy has been had recourse to from the outset. The very severe and intractable forms of the disease do not, however, appear to have been benefitted by it; and we may remark that Professor Fricke of Hamburg has noticed the violent reaction which its employment excites in the case of persons who have been taking iodine, probably from the formation of an iodide of mercury.

Mr. Guthrie states that local remedies are of little use in rheumatic ophthalmia, and that if colchicum, aconite, bark, or soda, fail in arresting the disease, he has recourse to mercury, generally calomel and opium; but in employing the latter he differs in some respects from most others, he giving it so as to produce a moderate effect on the mouth as quickly as possible, and only in chronic cases using it as an alterative.

Iritis.—Dr. Hall praises the iodide of potassium as an adjuvant in the treatment of the acute malady, and states that, next to mercury, it is the best remedy that can be applied.

Strumous Conjunctivitis.—Dr. Hocken recommends the application of the nitrate of silver to the *outside* of the lids, and De La Garde and Lanyon, who have adopted the method, approve highly of it.

Dr. Furnivall speaks well of the tincture of iodine similarly applied.

Gout.—Dr. Bence Jones strongly insists on the employment of those measures which occasion the oxygenation of uric acid. Causing an increase of secretion from the liver and intestinal glands, through the action of purgatives, and especially of mercurials, indirectly does this, and also causes the secreted products to be discharged from the intes-

tinal canal, instead of remaining to undergo partial reabsorption and oxidation, as is supposed by Liebig to be the case in regard to the chief elements of the bile. The quantity of the non-azotised substances may be further reduced by emetics, which produce bilious vomiting, and by sudorifics. In regard to this last class of medicines, according to Dr. Jones, the great benefit which is occasionally experienced from them, is not thus perhaps sufficiently accounted for; because the quantity of these substances, which can be removed by perspiration, cannot be supposed to be very great.

It having been shewn that when benzoic acid, or one of its alcaline salts, is introduced into the stomach, the lithic acid of the urine becomes converted into hippuric acid, the alcaline compounds of which are of very easy solubility, it is suggested that this fact may be made subservient to the prevention and cure of gout and lithiasis, and the following formula for "benzoin water" is recommended:

Purified benzoate of potash
Biborate of soda—of each 15 grs.
Bicarbonate of potash ʒss.
Distilled water, ℥xvj.—m.

This is prepared under a pressure of 2½ atmospheres of carbonic acid gas, and the water will be found to retain a considerable proportion of it long after exposure to the air.

Dr. Todd lays down the following rules for the administration of colchicum. It should not be given in the asthenic form of gout, at the outset of a paroxysm, nor until the bowels have been duly acted upon. The first doses should be small and uncombined, and not given so as to excite nausea, vomiting, or purging, their effects being carefully watched, as like digitalis and some other medicines, it is apt to accumulate in the system. It is inadmissable in persons advanced in years who have had several attacks.

Rheumatism.—Greiner, during the "premonitions," recommends, amongst other things, the tartrate of borax, in doses of ten or fifteen grains, with the addition of a quarter of a grain of ipecacuanha, several times daily. During the first stage of the disease, the tincture of aconite, along with that of hyoscyamus, in very minute doses. If great, but not critical, sweats take place, corrosive sublimate, in the proportion of one grain to ℥i. of water, the dose being xv. drops thrice a day, is alleged to be useful. The muriate of gold is also recommended, and numerous other things of lesser import besides.

Klencke and Panek have recommended, like Dr. Bennet, the use of the cod-liver oil. Greiner moderately praises it, but not to the extent it is lauded by some. He recommends, however, "fat oil" in those cases in which the disease is accompanied with poverty of the nutrient material in the blood, and at the same time with peculiar irritability, and with emaciation, and a slight degree of fever. The external use of the "grass oil of Remaur" (andropogon calamus aromaticus) is adverted to by O'Shaughnessy.

Requin recommends large doses of opium, on the plan of Corrigan, given in sufficient quantities to produce narcotism; whilst Greiner speaks of this drug as not sufficiently "constant and commanding" against the disease.

M. Briquet has succeeded in curing, by the disulphate of quina, several cases of rheumatic hydarthrosis and chronic rheumatism. The dose of the salt was from grs. xviii. to xxxvi. per diem, increased to ℈iiss.; the treatment lasted from five to six days. Experience proves that if not useful in that time it never will be. The drug must be given in pills, and when it produces deafness should be discontinued.

M. Bassieres refers to seven cases in which the quinine was administered in the dose of from ℈j. to ℈iii.; in three out of the seven it produced curative results. Baudens has also administered it successfully. In one of his cases ʒss. was given in the 24 hours; in another grs. x. were taken, and continued every morning for a month. M. Louis has also employed the same medicine; his patient taking nearly ʒi in seventeen days. M. Martin Solon has strongly recommended the use of the nitrate of potassa in large doses in the polyarticular form of the complaint. From ℥ss. to ʒii. is given in the day in lemonade, or any pectoral ptisanne, so divided that the patient does not take more than ʒiiss. at a dose. One patient is stated to have commenced with from ʒx. to ʒxiiss.; and another to have been cured who was suffering under the complication of endocarditis. Several practitioners have followed this plan, employed for some time, according to Dr. Bennett, by M. Gendrin, in the *Hopital la Pitie*, and with good results; whilst it has been asserted by others that such large doses of the drug are dangerous, and may produce very untoward results. Between the quinine and potash salt, the treatment of rheumatism in France appears to be divided at present; but the statement of a writer in the *Gazette Medicale*, perhaps places the question in its true position, viz.; that although the accuracy of the various reports is not to be questioned, and the large doses of these drugs may not only be inoffensive, but often useful, yet it is to be remembered that not a few cases of rheumatism have a natural tendency to relieve themselves by perspiration, &c.; and many of those related might have got well, if nothing had been given except simple warm drinks.

Otto recommends the bisulphuret of carbon as very useful. The usual dose which he gives is four drops of a mixture composed of one part of the bisulphuret and two parts of alcohol, given every two or three hours.

A teaspoonful of brimstone in a small cupful of milk, taken every night at bed-time, for a week or two together, is one of the best of all remedies, that we know of, against old obstinate rheumatic aches, cramps of the legs, the pains that are connected with a varicose state of the veins, chronic sciatica, &c., according to a writer in Johnson's review.

The well-known nostrum the "Chelsea Pensioner," that has so long had a high reputation in chronic rheumatism, is mainly indebted to sulphur for its virtues.

THE BILLINGSGATE OF AN M.P. REPLIED TO.

[It is with the most insuperable reluctance that we condescend to revert to a subject, which we feel with our readers, is only appropriately treated when passed by in cool contempt and silence. We are really *most* anxious to give effect to the general opinion, that the discreditable tricks and general character of our more than half demented adversary have placed him below the notice of a gentleman, as they have placed his Journal beylow a gentleman's reading. Our insertion of the following correspondence (most unwillingly conceded) is grounded solely on a reason advanced to us by Mr. Carfrae, that the pecuniary interests of the *Medical Times* in reference to *advertisers*, require that the aggression attempted—as stupidly, as wantonly—should be resisted, and the real position of the two Journals better made known. For the future we shall give full indulgence to the measureless disgust and contempt we feel for our unfortunate opponent's despicable tactics, and leaving him undisturbed to his unimaginative and plebeian Billingsgate, hear or survey, his hard names, his menaces, and writhings, with the most placid and smiling indifference.]

To the Editor of the 'Medical Times.'

Sir,—

In a weekly contemporary, noted for its high bred and scholastic elegance, I find the following gentlemanly and good tempered paragraph :—

"J. L. (an Advertiser.)—It was not to be expected that Mr. Churchill would engage in any transaction of the kind with such a *scoundrel*. Besides, Mr. C. did not consider there were *five* persons in the profession, *or even* a *single* advertiser who would believe the statements of such a detected exposed knave!"

I am quite sure that Mr. Churchill, who is a prudent tradesman with a very natural aversion to stone throwing, knew nothing of the insertion of this paragraph. I place implicit belief in the assurance which he is accustomed to give respectable authors, that "before he would undertake the publishing of the *Lancet*, he strictly bargained with the proprietor that all abuse and scurrility should be given up." Indeed, without such a guarantee I am sure "Mr. C." would not have offered an asylum to the unfortunate journal; for, in that case, his connection with a low bad man, like Mr. Wakley, would be so equivocal and suspicious a circumstance, that no man of character would think it safe or respectable to have any dealing with such a publisher, much less money transactions. I consider, therefore, that Mr. Wakley, by the above act of scurrility, has broken his agreement, and unwarrantably placed "Mr. C." in a false and very dangerous position. For my part, so far from calling "Mr. C." a "*scoundrel*," I own, frankly, that as far as I know, he is no such thing; and this, *notwithstanding* his connexion with "Mr. Wakley." When I called upon Mr. C. with the invitation the paragraph refers to, (for the purpose of having the question, which of the two journals had the larger circulation, decided by two respectable medical publishers—as umpires) Mr. C. shewed me every civility; he declined, however, the invitation. He said, "I will have nothing to do with the affair; I leave it entirely between you and Mr. Wakley. But when you say that the *Lancet's* circulation is much under two thousand, I know that is false; I am confident it is full two thousand: I'll guarantee that we sell two thousand good. If you are going to drive Wakley, or drive the *Lancet* out of the field, you should do it truly. Mr. Healey and I are good friends, and I suppose we shall always remain so." On seeing him decline my invitation so positively, and which, indeed, was not at all to be wondered at, since he could only claim, *even to me*, a circulation of two thousand, I remarked, that as to *our* statement of the *Lancet's* circulation being under two thousand, it stood on the same ground as his, that it *was* two thousand—that it was an assertion that required proof, and the only way to decide it was to accept my offer. Again, however, he declined, and we parted as good friends as we met. I am sure that "Mr. C.'s" reason for declining was no personal objection; and that he laboured under a full conviction that the *Lancet* was a forlorn affair—that the *Medical Times* had run a long way ahead of it—and that our circulation was, as I stated, double that of the *Lancet*. Mr. Churchill was as civil and proper as I could wish.

Now Mr. Wakley, in loosely calling me a "scoundrel" and a "knave" in the same free, off-handed manner in which street blackguards unmeaningly bestow disgusting epithets on one another, would have done well to mention one circumstance in my humble career to justify his scurrility. I am not an unknown person, and either as a tradesman or a man, I defy the whole world to fix a single dishonourable stain on my character. I believe I never offended, knowingly, any man but Mr. Wakley—and my only offence to him is, that I have a publishing connexion with his great eye sore, the *Medical Times*. For that, this odd M. P. can stoop to *manufacture* correspondent's "notices," and lavish abuse even on *me*. The subject of personal respectability is not one I would intrude on your pages, but since it has been forced on the profession, I beg to tell Mr. Wakley—that *my* past career has never been so much that of a "knave" and "scoundrel" that the whole world could readily *believe* me guilty of arson because my house took fire while I was in it, and all my family out, and that a rich and liberal insurance company could refuse me payment of a policy I had duly bargained for, because they came to the extraordinary opinion that I had committed a capital felony to get at it. And the public never thought me such a "scoundrel" and "knave" that they dreamed for a moment of supposing that I had been engaged as the executioner of Thistlewood, or any body else. I am not only not a "knave and a "scoundrel," but so far removed from it, that no person ever suspected me of "scoundrelism" or "knavery." How much might Mr. Wakley wish to give if he could say as much?

One word more. Mr. Wakley talks of advertisers; I hereby charge him with a *systematic robbery* of advertisers through a long series of years. At the time when the *Lancet's* circulation was not more than three thousand six hundred, and during the periods that it was less than three thousand, he was accustomed to ask high prices for advertisements on the plea of having at least twice that circulation; and was accustomed to charge them for stitching in their own bills at that enormous rate of charge. Now, how many bills were asked?—six thousand! How many used?—little more than two thousand! Thus, three thousand, or nearly four were entirely

lost! Now, supposing that these bills cost but two guineas per thousand for paper and printing, —and some of them cost four, five, or even six guineas—and that *only* one hundred advertisers affixed bills annually: Mr. Wakley thus *swindled* the advertisers of *more than six hundred pounds* every year!—besides the large extra sums he induced them to pay in the belief that those destroyed bills would have been used—not for fire kindling (Mr. Wakley's benefit)—but for circulation to their benefit. This is a serious charge; I dare Mr. Wakley to gainsay it, and if he cannot gainsay it, I shall ask the public to say which is it—he, or I—that is the "scoundrel" and "knave."

I am, Sir,
Your obedient Servant,
J. A. CARFRAE.

49, Essex Street, April 22.

P. S.—Mr. Churchill has this day personally called upon me, giving his employer *the direct lie* and requesting me to "engage" in the "transaction" I challenged him to two month's since!

[Mr. Wakley, with the kind of courage that enables him to bear the burden of life—a craven courage we sometimes see in a well-thrashed bully—and, evidently counting on the wish we expressed some time since, not again to sully our pages with his name, has returned, after a month's slinking silence, to the very unequal affray. We see in the foolish daring another instance of the *Medical Times'* good fortune. Mr. Wakley proves to us that he is clearly where it is our mission to place and keep him—in the FULL POSSESSION of NEMESIS. He is teaching the world a truth he has at length been cruelly taught himself, that there is some such thing as a retribution in the circle of fate: that the evil bad men sow in events, events will reproduce to them with increase. We have only to pursue *our* course to ensure him his destiny. Left to his increasing reverses, he must perish in the excess of moral calorie his chafed nature generates, or sink under the load of ignominy a disgusted profession and public heap upon him. With a moribund journal, which no costliness of loan or eleemosynary aid can save, he resembles a knavish gambler, holding in his clenched hand his grand trick, his trump card—a failure! The baffled and exposed incendiary of Rome, Cataline, was composure and triumph itself to him! The shabbiest of England's M.P.'s become its most unfortunate, we cease to fear that Finsbury's example will be followed, or that the House of Commons is destined to have its benches occupied by the debtors of a moral gallows. But we stop: the miserable man has sunk beneath contempt, and made even an execratory notice impolitic. It has been well said that the most irredeemable of villains may be punished into an object of popular sympathy. We spare Mr. Wakley, because he is rapidly reaching that inappropriate position.—ED.]

The Billingsgate paragraph appeared on Saturday, and on Monday Mr. Churchill, much to Mr. Carfrae's surprise, called at the *Medical Times' Office* and presented that gentleman with the following document:—

1. That the sale of no other Medical Journal published in London is double that of the *Lancet*, as has been falsely and fraudulently* asserted.
2. That the sale of the *Lancet* exceeds that of any other Medical Journal published in London.
3. That the sale of the *Lancet* is double that of any other Medical Journal published in London.†

The Publisher of the *Lancet* offers to deposit £50 on each of the above propositions, making a total sum of £150, with John Bacot, Esq., the Treasurer of the "Society for the Relief of Widows and Orphans of Medical Men," and submit the comparative sale of the *Lancet* with that of the periodical named by Mr. Carfrae, in a note addressed by him to Mr. Churchill, March 6th, 1844.

Mr. Churchill agrees to the Publishers as umpires, proposed by Mr. Carfrae.

The Proprietor of the publication to be entitled to withdraw £50 on each of the three propositions proved by him to the satisfaction of the umpires. His opponent to be compelled to allow his money to be appropriated to the Society named, of which Mr. Bacot is the Treasurer.

Mr. Carfrae on the same day wrote out the following reply, at once accepting the challenge:—

TO MR. J. CHURCHILL, PUBLISHER OF THE "LANCET."

SIR,—In answer to a document which you this day at the *Medical Times* office personally delivered to me (but which you have *cautiously* left without date, signature, address, or direction); I beg to say that I at once frankly, and with great pleasure, accept the proposal made to me I presume by you, to stake Fifty Pounds on the fact that the bona fide circulation of the *Lancet* is *not* double that of the *Medical Times*; Fifty Pounds on the fact that it is not larger than that of the *Medical Times*; AND FIFTY POUNDS ON THE FACT, THAT THE BONA FIDE CIRCULATION OF THE "MEDICAL TIMES" IS TWICE THAT OF THE "LANCET." Considering that this offer—now that we have both come to terms on it—should be decided on amicably, and in a gentlemanly spirit, and in a manner to leave no doubt of its conclusiveness, you will feel with me that we ought together to lay down explicitly the principles and conditions which should govern the arbitration. In the first place, as I made you the offer for this arbitration in writing (under signature) on March 6th, when you anxiously declined it, I think it fair that the investigation should be for a period, not later than that date. The results would otherwise appear suspicious to the public, since it would be naturally open to doubt whether in declining then, and accepting so long after, you were not manœuvring for time to get up a fictitious circulation, at least in accounts. Of course you cannot object to this proposition. Secondly—as the Proprietor of the Journal you publish, and which we are together to inquire about, has said in its very last number "It was not to be expected that Mr. Churchill would engage in any transaction of the kind with such a scoundrel," you will admit that before we do "engage" in the "transaction," that this very libellous, blackguardly, and it now appears *altogether false* assertion, requires some decided disavowal and contradiction on your part, or else, taking it in connexion with the extraordinary circumstance of the *unsigned, undated, undirected* paper which you gave me immediately after it, I shall be obliged to think that something dishonourable and tricky is in contemplation, so that you or the Editor may be relieved of your due responsibilities, when the decision is made known. What increases my fears in this direction, is that throughout the whole document which you have given me, you *carefully, awkwardly*, and most *mysteriously* avoid mentioning once the name of the *Medical Times*, though your proposal to me, I must presume, has reference to it only. It is impossible not to see that a dishonest party would in case of defeat, &c., make a dishonest use of these very singular circumstances; and every body knows, that when things with plain men of business are not open, frank and regular, but crooked—strange, and not straightforward, something wrong is in the wind. I propose, therefore, that my note March 6th, 1844, your document (without date), this letter, and any further arrangement you may require, shall be published in *both* Journals *before hand*, to shut out all misapprehension, and to let the profession know precisely the wrong doer, if there should turn out any breach of what is fair and honourable.

Thirdly, as I do not know Mr. Bacot, I propose that the money shall be lodged in the hands of the respectable Medical booksellers acting as umpires, who will then be at once able to give effect themselves to their decision. The sums to go to the successful party to dispose of as he may think proper—with the exception of fifty pounds, which shall be spent in advertising (except in the *Medical Times* and the *Lancet*, where they shall appear gratis) the general facts of the arbitration, the name of the Journal the more widely circulated, with the grand amount of its superiority. These three trifling suggestions (but necessary for a gentlemanly and effective investigation), you will not object to for a moment, if you really wish this arbitration. Indeed I have abstained from mention of several stipulations (which my friends assure me are indispensable to secure fair dealing with you or any one else connected with Mr. Wakley), for fear you should take advantage of them to decline the inquiry; and I hope, Sir, on your part, that by warmly meeting me in what is now our mutual proposal, you will show that the introduction (unnecessarily) of large sums of money into the matter, and the direct abuse lavished on me but three days since in the *Lancet* were not (very erroneously) intended to make me decline the arbitration I sought from you almost two months since, without attempting to impose on you a single condition.

Awaiting your early reply (for delay in this matter must be unsatisfactory), I am, Sir,

Your obedient Servant,
J. A. CARFRAE.

49, Essex-street, Strand, April 22nd.

P.S. The Booksellers I should name, would be Mr. Bailliere, bookseller to the Royal College of Surgeons, and one of the Firm of Longman and Co., or if he decline, Mr. Renshaw.

*** Mr. Churchill on Thursday returned an answer, in which he declines every suggestion Mr. Carfrae made to secure an inquiry free of suspicion, yet while shirking the whole inquiry, announces with an air of bravado, that he has deposited the £150! His insincerity in the whole transaction is thus as clear as we all along suspected. We shall publish the curious answer next week. The reason he gives for not having the date fixed backward from the time he declined, is that we published the "Medical Times Almanack!" It was, of course, never dreamed of to include that in the inquiry!

* This word appears as "*fraudently*" in the M.S., but presuming it to be a mistake, we have taken the liberty to correct it in the text.—ED.

† It is at once obvious that Mr. Churchill in asking our Publisher to inquire whether the *Lancet's* circulation is under or not ANY other Medical Publication, asked for what he knows *could not* be inquired into. So wide an investigation is wholly impossible, and no doubt, this circumstance was well foreseen by the cautious Mr. Churchill.—ED.

THE WATER CURE FOR ACUTE RHEUMATISM.

To the Editor of the 'Medical Times.'

Sir,—The insertion of the following case of acute rheumatism, affecting nearly the whole of the body, may prove interesting to some of your numerous readers,

G. H. WEATHERHEAD, M.D.
Senior Physician to the Royal Free Hospital.

Joseph Silk, æt. 23, barman at "the Cat" public house, in Whitecross Street, Barbican, was brought to the Royal Free Hospital this day week (the 15th April) labouring under acute rheumatism, affecting the ankles, knees, hips, back, shoulders, wrists and hands, all of which were much swollen and inflamed. He came to the hospital in a cab, and was obliged to be carried to the ward on a chair, being in such excrueiating pain that, as he expresses it, "he could not bear to be touched;" he had been ill about a week, and for a few days under the care of Mr. Harris, of Barbican.

About sixteen months ago, Silk had a similar seizure, and was then under the care of Dr. Cobb, at the London Hospital, where he remained seventeen weeks. Whilst there the disease flew to the heart, when above a hundred leeches, by his account, were obliged to be applied over the region of that organ; first, 36 were applied, when relief not ensuing, 24 more were put on. This dangerous state of the symptoms still continuing, next morning two dozen more leeches were applied, and others, repeated in lesser numbers, in the course of the day. This treatment was followed up by a large blister over the region of the heart, which was kept open for thirteen weeks; he was likewise salivated, and his mouth was sore for weeks.

The treatment in the present instance has been as follows:—A dose of the house aperient was given as soon as he was gotten to bed, and directions were left with the nurse to apply the cold water bandages (carefully covered with dry flannel) over two of the most painful joints, as soon as the aperient had operated. As relief ensued in one joint, the wet bandage was to be applied to a new one, and he was ordered some of the house-fever mixture every three hours.

The account Silk gives of the effect of the cold water bandages is, that as soon as the first chill had ceased, which was in two or three minutes, a glow succeeded, ending in warm perspiration, extending from the joints all over his body; he felt his pains sensibly relieved in half an hour, and greatly relieved by next morning.

On the 18th he was nearly free from pain, and felt as well, he said, as after the seventeen weeks formerly mentioned; he had taken only one bottle of the fever mixture. He drew my attention to his urine, which was thick and turbid, for which I prescribed one drachm of carbonate of soda in eight ounces of water, of which he was to take two table-spoonsful four times a day; the wet bandages to be continued.

April 22, (this day)—I found Silk sitting up and dressed, free from all complaint, except some slight pain in one knee, although only one week from the first adoption of the cold water treatment.

Here, Mr. Editor, is an undeniable instance of the almost instant efficacy of the cold-water treatment in a case of acute rheumatism of great severity and intensity, and may bear comparison without prejudice with the treatment adopted on the former occasion, in reference to which I may be allowed to remark that had a translation of the disease to the heart occurred under the cold water treatment, such as did take place, by Silk's account, in the previous attack, the advocates of the hydropathic mode of curing rheumatism would never have heard the last of it—but hydropathy, it must be admitted, is an unfortunate word, for we now have so many "*pathics*," that it is enough to sicken

people of everything having any relation to the *pathetic*.

63, Guildford Street, Russell Square,
April 22, 1844.

P.S.—Silk is still in the hospital, and any one desirous of questioning him personally, may do so any day so long as he remains in it.

EXPERIMENTS ON ARSENIOUS ACID.

To the Editor of the "Medical Times."

Sir,—Having been recently making a few experiments upon arsenious acid, or as it is sometimes erroneously termed "white oxide of arsenic," I have found, that metallic arsenic may be readily separated from it by the agency of amalgamated zinc; it being only requisite, with a view to this object, to dissolve the arsenious in hydrochloric acid, and afterwards to plunge a piece of zinc, well amalgamated, into the solution; when, owing to the nascent hydrogen generated, combining with the oxygen of the arsenious acid, nearly the whole of the metal will be immediately thrown down as a black, powdery precipitate; the zinc itself being, at the same time, covered with a metallic incrustation; the latter, in some cases, assuming a beautiful iridiscent appearance. In this manner, I have succeeded in detecting about one-eighth of a grain of arsenious acid in solution, and I have but little doubt, that by nice manipulation, a much smaller quantity might be rendered appreciable. It is true that a similar effect is produced by common zinc upon a hydrochloric solution of arsenious acid—a fact well known to chemists; but its employment is objectionable, on account of the rapidity with which the hydrochlorate of zinc is formed in the liquid; whereas, if amalgamated zinc be used, but a very small quantity of the metal is consumed; and therefore such zinc is certainly preferable to the former, it being evident that the less impure the precipitate, the more readily will it admit of being itself tested by the ammonio-nitrate of silver, the ammonio-sulphate of copper, and the other ordinary re-agents; having, of course, been previously dissolved in nitric acid, according to the usual mode of procedure.

In calling attention to amalgamated zinc as a test for arsenious acid, I am, at the same time, anxious to recommend its employment as an antidote in cases of poisoning by that highly deleterious compound; being, for my own part, under the impression, that the deadly effects it produces when taken into the stomach, are attributable, in a great degree, to its being dissolved by the free hydrochloric acid contained in the gastric juice; for, if arsenious acid be not thus acted upon, I cannot conceive how, in its *insoluble state*, it can be carried by the absorbents into the circulating system. Assuming then the truth of this supposition, and also admitting the correctness of the statement made by chemical writers, that arsenic in its *metallic state* is not poisonous, but, on the contrary, wholly inert, it appears to me highly probable that amalgamated zinc would exert the same action upon arsenious acid contained in the stomach, as it does upon the hydrochloric acid solution of it in the laboratory; and that, therefore, this amalgam might be successfully employed in many cases of poisoning; it being, as I have just said, for this purpose, only necessary that the amalgamated zinc be reduced by trituration, or any other mechanical means, to a finely pulverulent state, and then administered in such a dose as the quantity of arsenious acid, supposed to have been taken, might seem to demand.

Hoping that the above few hints may prove useful both to the profession and the public, I have the honour to subscribe myself, Sir,

Your most obedient Servant,
W. H. O.

Surrey Place, Old Kent Road, 18th April, 1844.

Adelaide Gallery,—During, and after the lecture on mesmerism and *clair-voyance*, delivered at this institution on Saturday last by Mr. Vernon, considerable discussion arose between several gentlemen, members of the medical profession, and the lecturer, as to the possibility of so closing the eyes, as to prevent any rays of light from reaching them. The audience, which was exceedingly numerous and respectable, passed a resolution, affirming their confidence in the chairman and their scrutineers; and another, declaring their belief that the experiments they had witnessed were not satisfactory, and that further enquiry and investigation were requisite, before the doctrine of mesmerism could be received. Mr. Wakley, jun., who attended the meeting, attempted several times to address the audience, but the style of his speech was so displeasing, that he was silenced, though with considerable difficulty, arising from the exceeding *un-bashfulness* (to coin a word for the occasion,) which he exhibited. A gentleman near us remarked that he had all his father's impudence, and none of his talent. Dissatisfied with the reception he encountered, this modest youth declared he would convince those present of the imposture, if he stayed till ten at night, and afterwards proposed that another day be appointed to reconsider the question, and that the proprietor should give *free* admission to whoever chose to come on that occasion. We need hardly say that the proposition was unanimously scouted, while at the same time the rather significant question was put:—Would he distribute his *Lancet* gratis to the public? Other significant indications of displeasure ultimately reduced this worthy scion of the coronatorial stock to silence, not, however, without his endeavouring to get a resolution, couched in stringent and abusive language, and condemnatory of mesmerism, adopted by the meeting. It obtained a seconder with difficulty, but not a hand was held up in its favour.—*From a Correspondent.*

[From another Correspondent.]

On Saturday last Mr. Vernon gave a lecture at the Adelaide Gallery on Mesmerism, and produced two subjects who were supposed to have the gift of *clairvoyance*. Numerous experiments were performed—the eyes being in one case covered over with a kind of putty mixture, but it was found that whenever the subject could see, a channel had become formed by the face's movements sufficient to admit a probe, and therefore light. The audience passed a resolution, bearing testimony to the fairness with which the proceedings were conducted, but declaring the experiments unsatisfactory. Mr. Wakley, Jun. attended with the announced design of repeating his father's achievement of crushing mesmerism. He came ready equipped, with a resolution, declaring in advance the whole thing—"humbug," &c., but when, *after* the experiments, he attempted to put it to the meeting, he was met with a shower of hisses that surprised, if they did not disconcert him. An unfortunate allusion by him to the *Lancet*, raised a hurricane of condemnatory uproar—its very name was met by expressions of the strongest disapprobation. He was completely silenced. The young gentleman, who during the investigation of the experiments, amused himself by thrusting the *Times* newspaper towards the face of the lecturer, exclaiming to him in a vulgar irritating manner—"Oh, but the *Times*—the *Times!*" was heard exclaiming as he left the room, not a little discomfited—"I am *so* sorry—I had such a good anecdote for them, if they would but have heard me!"

TRANSACTIONS OF LEARNED SOCIETIES.

Westminster Medical Society, April 20—Mr. Fisher in the chair.—*Secondary Symptoms in a Child—Depressing Influence of Calomel.*

Mr. Acton narrated a case of secondary symptoms, principally consisting of condylomata, occurring in a child eight years of age. He was consulted at the Islington Dispensary by the mother of a little gipsy-looking girl, and on examination discovered a mass of condylomatous growths, completely encircling the verge of the anus. Their surface was covered with the peculiar yellow and white chamois leather appearance, characteristic of condylomata, and the smell was of that offensive kind which is usually met with in these cases. No primary symptoms nor marks of any cicatrices could be found. The entrance to the vagina was large—the hymen perfect; no discharge at the time of examination. There were three or four spots of recent lepra on the thigh, of a rosy, not copper-coloured, hue. The history was of a most unsatisfactory kind; the parents denied having had syphilis, and they stated that the child was perfectly healthy until it was about seven years and a half of age, when the child had a somewhat similar complaint to that under notice, for which she was treated by Mr. Semple, who said it was a venereal disease. A brother of the patient, a few years older, was attacked a month previously with a disease resembling that under which the girl laboured; he was covered with blueish spots, and his hair fell off. Mr. Acton could not learn whether any appearances were ever observed on the male organs of generation, but the child complained of a soreness on passing his motions. When examined afterwards, no traces of disease on those parts could be discovered, but there were three or four spots of lepra on the left shoulder. With reference to the girl, the mother stated that she never left her sight; and that four children, including the brother just alluded to, slept together. Calomel in dry powder was ordered to be applied to the condylomata, after they had been well washed with a solution of chloride of soda, and two grains and a half of the hydrargyrum cum cretâ were also prescribed, to be taken twice a day. In a few days' time the growths were reduced to a level with the surrounding skin, and the surface presented a healthy appearance. The spots on the thigh were fading.

Mr. Acton then made some observations on the case, and successively discussed the questions:—

Are condylomata syphilitic? and came to the conclusion that they can depend upon no other cause.

He proceeded to shew that in this case the syphilitic disease could not have been an hereditary complaint, nor have originated in a sporadic disease. He believed that condylomata were not contagious, and founded his opinion on experiments, and he was of opinion that this child must have had primary symptoms. After discussing the various sources by which syphilis can be contracted, he left the society to draw their own conclusions.

Mr. Fisher enquired, if Mr. Acton had been able to trace the history of the disease in other cases in children?

Mr. Acton observed, that he had already seen five cases of secondary symptoms in children since he had been in London; in the other cases the history had been tolerably clear. Of three children whom he had seen thus affected, the eldest, a girl fourteen years of age, had contracted the disease from some extraneous source, and had primary symptoms. She slept with others of the family, and from her a younger brother had the disease in the form of primary symptoms, and a younger sister was also affected. Mr. Avery had been kind enough to send him a case—a little girl who had condylomata, in which the history was not very clear. The mother was separated from her husband, and the complaint, perhaps, was hereditary; but in the instance before the society it could not be so, as the child had attained the age of seven years and a half before the disease appeared. It might possibly have been communicated by the sheets, or by sponges.

Mr. Fisher had never known the syphilitic disease arise spontaneously, and he suggested that the child had probably slept with a person labouring under the complaint, and that the child's hand had come in contact with venereal matter, and had afterwards been applied to the part.

Dr. Chowne asked Mr. Acton to what particular part the condylomata were confined; whether they were seated on the nates only, or were also met with on the thighs?

Mr. Acton replied, that in this particular case they were situated round the margin of the anus; they presented all the characters of condylomata, and entirely differed from the vegetations which occasionally arise, as a consequence of collections of dirt or filth. Condylomata never have any such origin; all authors agree that they proceed only from primary symptoms, and no cases have been recorded where they have arisen from any other source. This form of disease is found among the lower orders almost exclusively. He had brought the case forward, because, if a man were accused of having committed a rape, and such a child were selected as this one to support the charge, it might go hard with him. There were not any observations on this subject in any of the works on medical jurisprudence.

Dr. Sayer had seen ten or twelve cases in the course of his practice, two of which he could call to mind. In both cases the mothers were affected with syphilis. The peculiar sensibility of the skin

of children shewn by the various skin diseases to which they are subject, should not be forgotten, and may be regarded as a reason why in them it may be primordially affected; there is no other way to account for it. In some cases he had seen, the history of the disease could not be very well ascertained, but in the two he had alluded to, it was very clear.

Mr. Acton remarked, that the cases alluded to by Dr. Sayer were not very uncommon; young children soon after birth may become affected with condylomata from hereditary disease, but his case was thus far peculiar,—that the malady did not show itself until the child was seven years and a half old. When the disease is hereditary, it is accompanied by other syphilitic symptoms.

Dr. Sayer observed, that of the two cases mentioned by him, one child was five years old, the other between three and four. The mothers were decidedly syphilitic at the time.

Dr. Chowne thought the subject was one of great interest; among the great number of children who came under his notice, he had occasionally seen warty excrescences on those parts resembling these in question, and he thought it would be a matter of exceeding difficulty to pronounce decidedly as to their character. Considerable hesitation is occasionally shewn by surgeons of eminence and experience with regard to the ordinary venereal eruptions even, and of this he had a proof to day in two cases. He was disposed to think that condylomatous excrescences might resemble those from venereal disease, and yet not have any such origin. The same difficulty would be experienced in their diagnosis, as with the venereal eruptions to which he had just alluded. With regard to warts, it must be remembered that children are very liable to the formation of crops of warts, which come out and disappear capriciously; and he (Dr. Chowne) believed, that when they occur on the parts of generation, or round the anus, they may assume a delusive condylomatous character. He did not think the question had any bearing in a forensic point of view, as the appearances were so indefinite; he did not think any one could connect the existence of condylomata with a recent criminal act. Dr. Sayer's cases were interesting, but not conclusive as to the hereditary origin of the disease, on account of the age of the children. He thought it more probable that the linen or towels used by the mother had come in contact with the child's person, and that the disease had originated in that way. The subject generally was one of great interest, but more facts were required for its elucidation. He would wish to ask Mr. Acton whether, in a case of condylomata around the verge of the anus, he could, on examination, positively ascertain their venereal origin.

Mr. Acton, in reply, remarked, that the observations of Dr. Chowne appeared to refer principally to the distinction between warts and condylomata; the latter present a flattened yellowish, chamois leather appearance, while the former are, perhaps, reddened, and always granulated. Warts never assume a condylomatous appearance, nor is it so stated by any author.

Mr. Snow wished to enquire whether condylomata have a constitutional origin, or are merely a degeneration of the primary sore? He had only seen them follow a chancre, and was induced to believe that they were the consequence of a local cause.

Mr. Acton stated that authors generally agreed in regarding condylomata as a secondary symptom, although they were occasionally met with, combined with symptoms of a primary character. Thus they were found, in children and women of the town who neglected their persons, in every part of the body where damp could exist. In women with large breasts they might be found lying between the mammæ and the chest, and they sometimes exist in the arm-pits, or between the toes. They are generally accompanied with lepra, psoriasis, or impetigo, and very frequently with sore-throat. That the excrescences in the case under the notice of the society were condylomata, and not warts, might be ascertained by the treatment. Cleanliness only was first employed, and then they became worse; they were afterwards sprinkled with calomel, and the hydrargyrum cum cretâ exhibited internally, and then they disappeared in a week. If warts were dusted with calomel it would not produce any beneficial effect. Warts are the more rebellious to treatment, condylomata more easily got rid of.

Dr. Chowne desired to know the experience of the society, whether condylomata were never got rid of without mercury. He understood a radical cure might be effected by excision.

Mr. Chance differed in opinion with Mr. Acton, respecting the rapid cure of condylomata following the exhibition of mercury. He had seen several cases during the last twelve months—not to go any farther back—and in some of these mercury had not the slightest beneficial effect. He believed that in some instances condylomata do not depend on a syphylitic taint, but on an accumulation of filth, &c. At the same time he fully believed that in very many cases it is caused by syphylis.

Dr. W. Merriman narrated a case in which a small dose of calomel caused extreme depression, which was recovered from with difficulty. The patient was a gentleman, between 58 and 60 years of age, who had a carbuncle on the occiput in the beginning of the year, which was opened by Sir B. C. Brodie. The discharge afterwards was profuse, but gradually abated. He became somewhat feverish, and on the 18th February, had a shivering fit, having had one also the day before. The tongue was coated. Three grains of calomel were prescribed, followed by a draught containing rhubarb, and sulphate of magnesia, in the morning. As calomel usually produced fainting with him, he had a draught, with ammonia, to take if requisite. A fainting fit came on during the night, while at stool, and was succeeded by exceeding and long continued depression and diarrhœa, which were checked ultimately by aromatic and astringent medicines, and by the free exhibition of nutritious diet, brandy, &c. During the progress of the disease erysipelas attacked the wound and scalp, and spread to the nose.

Mr. Snow did not think that the great depression in this case was to be attributed solely to the influence of calomel. The patient had been suffering previously from carbuncle, in itself an indication of a debilitated system. As calomel always caused fainting in this patient, it might probably have increased the depression, but could hardly be regarded as the sole cause.

Mr. Streeter enquired as to the general constitution of the patient prior to the formation of the carbuncle; was he a man in robust health, or otherwise?

Dr. W. Merriman believed that he had been previously in the enjoyment of good health.

Mr. Acton remarked that, without attributing the depression in the present instance to the small dose of calomel that had been given, the inference was borne out by the fact that great depression is occasionally produced in young men the first time that mineral is exhibited. So much is this the case, that he is in the habit of recommending them when he commences the use of mercury, to take a glass or two of wine more than ordinary. The extra stimulus is only needed for the first few days.

Mr. Streeter could not agree with Mr. Acton that a single mercurial purgative could be productive of such depression. He should be indisposed to give calomel uncombined with a narcotic, to a patient recovering from carbuncle, with threatening erysipelas. There are some persons to whom large doses of calomel should not be given, and it is requisite consequently to feel one's way before prescribing it in full doses.

Dr. Chowne thought the case was too complicated to fix upon calomel as the cause of the depression; the carbuncle, the incipient erysipelas, and the action of the purgative, might have have had a combined effect: nevertheless, calomel in small doses may cause great depression even in persons in full health. He believed that the peculiar purgative action of calomel is exerted on the duodenum, and would thus consequently explain the depression caused by its specific action. It produces a peculiar sensation in the situation of the duodenum, accompanied by depression and sickness, which, in persons of a peculiar sensibility, may amount to depression equal to that described by Dr. W. Merriman. Such cases, however, are exceptions to the rule. A great deal of hanging and drowning is prevented by the timely exhibition of a dose of calomel, which, by clearing out the unhealthy secretions and vitiated bile of the hypochondriac, restores him to good spirits, and to life itself, as it were.

Medical Society of London, April 15th.—Dr. Theophilus Thompson, President, in the chair. —*Abdominal Tumour.*

Mr. Hooper mentioned the case of a little girl, thirteen years of age, who is at present under his care, with a tumour of the abdomen, which is productive of considerable constitutional irritation. It had been discovered only a fortnight; it extended from the umbilicus to the pubes, and was about as broad and thick as the hand. The edges could be felt to be hard, but were not very distinctly defined. The constitutional irritation was high at first, there was considerable fever, a frequent pulse, loaded tongue, and restlessness. Mr. Hooper exhibited mild alterative doses of mercurials, and also employed iodine externally, with the effect of improving the secretions, and the patient's health; but there still existed much general disorder. There was not any tenderness of the abdomen, and the lungs were healthy.

Mr. Pilcher was of opinion that chronic peritonitis existed, and that probably tubercular deposit would be the result. In a case which he attended, the disease was complicated with ascites, but the operation of paracentesis could not be performed, as no healthy point of the peritoneum could be discovered. On examination of the body after death, the abdomen was found covered with tubercles, the peritoneum being completely studded with them. There were also tubercles in the lungs, but not in an advanced stage. The origin of the disease was traced ultimately to a kick.

Mr. Hird referred to the frequency of tubercular disease in children, among whom, also, scrophulous tumours were not uncommonly found in the abdomen, the lungs being, also, more or less affected. The cases generally terminate fatally, but the exhibition of the iodide of iron, and the use of iodine externally may sometimes do good.

Dr. T. Thompson had found that tubercular disease in the abdomen was so frequently accompanied with a similar condition of the lungs, as to serve as a means of diagnosis in cases of doubtful abdominal disease; if the lungs were sound, the disease might be safely considered not to be tubercular. He recommended that Mr. Hooper's patient should have the benefit of good air and nutritious diet; and should likewise use salt water baths, and take the extract of taraxacum internally.

Mr. Linnecar narrated a case of severe gastrodynia, in which, the ordinary remedies having failed to afford any relief, two drachms of extract of taraxacum, well prepared, given in three doses during the day, for ten days, had effected a cure.

April 22. *Mesmerism.*—The subject of mesmerism was introduced by Dr. Clutterbuck, who enquired the result of the visits paid by several members of the society on the previous Monday evening, to the Southwark Literary Institution, on which occasion Mr. Vernon delivered a lecture on mesmerism, which he illustrated by experiments.

Dr. Willshire, in describing what took place, stated that all the experiments were decided failures. A medical gentleman, of the name of Burt, brought a very complete mask, lined with black velvet, which extended from the superior part of the brow to the chin, and was secured over the face by several ribbons. It was so contrived as to render vision impossible. Mr. Vernon at first objected to its use, as the wearing the mask would render the face very hot; the slit for the mouth was very small, and there would not be a sufficient degree of lucidity. The opening for breathing was enlarged, but still Mr. Vernon objected, when Mr. Rendall, the chairman, having assumed the mask, declared he could wear it for twenty-four hours without inconvenience. It was then tried on several girls who had been previously mesmerised, and who, after fumbling about the

mask for some time, were utterly unable to read. Mr Vernon explained the failure by attributing it to want of sufficient lucidity. A similar failure occurred with a boy who was afterwards mesmerised. The phenomena of *clairvoyance* could not be produced in any one of the persons who were subjected to Mr. Vernon's manipulations.

Dr. Waller stated that he was deputed, at a large meeting at Crosby Hall, to watch the experiments, and that they all failed; he mentioned an experiment with regard to catalepsy, which was supposed to have been produced by Mr. Vernon, on the person of a little girl, and whose arm, when fixed, Mr. Vernon defied any one to bend. He (Dr. Waller) tried to do so, and succeeded very easily. The other experiments attempted by the lecturer proved to be equally unsuccessful. Although he looked upon these exhibitions as utter deceptions, he still thought there was something in the science, or art, which could not be explained.

Mr. Clarke, in expressing his disbelief in mesmerism, referred to the experiments performed in Bedford Square some years ago, with Dr. Elliotson and the O'Keys'. He mentioned that Dr. Elliotson had mesmerised these girls at the distance of three hundred feet, and yet he had recently failed altogether in producing that effect on one of the sisters, whom he had accidentally encountered in Tottenham Court Road.

Mr. Dendy, who confirmed all the statements made by Dr. Willshire, stated that he visited the Southwark Literary Institution purposely to develope the imposture. The experiments on that occasion were failures in every respect. He (Mr. Dendy) thought there was a great deal in mesmerism, but nothing at all in animal magnetism. He considered Vernon to be a thorough impostor, and one who ought to be exposed.

Dr. Roberts, Mr. Crisp, and other members, added their testimony against mesmerism, which Dr. Roberts said he looked upon as a piece of humbug.

GOSSIP OF THE WEEK.

Apothecaries Hall.—The following gentlemen were admitted Licentiates on April 18th, 1844:—Basil Barrett, William Charles Small, Edward Garraway, Thomas Busher Cowherd, Richard Balderstone Yeats, Peter Redfern, Richard Holland Bradley, Christopher Scaif, Joseph Pitman Symes, John Gould, William Hind Rogers, William Lock, John Charles Parrott, Edward Pemberton.

Royal College of Surgeons.—Gentlemen admitted Members on Friday, April 19th, 1844:—J. Blomfield, R. B. Thompson, J. Houlton, J. Brown, H. J. M'Dougall, R. Atkinson, H. Hinds, F. H. Harris, T. Watts, H. F. Fosttit, H. G Wotton, A. Major.

Mr. Edmund T. Clark, a student at the Charing Cross Hospital, died a few days ago from the effects of an accidental puncture in one of his fingers, whilst dissecting. He was attended with great solicitude by the medical authorities of his hospital.

Mr. Rowland Agar is to be Assistant Surgeon in the 43rd. vice Thompson, who resigns, and Mr. Wood of the 9th Lancers (India), is appointed to the charge of medical soldiers in England.

When Francis the First was suffering under a dangerous illness at Compeigne in 1538, he requested the emperor to send him from Spain a celebrated Jewish physician, who turned out to be a converted Jew. Francis was convinced that, to be cured, he must have the aid of a real Jew, and therefore dismissed the convert, and sent to Constantinople for an Israelite, who adhered to the faith of his fathers. The Jew came and cured him—by ass's milk.

We have had the pleasure of inspecting and examining the Parisian Venus. It is certainly a beautiful model in wax, presenting us with the beau ideal of womanly beauty, as impersonated in the Caucasian variety of mankind. Removing the integuments, the whole anatomy of the human figure lies unveiled before us. It is a subject of interesting observation for the physiologist and anatomist.

Dr. Dwight, of Portsmouth, New Hampshire, has attended the birth of the five thousandth child. Dr. Frederick Dorsey, of Hagerstown, has presided as the accoucheur of more than eight thousand children, and in a number of instances has presided over three generations of persons.

Mr. Harvey has been appointed Curator of the Herbarium of Trinity College, Dublin, and is about to make public the valuable Californian and Mexican plants of the late Dr. Coulter, which are preserved there. Dr. George James Allman has been elected Professor of Botany in the said College.

In answer to a question from Mr. French, Lord Elliott confessed that the Government had an intention to introduce a Bill this Sessions on the Medical Charities of Ireland.

In justice to the Editor of a weekly contemporary, we are bound to state that he asserts that the forged letter from Nottingham against the Provincial Medical Association, was directed from Nottingham *by mistake*, and that he had positively received at least fifty more letters, more severe, on the same subject. It is strange that fifty-one letters should be sent so opportunely; and still stranger, that the one *selected* should turn out an imposture. Of course, no one will suppose the worthy Editor so much to forget the gentleman, and play the vile person, as to assert by wholesale, and in a way so palpable, that *which is not*, but this certainly is somewhat of the marvellous. There can be no doubt after the *expose* from Nottingham that it was a great "mistake" to date the letter from there.

PERISCOPE OF THE WEEK.

The Use of the Alcoholic Lotion in Phthisis Pulmonalis.—This and the four following articles constitute the principal contents of the last number of the *Lancet*:—Dr. M. Hall says that this lotion possesses a power in checking the progress of the deposition and softening of tubercle in the lungs, beyond any other which he ever tried. The number of patients who have recovered from incipient phthisis under its use, and who, after many years, are still living, and in apparent health, warrants him, he thinks, in making this assertion, and in expressing himself in strong terms in regard to its extreme value. It is to be constantly applied by means of six folds of linen over and across the upper lobes of the lungs. One part of pure alcohol is mixed with three parts of water. It is applied tepid at first, and afterwards of the temperature of the atmosphere. It is used in small quantity at a time, every five minutes, so that the application may always consist of alcohol and of water. (If applied in larger quantity, and less frequently, the alcohol would evaporate, and water alone be left, and this would be the source of a feeling of discomfort, instead of the glow which the alcohol induces.) The application is easily made; a piece of soft linen, of the size of a very large sheet of letter-paper, being folded in the usual manner, is then folded twice more, in lines parallel with the first, so that the whole consists of six folds. These are stretched, applied across the upper part of the thorax, just below the clavicles, and fastened to the shoulder-straps, or other part of the dress, which latter is to be arranged so as to be readily opened and closed. A sponge, the size of a walnut, is then filled with the lotion, and pressed upon the linen along its whole course, the dress being opened for this purpose, and immediately closed. The operation need not occupy five seconds; it should be repeated every five minutes. The application of the lotion should be incessant during the day, and all waking hours, the dress being light, or even entirely removed, so as to allow of free and rapid evaporation. It is to be suspended during the night. Dr. Hall mentions briefly several cases in which this lotion appeared to do good, and he begs to be understood as stating only the fact, that he has witnessed many, very many cases of incipient phthisis checked by the strenuous application of the alcoholic lotion, and the patients restored to apparent health; these cases having been proved to be phthisis by the presence of the physical signs, as well as the morbid symptoms of this dire disease. Neither does he recommend it as a cure for phthisis. He thinks it the most important remedy in this disease which we possess; but he would by no means neglect any of the other well-known aids in the treatment of phthisis. Of these, change of air, free exposure to the sea-breezes, a sea voyage, a mild climate, a chalky soil, a locality screened from the north-east winds, gentle exercises, especially on horse-back, a meat diet, with a little of Bass's ale, perhaps, but without other stimulus, the system of sponging with sea water, or salt and water, or vinegar and water, light clothing, with flannel next the skin, &c., the plan recommended by the late Dr. Stewart, &c., constitute the additional remedies to be adopted in the treatment of phthisis.

Acrid Saliva.—Dr. Wright describes a variety of saliva, under the title of acrid saliva, which he says comprehends two divisions; first, saliva which is acrid or unusually active, from some peculiar and, unknown change in its proper constituents; and secondly, saliva which is acrid, or unnaturally active, from the presence of some matter which is foreign to the healthy secretion. The cause of the acrid condition of the saliva in the first of these subdivisions, Dr. Wright says he is at a loss to imagine. The only conclusion which an extended and deliberate enquiry has enabled him to arrive at is, that the saliva, thus unnaturally active, differs from the healthy fluid only in possessing the properties which are peculiar to it in an extraordinary degree. The saliva in maniacal patients, which on analysis seemed to be perfectly healthy in its constituents and their proportions, has been frequently observed by Dr. Wright to be so acrid, as to excoriate the parts of the body with which it came in contact. In one case the back of the patient's hand was abraded and inflamed, from being repeatedly used to wipe the foaming saliva from his mouth; his lips, cheeks, and gums, were also diffusively excoriated. Dr. Wright does not doubt that such saliva injected into the circulation would speedily induce hydrophobia, nor that this disease would result from the bite of a maniac in his extreme of fury. For the explanation of these phenomena it is not necessary that the saliva of maniacal or rabid persons should vary in anywise from the secretion in its natural state. On comparing the action of the one and the other variety of saliva, it will be found that the difference is in *degree* not in *kind*. Healthy saliva, as already shewn, when injected into the veins, produces symptoms closely resembling, if not identical with, those of hydrophobia; and if the quantity injected be sufficient, death, apparently hydrophobic, is the constant result. When the system becomes inoculated with a smaller quantity of saliva, as occurs from a bite, or from the application of saliva to an abraded surface, the effect produced is directly as the activity of the saliva, at the time of its secretion; this may be simply local or constitutional irritation, mild or malignant, or furious delirium and hydrophobia. This last named malady is regarded by many writers as produced by a specific poison which is peculiar to the saliva under certain circumstances. All efforts however to free the saliva from this poison, or to obtain it in a separate state, have hitherto been unavailing. The most delicate services of chemistry have been employed, but without detecting anything at variance with the healthy secretion; and the microscope has revealed nothing peculiar, except occasionally the presence of animalcules. These, however, are frequently found in saliva, both healthy and morbid; and their casual presence in the saliva of hydrophobic persons is no proof whatever that they have the least chance in contributing to, or in transmitting the disease. Luhr detected them in the saliva of a diseased scorbutic patient. Another example is recorded by Dolœus, and again in the case of a man suffering from the venereal disease. Dr. Wright's opinion is that there is not the smallest chemical difference (that could affect the natural properties of the secretion) between the saliva of hydrophobia and the saliva of perfect health; and that when, by the inoculation of the system with salival fluid, rabies is engendered, it is the effect, not of any specific poison, but of the saliva itself, possessing in an undue degree, the physiological activity which is natural to it. This he shews to be the case by a series of comparative experiments. Saliva may be rendered acrid by the presence of foreign matter, either from the spontaneous generation in it of some morbid animal matter, as occurs in putrid fevers, syphilis, malignant diseases, &c., or from the casual introduction into the system of some irritant or other, which, in escaping by the salivary glands, imparts an acrimony to their secretion. There is every reason to believe that in many malignant and infectious diseases, the saliva undergoes extreme changes, which not only completely alter its natural properties, but impart to it the power of transmitting the ailment to which it owes its deterioration. In various affections of a local nature, the saliva often acquires a remarkable acrimony. This is commonly due to the presence of some acid, though Dr. Wright has met with specimens in aphthæ, cynanche maligna, secondary syphilis, putrid fevers, scarlatina, and small-pox, in which the offending matter appeared to be an oily fluid, dirty-looking, and of a most disagreeable odor. An unfavourable termination of cynanche maligna, and of many other diseases which variously implicate the mucous lining of the mouth and fauces, is often preceded by a profuse flow of acrid saliva, which excoriates the parts with which it comes in contact, and causes, by being swallowed,

distressing sickness and purging. In the dentition of scrophulous children, &c., the saliva is often very acrimonious, and sometimes intensely acid. The treatment recommended by Dr. Wright as most beneficial in these and similar affections, consists in steaming the mouth frequently from a hot decoction of poppy-heads, or camomiles, and occasionally using a tepid gargle of rose-water, or camphor mixture, with the addition of a little carbonated alcali, and tincture of hemlock, or prussic acid. If tonics and aperients be indicated, they will be found most useful adjuncts to the local remedies. An undue alcalinity of the saliva is not unfrequently a source of acridity. It is generally the natural alcali of the secretion which is in excess, though it is sometimes owing to the free use of alcalies or of salts, which, in passing through the system, become converted into carbonates. Alcoholic liquids, aromatics, essential oils, some mineral salts, and other medicines, sometimes escape from the system by the salivary glands, and in so doing impart to the secretion various degrees of acridity and offensiveness.

Coloured Saliva.—The saliva sometimes presents a blueish tinge, under the continued use of acetate of lead; it has been known to assume a deep blue tint when indigo has been largely administered, and has yielded indigo on the application of heat to the dried residuum. The heat required is about 550°, and the indigo sublimes in acicular crystals. In the advanced stages of fever and purpura, Dr. Wright has also seen it of a deep blue colour, resulting as he believed, (for he did not examine it chemically) from the presence of Prussian blue, due to the spontaneous decomposition of the blood. The saliva often exhibits a great variety of colours, from a light red, or brown, to a deep purple, or black, in cachectic diseases, and in putrid fevers. These shades of colour, Dr. Wright also refers to the presence of blood in various stages of decomposition, though both the microscope and chemical analysis usually fail in recognising any of the distinctive characteristics of genuine blood. In the mesenteric diseases of children, in various forms of scrofula, and in malignant diseases affecting the abdominal viscera in elderly people, the saliva is not unfrequently of a fawn colour, and excessively offensive to the smell. In these cases, the colouring matter is generally due, either to the ptyaline being depraved, or to the presence of an oily fluid. A casual discolouration of the saliva often arises from the use of certain medicines, such as rhubarb, cochineal, &c., which may sometimes continue long after the use of the medicine has been discontinued.

Colica Hepatica.—Mr. Wood narrates the case of a gentleman who died after intense suffering, caused apparently by the passage of gall-stones. The gall-bladder was nearly full of a dark-coloured thick bile, and contained ninety-eight gall-stones; fifteen or sixteen about the size of horse beans, the others that of peas, downwards. The smallest weighed two grains and a half.

Lactation and After-pains.—Dr. Tyler Smith has written a short paper on lactation and after-pains, considered in relation to the reflex motor action, in the early part of which he remarks that the secretion of milk is intimately connected with the state of the uterus; but though a certain amount of irritation in the uterus is transmitted to the mammæ, and causes them to secrete, yet the law of counter-irritation, or the tendency of irritation in one part of the body to act as a derivative from other parts, is not entirely overcome by the sympathy between these organs. When irritation of the uterus is decided and continuous, so as to cause a large afflux of blood towards it, the sympathy between the two organs is modified. From the connection of this irritation of the uterus with the mammæ, and from experience, Dr. Smith draws the conclusion that if the child is not applied to the breast so early as usual in labours subsequent to the first, the after-pains are considerably diminished in intensity and duration. When they are excessive, he has procured almost immediate relief by an anodyne liniment to the breast.

Malignant Disease of the Humerus.—Mr. Newnham has published in the *Provincial Medical Journal* the case of a young man, seventeen years of age, in whom the disease occurred consequent on an injury received while playing with his sisters. Mr. Newnham, who saw him at that time, considered the accident to be merely an undue stretching, or perhaps a rupture, of some of the fibres of the deltoid, and prescribed accordingly, but some months afterwards the lad was taken to see a surgeon of eminence in town, in consequence of the arm being powerless, and painful when placed in certain positions, and also because any shock communicated to the arm gave great pain. The opinion then expressed was that there was a fracture of the neck of the bone, the surgeon judging from the round orbicular projection of the deltoid, the pulling or drawing forwards and inwards of the shaft, giving a remarkable width to the joint, the perfect facility of communicated motion in all directions, the pain of overhand motions, and the patient's incapacity of performing them but by a jerk from the trunk, and never without pain, while the plainness of the fissure, the pain on pressure, and the very perceptible crepitus, left no doubt on his mind as to the existence of fracture. The limb was accordingly put upon splints, and three weeks afterwards, on a renewed examination, the surgeon came to the conclusion that the process of union had firmly commenced, and that the fissure was considerably less perceptible. With this opinion Mr. Newnham did not coincide. He was fully of opinion that there was not any fracture, and the result justified him in his belief. The disease meanwhile made progress; the splints were of necessity removed, on account of inflammatory action, which had supervened, on the subsidence of which considerable enlargement of the upper part of the bone, attended with exquisite pain, was detected. Fluctuation afterwards becoming evident, a fine lancet, was inserted, but only a few drops of intensely black blood came away. The suspicions previously entertained of the existence of malignant disease, were now confirmed by a consultation, at which amputation was decided against, from the situation and extensive connexions of the disease. The treatment employed did not seem to exert any influence on the disease; the tumor continued to increase daily, fungoid growths sprung up through the opening that had been made, and through spontaneous ulcerations, and finally, the poor fellow died, utterly worn out by pain and exhaustion. When the body was examined after death, there was a large swelling of the right shoulder and upper arm, measuring thirty-two inches in its largest circumference, from which protruded three fungoid excrescences. The tumor, which had been tense and firm, had become soft, and evidently contained much fluid matter, which was evacuated partly by puncture, and partly by being ladled out by a teacup; in this way about six pints of a thickish dark-coloured grumous matter were removed; as also three small and undefined portions of bone, not yet thoroughly decomposed. In this fluid matter was also found in a state of ulceration, the cartilaginous structure which had originally formed the covering of the head of the humerus in the glenoid cavity; no trace of the head itself was discernible. nor were there any traces of muscle; the remaining more solid mass consisted of that kind of encephaloid degeneration which is usually found in this species of malignant tumor. Two thirds of the shaft of the humerus were gone, and of the remaining third one half was in a rapidly advancing state of decomposition. Of the scapula, the acromion process had been consumed, the coracoid partially so; the first, second, and third ribs were deprived of their coverings, and were perfectly rough and scabrous. About two-thirds of the clavicle were also involved in destruction. Encephaloid tubera were found in the lungs, liver, mesenteric glands, and kidneys. The head was not examined.

Digitalis in epilepsy.—Dr. Scott states that he has been successful in arresting the coming on of an epileptic fit by giving digitalis internally in rather large doses, during the existence of the premonitory symptoms. He employs it only in the sthenic species of epilepsy.

Malignant puerperal fever.—Mr. Crowfoot states in the *Provincial Medical Journal*, when speaking of the treatment of malignant puerperal fever that one, or at the most two bleedings to faintness from the arm may be employed in the first twenty-four hours, but, as far as his experience goes, the most powerful remedies are derivative bleedings from the vulva or anus by leeches; on the same principle of derivation, a scruple dose of calomel followed if necessary by a saline aperient, will aid in cutting short the disease. The treatment otherwise should be of the most soothing description, warm stupes should be applied to the abdomen, combined doses of calomel and opium should be given to allay irritation, with some saline febrifuge, and the patient's strength should be supported by mild nourishment. As the disease advances it must be left to the best judgment of the practitioner to vary the treatment according to the prevalence of symptoms of undue action, or of exhaustion: but under the most judicious management the result will be too frequently disastrous.

Effects of uterine hæmorrhage.—Mr. Dorrington in the *Provincial Medical Journal*, strongly recommends the exhibition of large doses of opium to combat the effects produced by uterine hæmorrhage. He advises a fluid drachm of the tincture of opium to be repeated once, twice, or oftener, at intervals of five, ten, or fifteen minutes. Mr. Hunt, a friend of Mr. Dorrington's, had a successful case in which six drachms of the tincture were administered in the course of four hours, and of this four and a half drachms in the course of half an hour.

Adipocire in the stomach.—Mr. Blagden states in the *Provincial Medical Journal*, that he examined a body disinterred eighteen months after death, on suspicion of there having been poisoning by arsenic, and found the mucous membrane of the stomach of a deep chocolate colour. At the cardiac extremity it was studded with numerous white granular bodies about the size of millet seeds. There were none at the pyloric extremities, nor in any other part of the alimentary canal. At first it was thought that these bodies might be arsenic, but upon examination by the usual tests, they yielded the same result as adipocire.

Extirpation of a steatomatous tumour from the neck.—A case is recorded in the *Provincial Medical Journal*, by Sir John Fife, of a large steatomatous tumour, oval in shape, extending from the right mastoid process below the clavicle, and laterally from the median line as far back as one inch from the spine, which he extirpated successfully on the 12th of March. Sir John Fife made the lower elliptical incision first, extending from above the mastoid process to the clavicle; two inches above this the anterior and upper incision passed, the two meeting at their extremities. The posterior part of the tumour was first separated, its base being gradually dissected from the mastoid process and the sheath of the large vessels; its outer surface was then separated from the inner and posterior part of the mastoid muscle, under which the tumour extended till it occupied the space over the subclavian vein, then it was cautiously dissected and finely drawn upwards when the whole mass came away. Seven vessels required ligature. The man recovered.

Injury of the lung.—Dr. Long relates a case in the *Dublin Medical Press* of a blacksmith, who accidentally wounded himself with a piece of red-hot rod iron. The rod struck the upper part of the sternum towards the left side, and after running in an oblique direction for two inches beneath the pectoralis major, penetrated the chest, and the substance of the lung between the third and fourth ribs. The man lived nine days afterwards. The post-mortem examination exhibited the left lung in a collapsed state, the posterior part highly inflamed, and coated with coagulable lymph, the superior anterior portion reduced to a pulpy semi-purulent mass, and the portion beneath the wound firmly bound by recent pleural adhesions.

Extirpation of part of the lower jaw.—Dr. Wade records in the *Dublin Medical Press*, a case of spina ventosa of the lower jaw, in which he operated successfully. The patient, a girl of thirteen and a half years of age, had not a bad symptom after the operation.

COURSE OF CLINICAL LECTURES ON SOME IMPORTANT POINTS OF SURGERY,

Delivered at St. George's Hospital, by Sir Benjamin C. Brodie, Bart.

Lecture IV.

(Lithotomy and Lithotrity continued.)

It is my intention to day to make a few additional observations on the subject of our last lecture. I explained to you as briefly as I could the various methods which have been resorted to for the extraction of calculi from the male bladder; let me, then, partly in continuance of the subject, and partly by way of recapitulation, make some general remarks on the operations best adapted for particular cases. And, first, let me advise you to pay no attention to those who would lay down certain definite rules for the management of every case. In this way, you will hear some say all stones may be removed by crushing, whilst others will tell you it is an extremely dangerous operation, and ought never to be resorted to. The fact is, that sometimes one and sometimes the other is preferable, being dependant on a great variety of circumstances. For example:—a man comes to you with symptoms of stone; you attempt to inject the bladder, but do not succeed; why, in such case, you would never use the forceps for crushing—I say, never; unless you can inject into the bladder four or six ounces of fluid, because the instrument would seriously injure its parietes. Again, if the patient had an enlarged prostate, you would not resort to lithotrity, because he could never be able to void the fragments. Whenever there is any disease which compels the patient to have his water drawn off, the operation of lithotomy is always preferable. Sometimes the stone gets lodged in a sort of pouch behind the prostate, and these are difficult cases, even for lithotomy; how much more difficult, then, would it be, when you would have to elevate the handle of the instrument to a considerable extent, before you could lay hold of it to crush it? Again, if there are many stones in the bladder, the cutting operation is preferable; because, although the bladder may bear the operation of crushing five or six times, still it will not bear it ten or twelve times. Those cases are far the best for crushing, where the stones are small, or only of a moderate size; and in these cases you have only to pass in the forceps (first, injecting the bladder), grasp the stone, and you will crush it very easily; and if surgeons would accustom themselves to this operation, and patients would be persuaded of its great advantage in removing the stone before it acquired any considerable size, there would seldom be any cases of stone of a serious character. Besides, patients might come to you over and over again, and have small stones treated in this way, and thus they would obtain instantaneous relief. From what I have just said respecting the crushing operation, you are not to understand that I am at all opposed to lithotomy; but still, for stones of only moderate size, the former is preferable, because, with five or six times breaking the stone, you completely get rid of it, and thus avoid the danger of effusion of urine into the surrounding textures, which always occurs to a certain extent in lithotomy. When you crush the stone, the patient must be allowed completely to recover the shock of one operation before another is tried, but you must continue the operation till every fragment is extracted, otherwise it will form a nucleus for fresh deposits. The danger of this operation is trifling, compared with lithotomy, but it would be nonsense to say it is entirely free from danger.

In the operation of cutting, two or three patients will sometimes die together, and this, perhaps, suddenly, when you believe them to be doing well. Never was any practitioner more successful, or performed the operation a greater number of times, than Mr. Cheseldon, yet he retired from his profession at the age of 46, mortified at the ill-success which had followed many of his operations. Many came to him on whom he was obliged to operate—at times, no doubt, against his will. Now, it has struck me, as well as some other surgeons, that the two operations might be combined, as there is danger, in extracting a very large stone, that you will tear the prostate, and then very bad consequences generally ensue from the effusion of urine. The only question here is,—could a pair of Lithotrity forceps be made sufficiently large to grasp a very large stone? In women, stones less frequently form in the bladder; but when this does occur, the shortness of the urethra materially lessens the difficulty of extraction. The urethra of the male is very dilatable, but that of the female much more so. Mr. Thomas was sent for some time ago by a lady who, for some reasons best known to herself, had deposited a toothpick in her bladder. He introduced a piece of spongy-tent, which soon dilated the parts sufficiently to enable him to pass in a pair of forceps, and thus he extracted the tooth-pick with little difficulty. This led other persons to think stones might be extracted in this manner from the female bladder, and I tried it in the case of a lady who had stone in the bladder. I introduced the spongy-tent in the afternoon, but when I saw her in the evening, she was suffering from retention of urine, so that having drawn it off, I put in a piece of fresh spongy-tent, and left her till the morning, and then extracted the stone without difficulty, as the urethra was well dilated. (Sir Benjamin here shewed an instrument invented by Mr Weiss for dilating the female urethra.) This instrument which is made to dilate by means of a screw is far preferable to the spongy-tent, as it allows the urine to escape. But this is only adapted to stones of a certain size; those which are not very large may generally be removed by means of this dilator. The stone which I hold in my hand I removed from a lady about a year and a half since. It is principally phosphate of lime, and you will observe that it is pointed at one end; this is from its getting into the urethra, and thus as it were becoming moulded upon it. This is not an unfrequent appearance. Where this occurs, it generally dilates the inner orifice of the urethra, so that you will be able to feel the stone without passing the instrument into the bladder, and then it is easily extracted. Whenever you can perform the operation without cutting, it is better to do so. You will remind me that the cutting operation is less painful.—So it is. And sooner done—So it is; but when you cut a woman for the removal of a large stone, she has incontinence of urine ever afterwards. I need hardly say how distressing this is, more especially to one who has been accustomed to society; and I know a case of a lady who is so circumstanced, and notwithstanding the use of a great deal of linen as a precaution, she is always in fear lest she should be detected by the escape of some of the urine. Nothing can be more distressing.

There is a method which is better than freely cutting the urethra, and it is one which I have performed several times with success; it was first mentioned to me by Mr. Hodgson, of Birmingham, and is a combination of dilatation and cutting. Here you merely divide the lining membrane of the urethra, without cutting the surrounding parts, which are very dilatable. You employ a *bistoire cachée*, which is not opened more than one-tenth of an inch; when you have introduced it, press it so that the blade will project against the upper part of the meatus,—this is of importance always to cut the upper part of the urethra. It is true that here also you will get incontinence, but it will only be partial. Of course you must use the dilator in this operation. I operated in this way on some patients in this Hospital, and Mr. Chapel has seen two of them since, and they were quite well; the incontinence only continued about three months after the operation. I should mention that the chief obstruction is at the external orifice. This operation is more easily performed in adults than in young children; the urethra of a child is more sensible, and much more difficult to dilate. Women are subject to chronic inflammation of the bladder, which causes a large secretion of ropy mucus with deposits of phosphate of lime; first, this is thrown down in separate parcels, but the mucus soon causes them to agglutinate, and thus a complete stone is formed. In men you may pick out these pieces with the forceps, but it is more difficult in women; because, in men you can inject ℥v or ℥vj of water into the bladder; but in women, under these circumstances, it will frequently hold none at all. In the male you may inject a quantity of fluid, and then hold the urethra to prevent its escape,—but this cannot be done in the female. This is why the treatment of stone is more difficult in women than in men. Some years ago I endeavoured to remove stone by decomposing it in the bladder; this I effected by injecting dilute nitric acid through a gold catheter, and then, drawing off the fluid, I precipitated the calcareous matter from the acid solution by strong ammonia; and it is astonishing how much may be removed in this way. In these experiments I allowed the acids to remain in the bladder about a quarter of an hour. The manner in which the triple compound—the fusible calculus—is decomposed by nitric acid needs no explanation; but I merely mention this as a matter of curiosity, as I do not think it can be practically employed.

COURSE OF LECTURES ON THE THEORY AND PRACTICE OF MEDICINE.

Delivered by C. J. B. Williams, M.D., F.R.S., Professor of the Practice of Medicine, and of Clinical Medicine, at University College.

Functional Diseases of the Heart. (continued.)—We were considering, yesterday, some of the functional diseases of the heart, beginning with excessive or inordinate action,—or palpitation, as it is properly called. Palpitation is divisible into different kinds, which it is important to distinguish in a practical point of view. Sometimes it may be accompanied by plethora or a tendency to inflammatory action, and sometimes by excessive nervous irritability, or a perfect state of anemia. The treatment of these conditions is to a certain degree opposite. Sedative medicines may be useful for both; but in the one class, the antiphlogistic or depletory measures are necessary to ensure permanent relief—and in the other, remedies of a tonic character. Now, to come to the consideration of the other variety of functional disease, —*irregular* and *defective* action; for these may be very well classed together, as where the action is irregular, it is usually defective too. In defective action, the impulse of the heart is weak, and there is a general debility pervading the whole system. Hence, after long continued illness, after very great exertion, or a state of bodily fatigue, the impulse of the heart is often weak to an extreme degree; but where the heart is especially weak in a disproportionate degree to the rest of the system, we have constituted the condition now under consideration—a state which may go on to the production of cerebral syncope, and an entire failure of the action of the heart. The pulse may be in force or strength proportionate to the heart's contractions, but different in frequency, becoming extremely slow—reduced, perhaps, to thirty in a minute, instead of seventy; or else there is a failure both in frequency and force at the same time. The results are syncope or fainting—a faintness which is sometimes described as being attended with nausea, sickness, and giddiness; surrounding objects appear indistinct; the lips quiver and loose their colour; and the teeth sometimes chatter; at other times, there are convulsions, and a loss of consciousness for a longer or shorter time. This *defectio animi* sometimes takes place where the action of the heart is too violent. After a time the patient recovers; the heart regains its energy; and there are various symptoms of reaction—a copious perspiration breaks out in various parts of the body, and sometimes cerebral excitement is produced. During the paroxysm the pulse is very weak, often imperceptible, and the sounds of the heart are feeble and indistinct; the first sound is quite changed, and the second sound is hardly heard at all. The causes of this defective action of the heart are various: sedative poisons, as tobacco and digitalis, will produce it; mental emotions of a sudden and severe nature will sometimes cause the patient to swoon away: but this exhibits more of the character of cerebral syncope, or loss of consciousness. Sudden and severe injuries to the nervous system in various parts of the body, the crushing of a limb, or a severe blow on the epigastrium, will produce the same thing.

Change of posture in weak subjects, when the heart's action is naturally weak, will also bring it on; and there is no doubt but that, in many instances, what is called cerebral syncope—mere loss of consciousness—may precede the suspension of the heart's action. Change of posture and loss of blood are other causes of general syncope and failure in the heart's action. In cases where animals bleed to death, the functions of the nervous system seem to cease before the action of the heart. In some cases, after death, the heart is found beating tumultuously after respiration has ceased. There is no doubt that the pulse becomes extremely feeble and hurried, or intermitting, when large quantities of blood are withdrawn; and this is observed more particularly when the blood is drawn while the body is in a horizontal posture, so as to affect the brain less than the heart. It is likewise a mode of fatal termination in disease of the heart, where the structure of this organ is defective. Sometimes, the action of the heart is violent, and by-and-bye this ceases, and it becomes more and more feeble, and is sometimes altogether suspended—but the arteries are found after death full of blood. There are two circumstances, in reference to this condition, not sufficiently noticed. In some cases of sudden death, the heart is found full of blood, dilated and distended by the mass of fluid, which it has not the power to expel; and in other cases, it is contracted almost to obliteration of the cavities. Here is a cessation of the heart's action, but it has been preceded by violent spasm. In some cases, where persons die suddenly from taking a quantity of spirituous liquors, particularly on an empty stomach, there is an extreme contraction of the heart. Sometimes, connected with disease of the heart, that organ is not only found full of blood, but there are coagula in it, having the appearance of fibrin, which seem to have been formed before death. The syncope induced by such a state would necessarily be fatal. But the action of the heart may be weak without actual syncope. Where there has been a low diet, long abstinence, or fatigue, lengthened illness—especially illness accompanied by vascular excitement, as febrile diseases—here the heart has been acting too strongly for weeks together, and consequently exhibits extreme weakness. In not a few instances, the heart is weak constitutionally, from defect either in its size or tone. Some persons are born with a weak heart which seems incompetent to carry on the circulation with activity; such persons exhibit in a high degree the signs of inordinate action. Sometimes, this occurs as the result of some organic change, as in the case of softening of the heart.

The *symptoms of cerebral syncope* are: weakness of the pulse with cold feet; the extremities habitually cold; pains in the back and limbs; shortness of breath; faintness on exertion; œdema of the feet; sick headaches; determination of blood to the head; and sometimes even convulsive paroxysms, together with a general failure of the functions. As a general rule, in these cases, the circulation is weak, and the heart is in a state of palpitation. Many cases supposed to be disease of the heart, and inordinate action of this organ, are really of the above description,—cases of great weakness of the heart, and sometimes palpitation, with accelerated action, flushing of the face, and determination of blood to the head. The weak heart tries to recover its power;—it is oppressed by the weight of the blood which it cannot repel; there is irritation, and a degree of excitement is often complained of. Now, this condition is very important; because, instead of using sedatives alone, the remedies necessary are those which restore and support the heart's action. These palpitations are not constant: they are not properly speaking contractions; they seem to consist of a superficial spasmodic action, or quivering, of the heart, rather than any definite contraction; while, at the same time, the distant parts of the circulation are found to be extremely weak. This is frequently exhibited in anemic subjects, and also in young persons who grow fast,—the process of growth being more active than the power of the heart to bring up the supply of blood to these parts. Young boys and girls are distressed with palpitation of the heart, and at the same time the extremities are cold, without there being any positive disease. Again, persons who suddenly grow fat and corpulent, suffer from palpitation from a similar cause. Sometimes, too, the heart gets fat, without increasing at all in strength. Now these cases of defective action—not only actual disease of the heart, but other conditions in which the heart's weakness forms a permanent feature—require always to be carefully distinguished in the treatment.

Treatment of functional disease of the heart.—The treatment of the disease may be divided into the use of temporary and permanent remedies. The temporary remedies are those that are used for overcoming the fit of syncope:—stimulants of various kinds—ammonia, brandy, wine, ether, volatile and essential oils; stimulants also applied externally, as, for instance, strong ammonia to the nostrils; dashing water in the face, which especially restores the heart's action; plunging the body into cold water is also effective in restoring from syncope. It may be brought on by things taken into the stomach; and in these cases it may be desirable to employ the stomach-pump to excite vomiting. For the continued treatment—the restoration of the strength of the heart—tonics must be employed. Ferruginous preparations are the best; next to them, bark and its preparations: quinine particularly, especially when combined with mineral acids. Medicinal tonics are of great efficacy, in their place; but pure country air, and cold bathing, sponging the body with cold water—cold salt water, and the shower bath, are among the most effectual means of restoring permanently the power of the heart. There is a variety of defective action that ought to be noticed; it is the disease called *angina pectoris*, or *syncope anginosa*, which usually consists of defective action, or diminished tonicity of the heart, with increased sensibility of the nerves connected with it; causing sometimes very distressing symptoms of faintness, and a feeling of oppression, combined with severe pain of a stabbing or shooting character, extending from the region of the heart to the sternum, sometimes completely across the chest, and upwards to the left shoulder, or even along the arm and the elbow, to the little finger, and sometimes to the left side of the face. These paroxysms are caused by exertion, mental excitement, or irregularities of diet. Sometimes, they are observed in patients who have exhibited other forms of neuralgic disease—as tic-douloureux. I have frequently known a person to have *angina pectoris* after spasmodic asthma. In all cases, however, it does not accompany this disease. But it will, perhaps, occur with disease of the left side of the heart, and at the orifice of the aorta; sometimes with inflammatory, sometimes with congestive, and at other times with structural, lesions. These symptoms may occur in connexion with defective action, or with inordinate action. It is supposed by some to be dependent on ossification of the coronary arteries. I have seen cases, in which patients have exhibited *angina pectoris* in a severe form connected with these lesions, particularly disease of the aortic valves; and sometimes disease of the substance of the heart itself. The treatment of this disease varies, according to the condition that accompanies it. When it is merely functional—merely neuralgic—it is often relieved by some of the remedies used in neuralgic diseases: the preparations of iron (in anemic cases); the preparations of arsenic, cautiously increased in quantity, and quinine. For the immediate relief of the pain, *belladonna* ointment, *veratria*, and *hydrocyanic acid*; this last is a most powerful remedy: but it is not capable of removing the tendency to a return, though it relieves the pain and the severity of the paroxysm. Where there is anything inflammatory—any symptoms of inflammation of the lining membrane of the heart or arteries—then an antiphlogistic treatment must be used. Inflammatory diseases of the heart are divided into those which affect the different structures of the heart;—the pericardium, both the sac and that which invests the heart itself; the endocardium or membrane lining the cavities of the heart; and lastly, the muscular substance of the heart itself. Inflammation of the pericardium is a serious affection, as it is accompanied by a deposition of lymph or serum, as well as by a change of its vital properties. The symptoms are attended by functional derangement of the heart. They are generally somewhat obscure; sometimes they begin with pain below the left breast, in the region of the heart, where the heart's motion is greatest; on any increased excitement, they are most apt to be felt. The pain sometimes shoots to the back, the sternum, and to the left arm. Sometimes it is accompanied by tenderness on pressure between the fourth, fifth, and sixth ribs or their cartilages; or sometimes, the tenderness is perceptible by pressure more towards the epigastrium. The presence of pain is uncertain, and it is even more frequently absent here than in pleurisy. Sometimes there is violent action of the heart, so that the patient complains of palpitation; there is also dyspnœa to such a degree, as to oblige him to sit up; and when this occurs, the features often exhibit a peculiar expression of anxiety, which is very remarkable in cases of severe pericarditis. The pulse varies very greatly; generally, it is quick and strong from the beginning, and there is a great amount of general fever; but in some cases, it begins with a pulse, slow and intermitting, and increasing in force and frequency afterwards. Sometimes the local symptoms are disguised; but delirium, spasmodic twitchings in various parts, and stupor, occur in not a few instances, at the commencement. Some patients have often been, and still are, when auscultation is neglected, treated for phrenitis, where there may be disease of the pericardium only. This arises from the violence of the action of the heart, and the manner in which the cerebral vessels are apt to suffer from this violent action. There is generally a previous susceptibility of the nervous system in these cases. Sometimes vomiting occurs as an early symptom of pericarditis; and, in not a few cases, a peculiar alteration of the voice, a sort of hoarseness, aphonia, and dysphagia or difficulty of swallowing. Remember, with regard to the delirium, that some of the symptoms of phrenitis, or inflammation of the brain, may be taken for inflammation of the pericardium. Pericarditis cannot prevail to a dangerous extent without producing very characteristic physical signs. These signs are, increased loudness of the first sound of the heart and abruptness of the impulse. Sometimes there is irregularity; but this is less frequent than in the *after*-stages. For the first twenty-four or forty-eight hours, there may be merely increased action, although the symptoms may indicate inflammation; and these cases will be relieved altogether by blood-letting or antiphlogistic remedies. If it last longer than this, other symptoms may occur from the altered state of the parts. Dulness on percussion, which is an early symptom, perhaps remains, and this depends on the heart becoming enlarged, and not contracting so completely on its contents. After awhile, there arise symptoms depending on effusion of serum and of lymph. These symptoms are very characteristic; we have the *friction*-sound connected with the action of the heart, which may be first of all a mere rustling noise, like the rustling of two pieces or folds of silk; but as it goes on, it becomes rougher or creaking, more characteristic of the glutinous nature of the parts, or of the matter secreted, as if they stuck together, not passing over each other without resistance; and, in its highest degree, this sound is exhibited by the *leather-creak* friction like the rubbing of new leather, or the creaking of a new saddle, to which Laënnec compared it. This sound may occur at various points of the heart while in motion; indeed it varies very much, and I do not know that any precise rule can be laid down. But there is a character in which it is important to notice, because this distinguishes it from other murmurs; viz., that when it is extensive, it occupies the whole period of the heart's motions, and even exists while the heart is at rest. In the first place, the action is accelerated and there is scarcely any interval at all; and it is just possible that the contraction or pressure upon the surface of the ventricles produces the friction sound. It has often been mistaken for other sounds, even by eminent persons, when using the stethoscope, and it has thus been passed over without due notice. When it occurs to a great

egree, it disguises the natural sounds in a very
arious manner. The situation of it is generally
n the mid-sternum, though it varies in different
ases; in some being heard in front of the chest,
nd in others at the back. Dr. Addison described
case in which it occurred at the posterior surface
f the heart. It is certainly caused by the effu-
ion of lymph, either over the surface of the heart,
r under the form of small spots. It is remark-
ble what a small quantity of lymph is sufficient
o produce it. When the sounds are thus muffled
t the heart, they may be heard in some degree in
he large arteries in the neck; so that you hear
othing but the friction-sounds in the region of
he heart, but in the arteries of the neck you have
ot the double sound. But the friction sound does
ot last long; either the disease is removed, and
he lymph absorbed; or else adhesion takes place,
r serum is effused which separates the surfaces
rom each other, so that their friction is prevented.
Now, this leads to the consideration of a result of
ericarditis—effusion of serum into the pericar-
ium, and this may be to such an extent as to
revent altogether the friction-sound taking place.
The first sign of this condition is an increased dul-
ess; but we often find an increase of dulness
efore any effusion takes place. There is a de-
rease of the impulse with an increase of the liquid
ffusion; a layer is interposed between the walls
f the chest and the substance of the heart, and
his organ no longer strikes against the chest
ith the same force. When the quantity of liquid
s small, the sounds are rendered musical; while
hey become more *clangorous*, or more drum-like,
t the same time that the impulse is diminished,
nd the dulness on percussion increased.

CLINICAL LECTURES ON MEDICINE;

Delivered at the GREAT CHARITY HOSPITAL, Berlin, by Dr. SCHONLEIN, first Physician to the King of Prussia, founder of the Natural System of Medicine in Germany, and Professor of Pathology and Therapeutics in the University of Berlin.

Prepared from the German expressly for "The Medical Times."

LECTURE X.

Hypertrophy and dilatation of the left side of the heart, with disease of the valve of the aorta.—Rheumatismus articularis.—Protuberance of the heart.—Simple crisis through the skin.—Narcotic effects of digitalis.—Increase of the phenomena of the heart.—Urinary crisis.—Delirium.—Connexion of it with the disease of the heart.

June 28, 1841.—Frederic Adlung, tailor, 25 years of age. The present case presents a rare complication of various diseases. We shall first strictly separate and analyse the individual phenomena, and then proceed to investigate the connexion which they have to each other. The first remarkable circumstance presenting itself to our notice, consists in the phenomena of the central organ of the vascular system. The patient, since his 12th year, has complained of an affection of the heart, which increased from year to year, and yet his determination to seek relief in this hospital was not caused by this affection, but by another disease, which masked to a great extent the original complaint. It is, however, the affection of the heart which first of all claims our attention. The pulsation of the carotids, and the peculiar purring sound connected with them, especially of the right carotid, strikes us at first view; on examining the left side, we may distinctly see that the pulsation extends over a large surface; percussion gives us a dull sound over the region of the heart, extending upwards as far as the third rib, and to the right; the phenomena on auscultation correspond with this; consequently, we may conclude that the heart is enlarged, and most probably in a state of hypertrophy. On more minutely examining the sounds of the heart by the stethoscope, we find an increased impulse, especially of the left ventricle; and corresponding with this—the sounds are more distinct on the left side of the sternum; whilst a little higher up, they are marked by an *after*-sound resembling the noise of a rasp, or file. These facts prove that hypertrophy and dilatation of the left side of the heart, with disease of the valvular apparatus of the aorta, are existing. The irregularity of the radial pulse, which is often interrupted, is also symptomatic of this affection. Other phenomena were also exhibited by the patient; namely, those of acute rheumatism, especially in the wrists. We had, indeed, previously examined him on that point, but he asserted that he had never suffered from rheumatism before. Besides this, there is a degree of febrile disturbance accompanying the articular rheumatism, which, however, to judge from the weak pulse (92 per minute), the dry tongue, the clammy, colliquative, perspirations, &c., is of a low character.

Prescription: ℞. Infus. herbæ digitalis (℈j.), ℥jv.; mucil salep, ʒij.; aq. laurocer, ʒij.; syrup. simpl. ℥j. mix. A tablespoonful to be taken every two hours. The affected joints to be enveloped in tow.

June 29.—In the right carotid, we perceive a highly-developed, shrill, and trembling sound, both on applying the hand as well as the ear; there is nothing of the kind perceptible in the other vessels; it is remarkable that this phenomenon frequently exhibits itself only in a single artery at the same time. No change can be expected in the old-standing affection of the heart; and such will only be possible, in as much as the rheumatism, recently added to the complaints of the sufferer, may act upon them. If some new morbid action, combined with fever, in which the vascular system plays a predominant part, be set up in an individual whose heart is already diseased, then it is evident that changes must take place in the activity of this organ; it still remains, however, to be determined in what manner an inflammation, combined with fever, effects these changes in an already degenerated heart. The uncertainty of the diagnosis of these diseases, is indeed an obstacle to their cure, since many old phenomena are totally disguised by new ones. We have now to revert to a very important feature, namely: the changes in the rheumatic affection, and in the fever combined with it. The pains of the wrists have decreased; pulse 96 per minute, rather shrill and trembling; the tongue dry and smooth; the urine red and very acid; the skin perspiring. We shall continue yesterday's prescription, and add to the beverage—sodæ carbonas.

30.—There is, in this instance, a decided change in the shape of the anterior wall of the thorax, corresponding with the situation of the heart (a condition frequently met with in children, when attacked by the above disease), that is to say, an indication of a *protuberance of the heart*. From the increased size of the heart, and the increasing force with which it beats against the walls of the thorax, the latter (provided the ribs still possess their cartilaginous quality) become protruded, which is always a favourable occurrence for the patient; for, as the yielding power of the ribs ceases after their ossification in advanced age, and as the heart can no longer extend itself in that direction, it presses the lung backwards and upwards, to which the injurious influence on respiration may be partially attributed. I have repeatedly found that children in whom this favourable change of the thorax had taken place, even when the complaint was very considerable, were much better than adults in whom the complaint had not yet advanced to the same degree, but where this change of form was not accomplished. In this instance, we find the bulging between the sixth and seventh ribs.*

The symptoms of the old complaint of the heart are almost the same; those, however, of the recent rheumatism and fever are very much ameliorated; but we have to notice another phenomenon in the heart, namely: that the *after*-sound of the valve of the aorta is much more audible; the patient has taken a decoction of digitalis, and bicarbonate of soda as a beverage, with a view to neutralise the morbid product, and to remove it by the urine; but, up to the present moment, there is no change in the urinary secretion; it is still dark, and very acid.

July 1.—The shrill, trembling, sound in the arteries is still perceptible. The difficulty of breathing, as well as the palpitation of the heart, have diminished; the local phenomena are the same. The fever has decreased considerably—pulse 80 per minute; but no urinary crisis has yet taken place: a circumstance which must always be considered as unfavorable in affections of the heart, since a progress of the disease is always to be apprehended, so long as the urinary crisis is wanting. The patient has now for several days taken the soda; but the urine is still very acid, thus showing an abundant secretion of uric acid!

2.—The phenomena of the heart have undergone no alteration; the joints remain moveable and free; but the urinary crisis is still wanting, notwithstanding all the remedies that have been employed to bring it about. A slight exacerbation exhibited itself last night. A series of new phenomena, however, have taken place since yesterday: the pulsation of the aorta is distinctly audible along the median line of the body, in the *regio epigastrica*, and, almost synchronal with it, towards the right, an undulating movement, which is probably seated in the lower vena cava; pressure below the ensiform cartilage oppresses the patient; vomiting has also taken place, which, however, we may attribute to the use of the soda, which is disagreeable to the patient. It shall, therefore, be discontinued.

3.—No material changes are to be enumerated in reference to the phenomena belonging to the disease itself: the joints remain free; the cardiac symptoms are the same; vomiting has not taken place since yesterday; the painfulness over the region of the liver, and the undulating movement, still, however, exist. The tongue is moist; the skin humid, but no clammy, colliquative, perspirations; the urine, however, continues exactly as before, being high-coloured and saturated with uric acid, but without sediment; this was the less to be wondered at, as we had discontinued the soda on account of the inclination to vomiting. A new phenomenon has exhibited itself since yesterday, *a*—change in the rhythm of the pulse, both in the heart and arteries, which has not only decreased in frequency to 60 per minute, but has also acquired a degree of irregularity. We have now to ask ourselves: is this a medicinal, or a morbid symptom? It might be the latter, for an affection of the aortic valves is, doubtless, existing. The decision of this question certainly might be attended with some difficulty; but if we consider that the phenomena of the valvular affection were previously existing, and have experienced no increase since yesterday, we may, even on this account, very fairly conclude that the change in the frequency and succession of the pulse, is not owing to the disease. Other signs of the action of digitalis, however, present themselves; and we are now inclined to attribute the vomiting which took place yesterday to the digitalis, and not, as we then thought, to the soda. Sufficient reasons exist at all events for discontinuing the digitalis; instead of which we shall now prescribe for the patient: ℞. Nitri gr. iij, ammonii muriat. gr. ij, magnes. carb. gr. viij, sacchari albi gr. x. —Mix. To be taken every two hours.

5.—Our attention to-day was immediately arrested by the change in the urine; it is discharged in a larger quantity, and exhibits a different quality: it has become clearer, but is clouded by mucus; it certainly still has an acid reaction, but not so much so as before; this is a very favourable

---

* The very reverse of this malformation of the thorax sometimes takes place, namely: a contraction of the lower part of the thorax, and especially towards the ensiform cartilage; a contraction which is intimately dependent on certain occupations, wherein this part is continually pressed against some solid substance, for instance in shoemakers, saddlers, &c. &c. Schönlein directs attention to the injurious influence of this malformation, in the following words, in the case of another patient:—

"We, in this instance, find the injurious effect of the occupation to which the patient belongs (he is a shoemaker), namely: a forcing inwards of the *processus ensiformis* of the sternum, by which the movement of the heart is impeded; this latter organ is also affected in consequence of rheumatic disease. If this process is of great length, then the stomach itself may become deranged in its functions, especially after digestion. This frequently gives rise to abdominal affections, diseases of the stomach, hypochondriasis," &c. &c.

symptom. The rhythm of the heart's pulsation has again become uniform; the former frequency (80 per minute) has also returned; the phenomena of the heart, with regard to the extension of the pulsation, and the anomalous sounds, as also the shrill, trembling, noise of the carotid, are the same; a more favorable change has now taken place in respect to the phenomena of the acute rheumatism. We may not only enumerate, that the joints remain free, and that the anomalous sounds of the heart are diminished; but also that the urine has experienced a favorable change, inasmuch as the desired secretion has commenced, although under a different form. For, notwithstanding that the process of secretion in this disease *generally* takes place in the form of a red, powder-like, urinary sediment; it is also not unfrequently the case, that the secretion exhibits itself as a yellowish sediment, which, in many instances, apparently consists of a tough mucus; on a more minute examination, however, it is proved to consist of uric acid and ammonia, deficient merely in the admixture of colouring matter. The apparently mucous secretion in the urine should, therefore, not mislead us. Finally, we have to speak of the medicinal symptoms, the inclination to vomit, and, above all, the disturbance in the rhythm of the movement of the heart, as also the change in the frequency of the pulse; they have all disappeared since the discontinuance of the digitalis. It formed a particularly unfavorable feature in this case, that, in addition to the great organic malformation of the heart, rheumatism, and *an attendant low fever*, were developed; and it was this circumstance, together with the complicated nature of the affection of the heart, that rendered the treatment difficult. We have therefore, now, the more reason to congratulate ourselves on the almost entire disappearance of the fever.

9.—The phenomena of the rheumatism of the joints, with which the wrists particularly had been attacked, no longer exhibit themselves; but an increase of the symptoms of the heart has taken place since last night, and more particularly of the valvular apparatus. There can be no doubt that the re-appearance of inflammation in these parts, is owing to the rheumatic action, which is the more manifest, as the slight secretions in the urine we noticed last, have again disappeared. The urine now exhibits the very opposite qualities: it is discharged in small quantities; has a dark colour, and an exceedingly acid reaction. The increase in the phenomena of the heart manifests itself as follows. Sensation of oppression, or heaviness, in the region of the heart; uneasiness on pressure; the patient finds no relief in any position in which he may put himself, owing to which he spent a very sleepless and restless night; the pulsation is wide spread; the impulse increased; and the anomalous sounds of the heart at the former locality, are, above all, again very distinct; there is further an inequality in the rhythm of the heart's movement,—a *pulsus inæqualis*, which we can now no longer attribute to the effect of digitalis; but which we must consider as a morbid symptom in connection with the other phenomena. Stokes has directed attention to the fact, that an uneven pulse (both with regard to regularity as well as force) is a more dangerous symptom in diseases of the heart than an interrupted, suspended one. My own experience also enables me to bear testimony to this doctrine. To the already enumerated phenomena, we have now further to add an increase in the fever: the skin is constricted; the urine diminished in quantity, and of a red colour; a considerable increase in the frequency of the pulse has also taken place during the last 24 hours (from 70 to 98 per minute); its character is also changed; it is uneven, and exhibits a peculiar trembling, or vibration, at the radial as well as at the carotid artery. All these facts sufficiently prove the renewal of the rheumatic inflammation, which, however, is limited to the internal membrane of the heart, covering the valvular apparatus.

Prescription.—Topical abstractions of blood, by means of cupping-glasses; a blister on the cardiac region; and an infusion of digitalis (gr. vj. to ℥v.) with ℥j of nitre, for internal use.

July 10.—The sounds of the heart are the same in intensity, but no longer extend over the same space; the pulse is now quite regular; there is no impediment in the respiration; the urine, however, does not yet exhibit any deposit, and remains in the same state as yesterday.

12.—The increase, which we had to notice in the phenomena of the heart, in consequence of the rheumatic inflammation, has again pretty nearly disappeared. As this amelioration has taken place simultaneously with the changes in the urine, which we have before been so anxiously and fruitlessly wishing for, we must consider it as a very favourable symptom; the urine not only exhibits a cloudiness, but also a red sediment. The pulse is regular, its frequency diminished to 84 per minute: no longer manifesting that shrill vibratory movement, although this phenomenon is still observable in the carotid. The oppression of the chest has also disappeared.

The medicine prescribed to be continued:—

13.—We yesterday noticed the long-desired sediment in the urine, which to-day, however, has again disappeared; but the urine is different from what it was before: being no longer so red, dark, nor acid, although not yet normal in point of quality and quantity. The real symptoms of the disease maintain themselves at the same degree which they possessed before the appearance of the rheumatic exacerbations: the hypertrophy and dilatation of the left ventricle, together with the affection of the aortic valve, remain the same; so that we may now consider the rheumatic action to have terminated, and that we have only to deal with the organic degeneration of the heart. Our treatment here will be attended by its difficulties and limits; for, from the long-standing of the disease, we shall neither be able to remove the affection of the valvular apparatus, nor to reduce the enlarged heart to its normal volume. As the effect of the digitalis has, moreover, commenced to manifest itself on the pulse, we shall now discontinue this medicine; and I take this opportunity of again reminding you, that great caution is to be observed in the employment of digitalis in diseases of the heart. (See preceding case).

July 15th.—Delirium has exhibited itself in our patient since last night; he can only be kept in bed with difficulty, screams violently, and does not know where he is. The connexion of this mental disturbance with diseases of the heart is still a matter of mystery; some have gone so far as to assert that all mental diseases are created by diseases of the heart; but, as a general rule, this cannot be considered as correct.

In some cases, a deceitful calm takes place in the cardiac symptoms, on the development of the cerebral affection; the tormenting phenomena of the heart are no longer felt as before; the nights are at times calm, and are no longer disturbed by asthmatic attacks; the surrounding friends are generally glad to see this, but the signification of this calm is but too well known to the physician.

Prescription.—R. Aq. Laurocerasi ℥ij, tinct. opii benzoic, ℥iss.—Mix. 14 drops to be taken every two hours. Baths with spiritus camphoratus and saponatus, and clysters of assafœtida and valerian.

16.—We left the patient yesterday in an alarming condition, threatening a speedy termination. His state to-day is less menacing, but we should do very wrong to indulge in sanguine expectations; for the phenomena of the heart continue in the same degree; the unevenness and interruption of the pulsations of the heart and arteries are likewise as they were before;—only a part of the more recently developed phenomena have somewhat diminished. Yesterday we found, for the first time, a disturbance in the mental functions of the patient, in consequence of which the immediate symptoms of the disease of the heart were somewhat masked; this is a real advantage to such patients, for they, in a great measure, get rid of their tortures, as soon as the mental disturbance exhibits itself; it may frequently be seen that patients, who for weeks had been unable to lie down, seek their bed on the appearance of these phenomena, and are capable of reposing quietly. Our patient no longer lies in that elevated position, which he formerly adopted, and has ceased to make any complaints; the consciousness of his physical sufferings is gone. Symptoms of irritation in the muscular system, approaching to convulsions, are said to have occasionally exhibited themselves during sleep. In point of fact, these cerebral symptoms constitute a frequent complication of the disease; the asthmatic attacks, especially *angina pectoris*, form, so to speak, the intermediate link; the mental disturbance takes place when this boundary is passed, and, therefore, it is only to be considered as a higher development of the affection of the heart.*

---

* We may here enumerate another, not uncommon, consequence of diseases of the heart, especially attending hypertrophy and ossification of the aortic valves;—*Apoplexia cerebri.*—In the case of the shoemaker mentioned before, *Schonlein* expresses himself respecting it as follows:—"A tolerably abundant epistaxis has here taken place, which, in states like that before us, acts much more favourably than any artificial abstraction of blood; it shows, however, the existence of another fact, which certainly has been observed by authors, but has not been taken much account of—namely: the circumstance that individuals, who are suffering from diseases of the heart, have a great tendency to effusion of blood about the head, by which a fatal result may be readily induced, even when the affection of the heart is not at an advanced stage. In this case, where the bleeding took an outward direction, it had a beneficial influence; but it is certain to have a destructive effect on the individual, when the bleeding takes place within the cavity of the skull. The possibility, therefore, of *apoplexia cerebralis* taking place, should always be taken into consideration when treating individuals afflicted with disease of the heart, and particularly those who are suffering from hypertrophy of the left ventricle; for persons, who might have lived for a long time with the simple affection of the heart, are frequently destroyed by this secondary condition. Everything having an exciting tendency, whether physically or mentally, should be carefully avoided with such individuals, and the intestines and kidneys ought to be freely acted upon."

Schonlein also gave utterance to the following opinion, in the case of another patient suffering from *rheumatismus articularis*:—

"We have here another individual suffering from the same disease as his neighbour; but the morbid process in this individual has assumed quite a different form to that which it possesses in the other case; you see here a very illustrative specimen of the modification induced in the morbid action by the individuality of the patient. The affection of the joints is very moderate in this instance, but yet bearing the character of *rheumatismus vagus.* As long as this mutability of the phenomena takes place in the external parts, I do not exactly consider it of very great importance; but I always prefer the *rheumatismus fixus*, because in the former we can never be safe that some slight disturbance may not lead to a sudden attack of internal parts. The rapidity with which rheumatism transplants itself from one locality to another, forms frequently a remarkable feature in this disease. Thus, for instance, I have a very lively recollection of the case of a journeyman joiner, where the wrists had been very much swollen, reddened, and painful; the swelling subsided; the redness and painfulness disappeared in a few minutes, and the eye was attacked in the most intense degree directly afterwards. In a few hours subsequent to this, we again witnessed the disappearance of the swelling and redness of the eye, and the development of *carditis;* this affection, in like manner, yielded again, and transplanted itself upon the articulations. Three or four of such sudden transpositions took place, within the 24 hours. At last the affection made a stand at the heart, and terminated by producing hypertrophy and dilatation of this organ, and disease of the valves. The lungs and the heart are intact in the above instance, but another phenomenon exhibited itself, which not so frequently occurs in simple *rheumatismus articularis*, and which deserves our attention. The patient, the day before yesterday, had a bleeding from the nose, which was repeated last night, simultaneously with a febrile exacerbation, and preceded by symptoms of congestion. This bleed

19.—The alarming stage of the crisis is now past. We were obliged to confine ourselves to sedative remedies while the patient was in that alarming state, as the organic affection of the heart, on which these symptoms depended, is beyond the reach of medicine. A calm, quiet, state took place after these remedies, and he enjoyed a refreshing sleep, as well in the course of yesterday as to-day. Thus the patient now feels himself very comfortable and comparatively well, and expresses himself to that effect. However, we can entertain but partial hopes; for, on merely glancing at the cardiac region, and still more on applying the hand or stethoscope to this part, we become very well aware of the tendency which the remainder of the phenomena really have; it is exactly the same here as it is with the attacks of *angina pectoris;* these pass by, but the cause of the paroxysms remains the same. The fate of the patient may therefore be clearly and distinctly diagnosed. The aggravating feature, in this case, consisted in its complication with the rheumatic affection, which attacked the most susceptible organ; on the other hand, the circumstance, which neutralised its effects, consisted in the healthy state of the cartilages of the ribs, which had not yet become ossified, and which consequently allowed of the bulging out of the heart, as a result of its enlargement and hypertrophy.

As the patient required greater quietness and a cooler temperature, he was removed from the clinical ward; his state remained tolerable; and he thus left the hospital on the 24th of August.

PARISIAN INTELLIGENCE.

(FROM OUR OWN CORRESPONDENT.)

Paris, April 25, 1844.

On the Utility of Diagnosis in Medicine, and the best method to be adopted in order to establish a certain one: by Professor Rostan—*Introductory Lecture.*—In the actual state of medical knowledge, considering the exactitude which anatomy, physiology, and pathology have reached, it may appear extraordinary to you that I should have deemed it necessary to point out the utility of diagnosis in medicine. But you will be still more astonished when I inform you that it is owing to the objections which have been raised against this important branch, that I have decided on making it the subject of the introductory lecture to my clinical course this session. Twenty years ago, it was not considered necessary for a physician to be able to establish a diagnosis. All diseases were then classed under one head—that of *irritation;* and though each organ might become more or less the seat of irritation, still the type and most frequent complication was that affecting the stomach; it was, therefore, unnecessary, according to the advocates of this doctrine, to establish a separate diagnosis in each case, since, in the immense majority of cases, gastritis formed the disease. Thus, not only have this physiological school retarded the study of diagnostics, but even we find Laënnec, that eminent observer, one of the most ardent promoters and founders of the modern school, to whom posterity owes the discovery of auscultation,—we find Laënnec refusing to acknowledge in many cases the utility of the diagnosis. The following are the words he one day addressed to me himself:—"Diagnosis being the result of an operation of the mind, may be erroneous; consequently it is a bad basis, and one on which we ought not to rely; the prognosis is far better." Again, a distinguished surgeon said to me only a few days since:—"Is there a diagnosis in medicine? In surgical cases it is useful, but, in medical, of what service? Can you not establish the treatment from the general phenomena? Can you not, from the state of the pulse, the heat of the body, &c., ascertain positively the existence of an inflammation?—but what matters it whether it has attacked the pleura, the lung, the heart, or any other organ? You know that inflammation exists, the treatment is, therefore, indicated. The local diagnosis is of no use whatever, as it throws no further light on the subject."

These objections are, it must be confessed, to a certain degree, exact; but though the general symptoms ought never to be neglected, still they are far from constituting the disease, or of being sufficient to guide the practitioner in the choice of the most appropriate remedy. For instance, suppose you are called to see a patient whose pulse is rapid, skin hot, breathing difficult and frequent, accompanied with a local phenomenon—severe pain in the chest; would you consider these signs sufficient to say whether the disease be pleuro-pneumonia or pleurodynia? or to indicate the treatment, which is so different, when the pleura or parenchyma pulmonaris is affected, from that required when the disorder is simply neuralgia or rheumatismus of the thoracic parietes? Again, a patient consults you, offering the following symptoms: facies Hippocratica; pulse small and frequent; skin cold; debility; prostratio virium;—would you here abstain from drawing blood, and administer tonic and stimulating remedies, under the impression that the first step to be taken is to restore the lost strength? By acting thus, your patient would soon die; on the contrary (and such facts are of daily occurrence), if you bleed, you will quickly perceive that the pulse will become stronger, fuller; the skin grow warmer; the diverse functions become developed beyond their normal type;—and all obtained by opening a vein. The concentration of the vital forces, which gave rise to the phenomena of debility, and even adynamia, seldom occurs except in young and strong individuals, affected with an intense and deep-seated inflammation of the lungs, or of some other important organ. It is, therefore, not rational to say that the general symptoms—very important, I admit—suffice, in every case, to indicate the therapeutical treatment of internal affections. Such an opinion is a perfect illusion.

Another objection has been made, and which is based in a measure on the system followed by practitioners previous to Morgagni; viz., that the symptoms, alone, are sufficient to indicate what remedies are necessary, and to establish a *suitable* treatment. You may remark that the symptoms are not here limited to the general ones, and that I did not speak of a rational treatment, for I consider this opinion as fundamentally erroneous, and have never ceased to combat it ever since I have delivered a lecture. And let me here give you an example, it being only thus that I can be enabled to demonstrate to you the truth of what I seek to impress upon your minds.

If the symptoms differ from each other, what should prevent your attacking a certain series and dissipating them by appropriate remedies? This method is one of the worst we could adopt, and was the original cause of specific remedies; as, according to those imbued with these doctrines, the symptoms being the whole disease, it is the symptoms alone which should be attended to. Thus, where œdema existed, it mattered little whether the cause was an affection of the heart, lungs, or kidneys; whether it was chlorosis, anæmia, or some obstacle to the venous circulation; hydragogues and diuretics were administered. Was it amenorrhæa,—emmenagogues were given, without considering whether it was produced by metritis, chlorosis, &c.; and you may easily conceive how injurious this sometimes must have been. Was it paralysis,—according to this theory it was an abolition of the contractile power in the muscles, and to restore it, vesication, urtication, cauterization, and such like remedies, were employed. In so doing, they acted consistently.

In a therapeutic point of view, the appreciation of the local symptoms is undoubtedly of infinite service. Pathological anatomy has proved that paralysis may be produced by an infinite variety of causes: simple congestion, hæmorrhage, ramollissement of the brain, meningitis, tumours of a cancerous, tuberculous, osseous or fungous, nature. These facts once proved beyond a doubt, how can we rationally content ourselves by establishing the treatment according to its symptoms. On the contrary, we ought to combat the disease which caused the paralysis, and of which this last is but a symptom. Such is the difference which exists, and as you perceive it is considerable, between a system of treatment founded on the symptoms, and that founded on the diagnosis. But, and this objection is more serious, the diseases which are cured the quickest, and the most successfully, are those of which the seat and the nature are unknown; for instance: syphilis with mercury; intermittent fever with the sulphate of quinine; and variola, against which vaccine matter is a preservative. True; but when we reflect on the immense number of diseases to which the human frame is subject, and compare them with the few which have their specific remedies, may it not be asked, seriously, whether we can establish a systematic treatment for diseases, because three or four facts support it, and though hundreds and thousands are in direct opposition with it? And ought we, because we are able to cure two or three disorders, the seat and nature of which it is hard to affirm, to declare that diagnosis is, therefore, useless.

But the utility and the necessity of diagnosis once proved, by what means can it be established? And, in the first place, what is meant by diagnosis? The definition may thus be given:—*the knowledge of the disease or lesion which affects the economy*, and which, in my opinion, is a local organic lesion. Now, it is on this that we must found our system of treatment. Still, let it not be supposed that I consider the local organic lesion as the only, though it is the principal, feature of the diseases we are called upon daily to observe. I consider a local diagnosis, i.e., the nature, the seat, the extent of the local lesions, as essential; but this is not all; for, independent of the cause which produces the lesion, other circumstances complicate the diagnosis—such as the constitution, the age, the profession, the habits of the patient, and the circumstances in which he is found. It is the re-union and the appreciation of these elements that constitute the diagnosis, and no one I think can affirm that, attentively considered, they will not enable us to form an exact one. But, what means are to be employed in order to attain a correct diagnosis? In the first place, what is meant by the word *health?* According to Professor Chomel, and I am entirely of his opinion, health is constituted by the normal exercise of all the functions of an individual. This definition appears to me far more precise, more simple, and less pedantic, than those which state, that health is the equilibrium of the strength, &c. By phenomena I mean all the changes which the patient undergoes, whether sick or in good health. The difference between the phenomenon and the symptom is, that the latter never takes place while the patient is in good health, whereas the former may occur while the individual is well or ill. The symptom follows the disease, as the shadow the body. The physician who neglects the disorder to combat only the symptoms, is like the sportsman who fires at the shadow, instead of the bird itself. Every one perceives the symptoms; but to the physician alone it is given to know that such a symptom indicates such a lesion, and that it is a sign of its existence

---

ing more frequently occurs in acute rheumatism, in certain seasons, caused by epidemic influences; and it also not uncommonly occurs, then, in other diseases. I have particularly witnessed this symptom in acute rheumatism, when typhus fever has been raging epidemically; it is always an unfavourable symptom, for it is usually a forerunner of a change in the character of the fever, which commonly acquires a low, or typhoid nature. The character of the pulse, and the state of the bowels, ought to be strictly attended to under these circumstances. In the years 1836-7, I frequently observed this supervention of typhoid symptoms on the rheumatic affection; it was generally preceded by hæmorrhage from various organs. In this case, the bleeding has been to some extent, and must make us cautious in our diagnosis; but we can certainly state, that the sensorium has become freer since the epistaxis; that no change nor increase of the fever has taken place; and that the secretions are in perfect order, the urine, in particular, forming the characteristic orange-red sediment. Finally, I may remark, that physicians who have directed their attention especially towards the nature of epistaxis, have asserted that it is inherent to rheumatism and gout, and that these diseases stand in the relation of causes to this effect."

But, in order to accomplish this, a certain operation of the mind is necessary, which requires the previous knowledge of anatomy, physiology, pathology, and other sciences. Thus the symptom is a morbid change occurring in the normal state of the human body; and when, by means of this reflective power, the physician comes to a conclusion that leads him to the discovery of a given lesion in an organ, or in a number of organs, it is called a sign.

We acquire a knowledge of diseases, by the use of our senses; thus *the eye* indicates the changes which have taken place in the size, the form, the colour, &c. of the body; *the ear*, especially since the discovery of Laënnec, is of the greatest utility in the investigation of the different sounds produced in the chest, whether in the lungs or in the circulatory apparatus; and it permits our judging as to the degree of matity or sonoreity caused by percussion; *the smell* informs us of the various changes which take place in the excretions, &c. This is performed even whilst the physician is still at a distance from the patient, and to a certain degree, in spite of the will of the former. And now let me explain how the individual ought to be examined. Bayle, to whose talents and reputation my praise can add nothing, said that the exterior appearance of the body was so important, that whenever it could be done, he examined the patient naked from head to foot. This is, however, impossible, not only with females, but likewise with most men, in private practice; yet it is very useful to uncover the patient, in order to ascertain the decubitus, and especially the dorsal decubitus. Whilst on this subject, I cannot refrain from mentioning a circumstance which occurred to me some fifteen or twenty years ago, while at the Salpêtrière, and the lesson which one of my pupils gave me. A woman entered the hospital on account of a violent pain on one side of the abdomen, accompanied with slight fever, and acute pains on the slightest motion. Evidently it was neither gastritis, gastro-enteritis, nor peritonitis, for the digestive functions were normal; and I concluded that it was owing to rheumatism of the abdominal parietes, and prescribed accordingly. Immediately after I left the patient, a pupil approached the bed, and on uncovering the part, found it affected with *zona*. Since that circumstance I have avoided similar errors, which, in reality, are unpardonable. Once this examination ended, certain questions must be put to the patient. Opinions here differ greatly. Bichat, with whom I agree, said that the first ought to be—*Where is the seat of the pain?* it being far more exact than to ask—*What is the matter with you?* In the latter case, the answer may be dubious, and made according to the ideas the patient has formed as to the disease; whereas, in addressing the former, he indicates the precise point in which he suffers. A remark may here be made, and which ought never to be forgotten. Let your questions be as simple as possible; for true eloquence consists in employing such expressions as to make yourselves clearly understood, and not by making a parade of your science. The next question is—*How long is it since you were taken ill?* The importance of this demand is indubitable; for instance, suppose the patient affected with a cerebral disease; if the answer is, that it commenced only one or two days previously, evidently it is an acute, not a chronic affection. According to the answers given to these questions, others may be put, so as to enable you to decide upon the method to be adopted in examining your patient. In so doing, you must begin with the organ or organs you suppose affected, and afterwards go to those which have an affinity with them, whether of vicinity or of sympathy. Thus, if it is a disease of the heart, begin by examining that organ; then the respiratory apparatus, which offers the closest relation with it. In general, you may adopt the following plan. Examine—1° *the digestive organs*—the lips, gums, and teeth; the tongue, paying attention to its colour, size, degree of moisture or dryness, different coatings, &c. It has been justly affirmed, that the tongue is a sure criterion in diseases of the digestive canal; and though the knowledge it affords is not so important in other affections, such as encephalitis, pneumonia, &c., still it ought never to be neglected; for, if the tongue, after offering a thick white coating, or a bright red colour, changes in appearance, be assured that some modification has taken place in the state of the patient. Inquire if nausea or vomiting, diarrhœa or constipation, exist; examine the substances thrown up, and the stools, for, in these last especially, you may find biliary calculi, entozoaria, &c. I know that this is not the most agreeable part of our calling, but as it may in some cases enable you to save the life of a fellow-creature, you will be amply repaid for the aversion it inspires. 2° *The circulation*—heart, arteries, veins, capillary system—finally the blood itself. *Heart*—ascertain if any abnormal sounds exist; its pulsations, its rhythm, its degree of matity, and its size. *Arteries*—the pulse: and here it may be mentioned that the ancients, though ignorant of the circulation, described the different varieties of the pulse with far greater accuracy than modern authors. Galen reckoned thirty-two different species. Bordeu wrote a treatise on the modifications which the pulse may present, and the utility such knowledge becomes of in the practice of medicine. Without admitting that it is as important as these authors state, still I think the following varieties may be received: *pulsus frequens, rarus, celer, tardus, fortis, magnus, durus, debilis, parvus, mollis, regularis, irregularis, æqualis, inæqualis, intermittens.* 3° *Respiration*—It may be frequent or unfrequent, equal or unequal, noisy, suspirious, short, accompanied with the inspiration and expiration of a great quantity of air, and *vice versâ*; finally, there may be dyspnœa or orthopnœa. Then, all the different *râles* and abnormal sounds obtained by auscultation and percussion. 4° *The genital organs*—Especially in females; for it seldom happens that menstruation is not more or less disturbed. 5° *Secretions*—The biliary and pancreatic secretions are hidden from our mode of investigation; and as to the salivary, it is seldom examined. The two principal are the urinary and the intestinal. In the former: you must examine the colour, the transparency, the limpidity, the quantity, the chemical composition; for, if in small quantity, and similar to that of the herbivora (*jumenteuse*), it indicates the existence of phlegmasia in some important organ; if abundant, limpid, and colourless, it is one of the principal symptoms of diabetes, in which disease it contains a notable proportion of sugar; finally, when it contains albumine, it is a sign of the presence of Bright's disease. 6° *Temperature*—The most eminent practitioners admit the utility of ascertaining the exact heat of the skin. Pinel affirmed that the existence of fever could be ascertained, with greater certainty, from the temperature of the body, than from the frequency, the strength, or the development of the pulse; and he was, perhaps, to a certain extent right, as the pulse may be changed by a moral emotion, whilst the heat of the skin is never affected by such a cause. The exact knowledge was considered so useful, that instruments were invented to appreciate it. M. Magendie made use of the ordinary thermometer, but I think this distinguished observer went too far when he introduced it into the different cavities,—rectum, vagina, &c. 7° *Nutrition*—As this is the complement of the organic functions, it is highly important to ascertain whether it is increased, diminished, or perverted. At a future period, I purpose examining, with the attention it deserves, whether the deposition of phosphate of lime in our tissues ought not to be considered as the result of a defect in the nutrition, rather than the product of inflammation. 8° *Nervous system*—may be the seat of numerous phenomena in its central portion, or in other organs, from sympathy. The *sensations*, as Boerhaave indicated, may be increased, diminished, perverted, or abolished. *Intelligence*—may present the same variations, with this difference: that the first is very uncommon, whilst the three others are extremely frequent: delirium alone constitutes an immense field of observation. *General sensibility*—The appreciation of the nature, the character, the duration of the pains experienced by the patient, present indications of importance. *Motor power*—From its augmentation, diminution, perversion, or abolition, our opinion may be formed as to the state of the brain. Finally, nothing ought to be neglected; for not only the sensibility, the movements, the senses, the intelligence, ought to be examined; but likewise the sleep, dreams, waking moments, &c. By the denomination *sleep*, I include all the kinds of coma and insomnia observed in a great number of acute diseases.

Such is the course to be pursued in order to establish a correct diagnosis; and though in some cases difficulties may exist, still with care, attention, and perseverance, they may be surmounted.

Cancer of the Cerebellum.—A woman, ætat 26, was admitted into the wards of M. Bricheteau, Necker Hospital, for excruciating pains in the head, occupying exclusively the occiput; all the remedies (emetics, purgatives, leeches, blisters, chlorhydrate of morphia by the endermic method, opium, ice on the shaved head,) employed, produced no amelioration; the pain continued as intense, accompanied, however, by no other untoward symptoms—no paralysis, no convulsions, not even the slightest numbness; in short, all the functions dependent on the nervous system, were normal. During the few short instants the patient was free from pain, she could walk about in the courts of the hospital, and no one, on seeing her, could have imagined that she suffered so acutely; indeed, her appearance was such that even the witnesses of her attacks doubted as to the reality of their existence. About a month after, she left the hospital; but three days had not elapsed when she was brought back *in extremis*, and died almost immediately. *Sectio.—Cerebrum*: normal; *cerebellum*: right lobe larger than usual; when incised, a few ounces of a reddish serosity escaped, and an encephaloid tumour of the size of an egg, projecting into the fourth ventricle, was discovered. All the other organs healthy.

Academy of Sciences: *Sitting of the 22d April.*—M. E. de Beaumont, V. P., in the Chair.—M. Payen read a report on a memoir of M. Lassaigne, concerning the quantity of nitrogen contained in organic substances. The process employed by the author is the following:—Place in a tube of about 0·079 or 0·118 of an inch in diameter, and about 1¼ inch in length, a piece of potassium of the size of a millet seed; force it down by means of a bit of platina wire, and then add the substance to be examined. Heat the tube, until the whole of the potassium is disengaged in vapours through the carbonised substance; divide the tube longitudinally, and mix its contents in a capsule, with from four to six drops of water; then add a drop of a solution of sulphate of iron, and one of chlorhydric acid; if the substance contains azote, the blue colour peculiar to the cyanuret of iron is produced. Conclusion: thanks to the author for his communication—adopted.

Physiological Researches on Sugar, Albumine, and Gelatine.—M. Pelouze, M.A.S., presented, in the name of MM. C. Bernard (de Villefranche) and Barreswell, the first part of their memoir on alimentary substances. In the month of December, 1843, (*vide Medical Times*, vol. ix. page 170,) one of the authors indicated a method by which it could be ascertained whether a substance was alimentary or not. This method consisted in dissolving the substance in gastric juice, forming a sort of artificial chyle, and injecting the solution into the vein of an animal. If the substance is assimilable, it disappears entirely, and is not found in the different excretions. Such is the case with sugar and albumine, injected after being mixed with gastric juice; whereas they are found in the urine unmodified, if injected dissolved in water alone. On the contrary, when the substance is unassimilable, such as prussiate of potass, they are found in the urine as given, whether dissolved in gastric juice or water. The same phenomena take place in the stomach; for sugar and albumine disappear, and are never met with in the urine; whereas, prussiate of potass is eliminated by that excretion. The following experiments were performed on three healthy dogs, while fasting; in the first, six grains of an aqueous solution of sugar were injected; in the second, ten grains of an aqueous solution of albumine; and in the third, ten grains of an aqueous solution of gelatine (*ichthyo-*

colla); these substances were all found unchanged in the urine, without giving rise to any accidents. The same quantities of the substances were dissolved in some gastric juice, taken from the stomach of a dog, and injected into the jugular veins of three dogs, after having been kept during six or eight hours on a *balneum mariæ*, at a temperature of from +100·40° F. to 104° F.; no accident occurred. The sugar and albumen were absorbed, but the gelatine was found in the urine. Similar results were obtained when they were given, or taken, as food. It may, therefore, be concluded, that the *peculiar character of assimilable substances is to disappear when injected into the veins, after having been dissolved in gastric juice.*

On the Component Parts of the Slime of the Nile, by M. Lassaigne.—The researches made by M. Regnault, M.A.S., on some slime taken at about 3000 feet from the banks of the river, seemed to demonstrate, that it was composed—of water, 11 parts; carbon, 9; oxide of iron, 6; silicium, 4; carbonate of magnesia, 4; carbonate of lime, 18; aluminium, 48. In order to decide how far the analysis was exact, the authors instituted the following researches on some slime of a brownish yellow colour. Dried at 212° F. for three hours, it lost 8·5 per cent. of its weight; weighed, in pure alcohol, its density was found to be 0·811. Analysed, it was found, on 100 parts, to be composed of—

Silicic acid	42·50	parts.
Oxide of aluminium	24·25	"
Peroxide of iron	13·65	"
Carbonate of lime	3·85	"
" magnesia	1·20	"
Magnesia	1·05	"
Ulmic acid, organic matter, nitrogen	2·80	"
Water	10·70	"
	100·00	

On the Dangers Attendant on Myotomy.—Dr. J. Lantery, of the Faculty of Turin, addressed from London a letter, in which he states that, during the six years that he witnessed the operations of rachidian myotomy, performed at the *Muette* (boy's ward), he never observed a complete cure; that the amelioration obtained ought to be attributed rather to the apparatus employed, than to the operation itself; and that the patients required constant support, complained of a dull pain in the side operated on, and lost their muscular force. These inconveniences persist for some time after the operation.

M. Panckouke addressed a pamphlet concerning a new mode of printing, by which means, the sum paid by authors and readers will be diminished to one-half the present price. Having remarked that, on covering the lower half of the letters, there was no difficulty in perusing the phrase, whereas this was impossible if the upper was hid from the sight: consequently, he proposes a method (*impression mi-type*) by which one-half of the letters being suppressed, twice as much matter will be contained in the same space. Certain modifications from the similarity of the upper portion of some of the letters will be required; but if once adopted, this can easily be done.

Academy of Medicine.—Sitting of the 23d April.—M. Ferrus in the chair.—M. Mercier addressed a letter claiming the priority for the invention of an instrument for the division of the valves of the neck of the bladder.

M. Guerin writes, in reply to the letter addressed by M. Guersant, in the former sitting, that he did not refuse M. G. being named member of the commission—that he was not aware that M. G. was adverse to the wish expressed as to increasing the number of the orthopedic wards in the children's hospital—and that, on the contrary, he would have considered himself fortunate in having so equitable a judge.

M. Husson proposed that the Dean of the Faculty be waited on by the *conseil d'administration*, and thanked for the hospitality he so generously accorded to the Academy, during the time the new assembly-room was under repair.—The President, in reply, said that this had already been decided upon; and then announced that on the next sitting M. Parizet, *secretaire perpetuel*, will deliver a panegyric on Bourdois de la Mothe, and M. Bousquet one on Double.

M. Biot, M. A. S., writes to request the nomination of a commission, to examine an instrument of his invention for the discovery of the quantity of sugar in diabetic urine.—Professor Roux stated that he had assisted at the experiments performed, and was glad that an opportunity was afforded him of stating how exact they were.—M. Gueneau de Mussy presented similar remarks.—M. Nacquart said, that M. Martin Solon employs it daily with great advantage at Beaujon Hospital.—The commission named was composed of Messrs. Andral, Gueneau de Mussy, Rayer, Boullay, Thillaye, Roux, Martin Solon, and Civiale.—M. Bousquet read a report on the number of vaccinations in France, during the year 1842.—M. Dupuis remarked that a case of a child being born with pustules resembling *variola*, does not authorize the conclusion of the reports that it was really this disease; inoculation ought to have been performed in order to ascertain if it propagated the disease.—M. Rochoux states that a first vaccination is a sufficient preservative against variola; and that it is equally certain that the position of vaccinated persons is more favourable, than of those who had been affected with variola; consequently, though he does not oppose vaccination being performed a second time, still he does not see any utility in so doing.—M. Bousquet: it was in order to prevent the development of *varicella* in persons who had been vaccinated, that re-vaccination was performed, as it was supposed to be the most efficacious method. At Orange, M. Bugas, during an epidemy of *variola*, re-vaccinated several persons; none were affected with varicella.—M. Villeneuve regretted that a statistical table, giving the proportions between the births and vaccinations, had not been made. After some further remarks from MM. Rochoux, Desportes and Bousquet, the conclusions of the report were adopted.

The President then drew by lot the names of the members to form the deputation to congratulate His Majesty, on the 1st May (St. Philippe); they were Messrs. Bourriat, Devilliers, Collineau, Labarraque, Loiselear-Deslonchamps, Bourdon, Burdin, jun., Velpeau, Boudet, M'Cartan, Dizé, and Oudet.—M. Huzard read a report on a memoir of M. Rey Fabien, on the best method to be employed in order to diminish the price of leeches.—M. Nacquart remarked that he thought it very injudicious to proscribe the use of small leeches, as he considered them necessary when applied on thin parts, such as the eye-lids, &c., and on children. Further, that it was not certain that a leech which had already been employed could not transmit a virus.—M. Huzard, in reply to the last assertion, said that though they had been employed repeatedly in the hospitals a second time, no accidents had ever occurred.—M. Nacquart asked whether a sufficient time had elapsed so as to permit its being affirmed that no consecutive accidents will take place?—M. Rochoux stated that, if agreeable, he would in the next sitting inform the Academy what had become of the establishment for the preservation of these *annelides*.—The vote on the conclusions postponed.—The Academy then formed itself into *Comité Secret*.

GARLAND DE BEAUMONT, D.M.P., B.L., & S. &c.
Honorary Physician to the Spanish Embassy.

A REPORT UPON SOME LATE STATEMENTS IN THERAPEUTICS.

By W. HUGHES WILLSHIRE, M.D., M.B.S., Physician to the Royal Infirmary for Children, and to the Surrey Dispensary, &c.

(For the "Medical Times.")

Continued from page 77.

Tetanus.—The reviewer of Dr. O'Shaughnessy's "Bengal Dispensatory," in Forbes's *Quarterly*, makes the following remarks when alluding to the Indian hemp (*cannabis Indica*):—"Subsequent trials with this plant, in this country, have confirmed neither its asserted activity, nor its therapeutical efficacy. Whether this be owing to the preparations having undergone some deterioration in their passage, or to the comparative phlegmatic temperament of the English, we know not. We understand that, in a case of tetanus, in the London Hospital, the extract, prepared by Mr. Squire, from plants brought over by Dr. O'Shaughnessy, was given in very large doses, but without any apparent alleviation of the symptoms, and in a few days the man died. In this case, the hemp acted as a soporific, and produced a slight tendency to inebriation. There was also an approach to the cataleptic condition, and during its use the the pupils were contracted; though, in most cases, dilatation follows its employment. The medicine, also, had a complete trial in a case of idiopathic tetanus, at Guy's Hospital. It was used both externally and internally, but without any manifest effect upon the system or the disease."

Liautaud recommends in this disease ʒi of the tincture of the hemp extract, to be given every half-hour, until the paroxysms cease, and catalepsia shews itself.

Mr. Reynett has given tobacco internally, with great advantage to the patient. It was combined with camphor and opium, and nearly three grains were given in the 24 hours.

Mr. Mariner, by his recommendation, had a patient treated in the following manner, with advantage. A bougie, smeared with strong red precipitate ointment, was introduced into the urethra, and, as soon as the patient began to suffer pain, the muscles of the limbs grew soft. The operation was repeated a second time, with the like result; but the man would not allow a third application to be made. The above treatment was suggested by that of the natives of the Tonga islands, who pass a reed down the urethra, until it projects in the perineum, then cut down upon it, and, bringing it out externally, pull it to and fro, until blood is freely discharged. A case was treated with marked benefit at the Westminster Hospital, by oil of turpentine, given until strangury was produced. The patient, however, refused to continue it.

Hydrophobia.—Mr. Bateman has lately given very large doses of belladonna and hydrocyanic acid, but without any effect.

Epilepsy.—Podrecca recommends the employment of indigo, either alone, or in conjunction with other antispasmodics. When he gives it alone, it is usually to an amount varying from half a drachm to a drachm and a half, in the 24 hours. The addition of castor and assafœtida, he has found of material benefit: but all the power which the combined drugs exhibit, of materially checking epileptic disease, he attributes to this medicine, the other two ingredients being wholly ineffectual by themselves for that purpose.

According to Dr. Durrant, where the affection is of recent origin, gradually increased doses of the sulphate of iron and zinc are to be relied on.

M. Jadelot remarks that, notwithstanding that the nitrate of silver is said to have been successfully administered by Fouquir, Merat, and Lombard, it is impossible to say whether it is to be considered as really useful.

Chorea.—Person has employed, with the best results, the chloruret of tin, as before recommended by Schlessinger. The patient was a girl, 11 years of age, and she was at length taking one-fifth of a grain for a dose.

M. Trousseau has recently been very strongly recommending the strychnos nux vomica, as a most valuable remedy in obstinate cases.

Neuralgia.—Several Italian physicians strongly advise the use of the *valerianate of zinc*. The dose is one or two grains at a time, taken in the form of pill. M. Roclouts is inclined to regard nux vomica as, on the whole, the most efficient and certain remedy against severe forms of the disease; as he has seen several cases, which had resisted the prolonged administration of steel, bark, and all the other most approved means, yield to its use. Dr. Waters has detailed several strong instances of cure and relief, by means of the employment of the sulphate of strychnia.

According to Dr. Hunt, arsenic is more often to be depended upon; whilst Coste, Brookes, and others, have attempted to shew that, where everything else has failed, the preparations of *aconite* have been very serviceable. According to Hutchinson, and the author, belladonna is deserving of encomium.

Rundc, in two violent cases of *coxalgia*, has given the *rhus toxicodendron* with advantage; and Fioravente recommends the application of freshly-

bruised *ranunculus sceleratus* to the heel; or, when that cannot be procured, a strong blister, *meloé vesicatorius*. The latter cure is much like that recommended and employed by Petrini, viz.: the actual cautery at *a white heat*, for five or six seconds, between the two last toes, where the nerve bifurcates. Petrini has been followed by Quadri and Caffe.

Romberg praises turpentine, as recommended by Martinet. He prefers the form of electuary:—

℞. Olei tereb. ʒi.
Syrupi aurant. vel mellis, ℥ii.
℥ss. bis in die.

Or of this:—

℞. Olei tereb. ʒi.
Magnes. cal. ℈iiss.
Olei menthæ, gtt. viij. M.

A bolus, of the size of a hazel-nut, to be taken three times a-day.

Blisters, sprinkled with ¼ to ½ gr. of the acetate of morphia, are also employed.

M. Ducros has given the details of some well-marked cases affecting the face and head, which were rapidly cured by the use of strong ammonia, applied to the palate, gums, &c., with a camel's-hair brush, so as to occasion a profuse discharge of tears and saliva. He requested the physicians of several hospitals to repeat his experiments on a large scale, and the results have been, he says, most satisfactory. According to a notice in Dr. Johnson's *Review*, the strong aqua or liquor ammoniæ, will be found a most valuable remedy in many cases of neuralgic suffering about the face and head, odontalgia, severe, nervous headache, &c. The best mode of administering it being to mix from 20 to 40 drops in a cupful of very thick gruel, and to take this at bed-time, or whenever the paroxysm of pain is present; the ammonia must be well blended with the gruel, else it will irritate very painfully the inside of the mouth and throat. It should produce a profuse salivation and lachrymation. In very severe or obstinate cases, it may be applied outwardly at the same time.

Otto speaks well of the bi-sulphuret of carbon.—Blanche affirms the value of the ter-chloride of carbon.—La-fargue *inoculates* the patient with a saturated solution of veratria, in severe cases, advising it to be repeated morning and evening, and that as many as ten or twelve punctures be made.

Stanelli states that the chloride of zinc, liquified by exposure to the air, possesses the property of alleviating the toothache, and that he has obtained uniform success from this means in more than fifty cases, and that it does not render the progress of the caries more active. In the *Dublin Medical Journal* a good example is related of the value of the sesqui-carbonate of iron in *neuralgia* of the *ureter*.

In *pertussis*, alum is employed, by Dr. Theophilus Thompson; and its effects are stated to be very prompt, and remarkable in relieving the whoop. Dr. Allnat has employed *cochineal* for the last twenty years with the most satisfactory results; the following is the formula:

℞. Potassæ carb. ʒi.
Cocci cacti ℈j.
Aquæ bull. ℥viii. M. ʒi. ter die.

I may remark that some care is necessary in choosing the cochineal, since, if the statements of Dietrich be correct, that it is constantly adulterated with lead, continued employment of it may be highly dangerous.

Dr. Maine follows Reicken, in praising enemas of assafœtida with laudanum; and tannic and benzoic acids are said to be sometimes efficacious.

In *spasmodic asthma*, quinine, in from two to eight grain doses, according to Hogan, forms a speedy and effectual cure; and in the early states of *spasmodic croup* a couple of grains of the sulphate, and a *snuff* plaister on the chest, for a child two years old, will ward off the attack.

In *influenza*, accompanied with severe nervous headache, Gilbert has succeeded in a number of cases, with good effect, in exhibiting *strychnia*.

In what Lisfranc calls *nervous ophthalmia*, he deprecates antiphlogistic and revulsive means, and advises the extract of belladonna to be rubbed on the temples, and around the base of the orbits, night and morning; sometimes the same medicine may be administered internally. In a few days the cure is said to be complete.

In certain forms of *delirium*, Recamier and Roche recommend the employment of musk; and an anonymous writer states that it is unquestionably one of the most potent and least fallible antispasmodics, that the Pharmacopœia contains; and that few compounds are more beneficial than pills composed of musk, or assafœtida, and camphor, to which a few grains of calomel, and also some extract of henbane, may often be most judiciously added.

In the *agrypnia* of old people, Canstatt strongly advises musk, when the affection is dependant upon physical irritation; opium being then often dangerous, though hyoscyanus and lactucarium are better.

In certain inflammatory forms of *paralysis*, Brodie advises the patient to be put under the influence of mercury; in other, and chronic cases, sulphate of zinc, and the tincture of cantharides, are recommended. Sir Benjamin makes the following valuable remarks:—"I must mention one circumstance to put you on your guard with respect to the tincture of iodine. The patient wanted to go into the country, and to take the iodine with him, to which I consented, on the condition that while taking it he should place himself under the advice of a medical attendant. This he did not do, and he one day had a paralytic stroke. It is one of many cases which may be mentioned to shew that iodine exerts considerable influence over the nervous system, and is not to be given without great caution.

In certain *paralytic affections* occurring in young children, after the exciting causes have been removed, Serres advises the use of strychnia, both internally and externally.

CUTANEOUS AFFECTIONS, ETC.

Tinea Capitis?—Under this name, as a disease, several remedies have been recommended; but what the writers mean by it, what specific form of malady is implied, the author of this report does not know. Dr. Wigan proposes the head to be twice carefully shaved, then a solution of Beaufoy's concentrated acetic acid (1 part to 3) is to be applied; soon, a number of red-looking spots will appear—the diseased parts; these are then to be touched for three or four minutes with the strong un-diluted acid. One application is said to be enough.

Seutin treats the disease with a preparation of wood soot, made into the consistence of a soft extract; and according to Snow, both creosote and pyroligneous acid have been used in Germany with marked success.

Fisher states the application, used at the Blue Coat School, to be an ointment of the bichloride of mercury, five grains to the ounce; and Sayer has called attention to the daily washing of the scalp in Belgium with the ordinary black soap, which contains a great deal of alcali; and affirms that he has derived benefit from the use of an ointment composed of equal parts of powdered charcoal, nitrate of potash, and common brimstone.

Mr. Worthington has found the ioduret of sulphur a useful external application in this disease? and other cutaneous affections;—the formula is ℈j to ʒvi.

Eczema.—In chronic forms, according to Erichsen, shaving is not necessary;—lotions containing either the pure alkalies, or their carbonates and sulphurets, in the proportion of one to three parts of water. In the moist form, ointments, containing nitrate of silver, iodide of sulphur, bichloride, nitrate, or ammonio-chloride of mercury. The sulphate of zinc and creosote, according to some others, are very useful applications.

To be continued.

EPILEPSY, A CURE FOR DRUNKENNESS.—Mr. Sheppard mentions the case of a woman of ill-fame, who became drunk in a low beer-shop. She was suddenly seized, while in this state, with an epileptic fit, which soon passed off, and she was carried home immediately, as he was informed, perfectly sober. He considers that this case bears out his idea, that the convulsive actions of the epileptic fit cause at times the restoration of the vital equilibrium of the blood.

ON THE STATE OF MEDICINE IN ANCIENT EGYPT.

By J. CLARKSON, Esq.

(For the 'Medical Times.')

According to the testimony of Herodotus and Diodorus Siculus, Upper Egypt swarmed with surgeons and doctors. There were physicians for every part of the body. The same functionaries were also embalmers, and therefore anatomists. Ptolemy Soter, Diodorus states, founded a school of anatomy, and ordered the dissection of bodies (possibly of those refused burial by "the judgment of the dead"). Pliny says, that dissection was encouraged by the example of the Pharaohs and Ptolemies. Mr. Hamilton justly thinks that Homer took some hints for his battle pieces from the walls of Thebes, and his accurate and skilful anatomy proves the proficiency of his masters. The trade of druggist was sometimes added to that of surgeon and physician. In Homer's time the use of drugs in Egypt (connected with the *charms* then employed in medicine, and still used in the East) appears to have been equally profuse. Was the nepenthe which the Theban Queen gives to Helen to soothe her sorrows, opium? Were the Egyptian Lotophagi opium-eaters like the modern Chinese? Shops for the selling of poppy-heads are among Rosellini's illustrations, and the description of the effect by Homer is similar to the effect of opium. "The wretches who eat it," he says, "forget their misfortunes, but at the same time lose all affections, and forget their kin and country." Synecllus gives testimony as to the existence of an Egyptian pharmacopœia. The medical class used, he says, acetates for dropsy. They employed unguents of white lead and verdigris. They observed critical days in fevers, and had a recipe for the cure of stone. The art of medicine must have been organised at an early time, because six books on medicine are ascribed to Thoth, who was Secretary to Osiris, a contemporary of the builders of the Pyramids, and grandfather of Osirtesen, the founder of civilization. The barbers were barber-surgeons, as they still are, in the East. Surgery was united to the barbers' profession in ancient Thebes, 2,000 years B.C., as appears from Rosellini's illustrations, just as it was united in Europe during the dark ages, as appears from the inimitable "Don Quixote," of Cervantes.

The poles, distinguished by an alternate stripe of white and blue, still used as a sign by barbers in the streets of London, share the genealogical antiquity of those checquers at the doors of the London publicans, which can be traced through the armorial bearings of the warriors, who controlled the vintages and vintners of England, to the doors of the vintners of Pompeii, thence to the Etruscan tombs of priests of Bacchus, and finally to the shrine of Osiris Bacchus, the first patron of wine and vineyards. Rosellini's illustrations exhibit invalids in the act of being bled fastened to a *pole* by a *ribband* or *band*; and the ancient custom handed down to the middle ages, suggested the barbers' sign.

It was the general custom of the ancient Egyptians to refer the invention of the arts and sciences to the gods. Six volumes, as we have said, on the subject of medicine were attributed to Thoth, in the time of Clemens Alexandrinus. The secrets of pharmacy according to Diodorus, the Sicilian, were believed by the Egyptians to have been revealed by the goddess Isis to her son Horus. Pæion, in the age of Homer, was the reputed founder of medical learning in Egypt, and indeed, it would appear that the poet regarded every Egyptian skilled in medicine as having sprung from the god Pæion (Od. v. 131). Pæion was, probably, the God On (*Pi On*) of Heliopolis, the same as Horus, or the Sun. The same was clearly the deity understood by Homer.

The medical profession must, undoubtedly, have existed at a very early period in Egypt. If the word *Rephaim* be properly translated in the English Bible, there were physicians in the time of Jacob. The Septuagint renders the word *Entaphiastai*, which we may understand to signify embalmers; but the first embalmers were, doubt-

less, physicians. Besides *Repha*, Heb., clearly comes from the word *Repha*, Sanscrit, a derivation at once honourable to the profession, and ancient. Homer exalted the state of medicine in Egypt, when in speaking of the Egyptians, he says—

Jatros de ecastos, epistamenos peri panton Anthropon.

We are told by Julius Firmicus that the Pharoah Nechepsus studied pharmacy seven centuries before the Christian era; and Ætius mentions some of the remedies used for fevers by the royal apothecary. Athothis (according to Manetho) wrote books on anatomy.

It has been thought by some writers that as the profession in Egypt was confined to one class of men, and was transmitted (as by inheritance) from father to son, it could never have been successfully cultivated. Does this follow? It has been likewise observed, that as the physicians were compelled by law to follow exactly the prescriptions contained in the Hermaic books, the science must have remained stationary. But the medical books falsely ascribed to Hermes, were probably forged at a later period, and are said by Galen to be full of absurdities. The law which enjoined a strict adherence to the regulations contained in these books, which were never seen but in the hands of the Pastophoroi, during a procession, must have been altogether nugatory. The knowledge of medicine, probably shared the fate of every other kind of knowledge after the irruption of Cambyses. (Diod. L. 1; Iamblichus de Mysteriis: Galen facultat simplic. medic. L. 6.) Some scattered accounts of the medicines in use among the Egyptians, may be found in various writers. Of the Nepenthes (named before), Homer has said enough, for a poet; but not enough for a physician (Homer Od. L. 4, v. 220). The Egyptians administered the squill, or sea onion, in cases of dropsy; and used oxyde of iron in treating the same disease. They used external applications, and frequently employed unguents, in which, according to Galen, they mixed saccharum saturni (oxyde of lead). An account of the remedy used by King Nechepsus for gravel, may be found in Ætius. It has been pretended on the authority of Aristotle (De Repub. L. 3, c. 15), that they were compelled to do so by the law already referred to; but the law was, probably, founded on the established practice. It was, probably, totally disregarded; it must have depended on the practitioner himself to have declared what was the state of the patient. Perhaps when the treatment failed, the law was cited, and blamed by the physician. The story told by Pliny of the Hippopotamus wounding itself (when redundant with blood), has been imagined to be a hieroglyphical description of the origin of venesection in Egypt.

The Greeks represent the *materia medica* of Egypt as chiefly consisting of simples. It is remarkable that we have no account of their manner of treating ophthalmia, a disease which, probably, has been always prevalent in their country. It has been questioned whether the Egyptians or the Greeks first dissected human bodies, and could consequently first claim acquaintance with anatomy. It has been dogmatically decided in favour of the latter; but the decision is very doubtful. The priests of Athens, who pretended to be descendants of Esculapius, and were thence called Asclepiades, were the most ancient physicians among the Greeks, and for many years, and long after the establishment of medical schools, their success continued undiminished. Of the ignorance of these quacks and imposters, abundance of proofs may be found in the writings of Pausanias, Plutarch, and Aristides; and since their defective knowledge was so apparent in later times, it would be idle to suppose that they possessed more skill in remoter ages. The first regular school of medicine was established by Pythagoras at Crotona. Alcmeon, who by the dissection of animals, brought comparative anatomy to the aid of his science; Dioscides, the celebrated physician of Darius, were both of this school. The yet more celebrated school of Cos, was founded by Hippocrates, who, according to Celsus, was instructed by Democritus in the medical art. Now, both Democritus and Pythagoras passed many years in Egypt. One thing is certain, that human bodies had never been dissected by any Greek physicians so late as the time of Aristotle, since that philosopher admits (Hist. Animal L. 1, c. 16) that the internal structure of the human frame was chiefly known by comparative anatomy. Hierophilus and Eristratus were the first Greek anatomists who dissected human bodies, and these physicians were both well advanced in life before they commenced their anatomical studies at Alexandria under the reign of Ptolemy Soter. But this prince would hardly have permitted the introduction of such a custom, had it been (as alleged) as repugnant to the feelings of his new subjects, as it was to those of the Greeks. May we not thence argue that the Egyptians had no prejudices on this subject? May we not suspect that the dissection of human bodies had been practised in Egypt before the time of *Ptolemy Soter?*

(To be continued.)

WHAT ARE THE THEORIES OF LIEBIG? AND WHAT IS THEIR VALUE?

BY THE CELEBRATED DR. FRANZ SIMON.

Translated for "The Medical Times," by SIGISMUND SUTRO, M.D., formerly pupil to TIEDEMANN, GMELIN, and BUCHNER.

(Continued from page 52.)

There are substances which influence materially the process of transformation and nutrition in the animal body; these are remedies and poisons. According to their operation, they can be divided into three classes:—first, such remedies as enter into chemical combinations with certain constituents of the animal body (as metallic poisons); secondly, such as can end or prolong that state of decomposition, which certain very complicated organic atoms are able to undergo (antiseptics, empyreumatics, ætherial oils); thirdly, remedies which take a direct part in the metamorphosis of the animal body, excite the activity of single organs, and cause morbid appearances in the healthy body; many of these operate as poisons even in very small doses. The process of transformation in the stomach has no influence on their chemical composition; they are merely dissolved, but not destroyed. The molecules of blood, being bearers of oxygen, cause, generally speaking, the transformation; but the dissolved fibrine and albumine are capable of becoming organic parts. The molecules of the blood not losing their clear red colour except in the capillary system, their oxygen is only there withdrawn. All substances contained in the capillary vessels, must, by contact with the molecules of blood, acquire similar qualities to the living molecules themselves. If one of the properties of blood be changed by a remedy, this can only be done in two ways: firstly, either the remedies brought into the circulation of the blood take a direct part in the transformation of matter, their elements entering into the composition of the new products; or secondly, they are introduced into the secreting organs, and exert their influence on the properties of the secretions. In both cases, the remedies lose their chemical character, and disappear, leaving no trace in the animal body. As regards their chemical composition, remedies may be divided into azotic and non-azotic remedies. The azotic are mostly violent and poisonous; but their operation does not stand in a direct proportion with the quantity of azote. *Caffeine* and *theobromine* contain more azote than any other vegetable substance, and still they are not poisonous: whilst *solanine* and *picrotoxine*, which contain very little azote, are exceedingly poisonous. The non-azotic and azotic remedies must, if operating on the quality of a secretion, undertake a similar part, as regards their chemical character, to the azotic products of the animal body or the non-azotic victuals. Thus azotic remedies must take part in the formation of bile in a similar way to that in which uric and hippuric acids do. It will always be remarkable, says *Liebig*, how men came to think of a beverage from tea-leaves and roasted coffee, in both of which, equally, azote is contained, and how these beverages have become a necessary want. It is not less remarkable, that the Indian discovered in smoking, a remedy, by which the transformation of organs is prolonged, and hunger borne more easily. *Liebig* shows, by calculations, that *caffeine* and *asparagine* can, by absorption of oxygen and water, be turned into *taurine* and *theobromine*, and that under equal circumstances, they can be turned either into *taurine* and *urea*, or into *taurine* and *uric acid*. The operation of *caffeine*, &c., on the animal organism, can be better conceived, if we consider that the principal constituent of bile contains only a proportionably small quantity of azote; that, consequently, the infusion of tea, though little *theine* be present, cannot be without effect, if, in general, it contributes to the formation of bile. At the same time we must remark, that in an excess of non-azotic food, joined with the want of exercise, necessary for the transformation of structures, the body requires the consumption of such victuals which are able to undertake the part of the azotic combinations indispensable for respiration. As to the operation of other azotic remedies, which act chiefly on the brain and nervous system, as quiniue, opium, &c. in as much as the effect emanates from material substances which are assimilated, and inasmuch as a larger portion has a stronger effect than a smaller one—only this explanation can be given: that these remedies take part in the formation of the brain and nervous substance. As soon as it is proved, that, out of the constituent parts of vegetable, *proteine* alone, or with the elements of non-azotic victuals, brain and nervous substance are produced, we can likewise presume that other vegetable substances, which, in their chemical composition, stand between these two, are employed for similar purposes. Fremy's researches show that the *cerebrinic acid*, which is totally different in its composition from the fat and azotic bodies of the organism, can be most aptly compared to the *choleinic acid*.

In the third book (from p. 199-282), *Liebig* treats of the motor power in the animal organism. And first he explains certain phenomena, which are produced in the animal body by the vital power. Vital power causes the increase of bulk, the transformation of food into animal structure, and the latter's resistance to exterior influence. All these vital functions must be regulated by explorable laws, which must correspond with the general laws of resistance and motion. These operations of vital power depend on a certain form of the parts, on a certain chemical composition, on a certain temperature, and on a constant supply of food. The vital power is, in its effects, similar to chemical force; it only becomes active by immediate contact, and can only perform its free operations with a certain form and arrangement of the elementary parts of the bodies. Therefore, the vital power can only then act in the nutriment of a living body, when the food has assumed its form and properties. The vital power must not only be placed in equilibrium with the chemical forces, but it must exceed them in its effects, in order to cause the necessary decomposition. That force stands nearest the vital power which is created by the combination of zinc and copper-plates, kept in contact with an acid. This disengaged force can produce a series of different effects, conquer obstacles, &c. As long as the chemical action of the acid operates on the metallic plates, the conducting wire will exhibit its activity. The motion of the blood and juices in the animal organism depends on certain organs, which do not create the moving power in themselves, but receive it from other quarters. The plant, being without conductors of power, retains the whole sum of its vital power; and is, by that means, enabled to conquer the strongest chemical forces, (to decompose carbonic acid). In the animal, this force is changed into motor power, and for that reason it only takes such substances for consumption which have an equal composition to that of the "force-creating" organs (muscles). The resistance which the azotic victuals and the chemical force oppose to the vital power, is infinitely smaller than the force and energy with which the constituents of carbonic acid cohere. The vital power is entirely different from other similar powers, as magnetism, electricity, for it displays phenomena which belong to no other. Heat has the effect on animals which the rays of

the sun have on plants. In certain degrees of cold, the phenomena of life cease. In carnivorous animals, heat is created by the combination of oxygen with the transformed structures ; in herbivorous, by the combination of oxygen with the non-azotic victuals. It has already been shown that production of heat and change of matter stand in the closest connexion ; that, in diminished heat, change of matter is increased, or the vital functions are injured. The consumption of spirituous liquors retards the increase of bulk. The carbon and hydrogen of the alcohol combine with the oxygen, and are disengaged in the form of carbonic acid and water, without the muscular substance taking part in the transformation; therefore, no corresponding measure of mechanical force is created. In "winter-sleepers," which do not increase in bulk during sleep, the temperature sinks. The production of heat itself cannot be considered as the cause of mechanical effects ; but the only source of mechanical power is the transition of living parts of our body into inorganic combinations. Thus, animal life depends on the mutual action of opposite forces, in consequence of which the supply and consumption of matter proceed. The vital power causes the increase, the chemical action of oxygen the consumption. This consumption, by receiving oxygen, is called change of matter, and only takes place when the sum of vital power is smaller than that of the chemical action, as is the case in the withdrawal of heat, or in using the active forces of the body in mechanical motion. From the relations of the use of oxygen to the transformation of matter, and to the production of heat in the animal body, those general rules are derived, some of which have already been explained, and the rest shall shortly be laid down. In a given time, only a fixed measure of mechanical effects can be elaborated, only a fixed quantity of heat disengaged. The sum of the mechanical force produced within a given time in the animal body is like the sum of the force necessary to produce, in the same time, the voluntary and involuntary motions. The quantity of azotic food necessary for organic reparation, stands in a direct proportion to the quantity of transformed structure, and this quantity can be measured by the azote contained in the urine. The sum of mechanical effects produced in two individuals of equal temperature is proportioned to the azote contained in their urine. Health in the animal body involves an equilibrium between expenditure and supply. The increase of matter at every age stands in a certain proportion to the vital power used as moving force. In childhood, where the supply exceeds the expenditure, the produced mechanical effects are smaller in proportion. With increase of mechanical effects, the ability to increase in organic structure diminishes. In old age, more is consumed than supplied; in childhood, more is supplied than consumed. The amount of force which an adult can exhibit or expend in mechanical action, is considered equal to the fifth of his weight, which fifth he can move during eight hours, with a celerity of five feet in two seconds. By the reparation of his bodily weight he gathers again a quantity of force, which allows him the following day to produce an equal number of mechanical effects without exhaustion, and this restitution of force is accomplished by a sleep of seven hours. We may presume that the mechanical force used for work stands in a direct proportion to *the number of hours given to sleep.* Man sleeps seven, and wakes seventeen hours. But if an old man sleeps only three hours and a half, cæteris paribus, he could only accomplish half his usual mechanical effects. The infant sleeps twenty hours, and wakes four. Thus, the active force used for increase of organs is in proportion to that used for mechanical effects, as twenty to four. Let us suppose that the old man and infant use an amount of force for mechanical effects which corresponds to the proportion of the force used by man : the mechanical effects must be proportionate to the number of the hours of waking ; the effects of formation and reproduction to the number of the hours of sleep. In man a perfect equilibrium exists between supply and consumption ; in the old man and infant supply and consumption are disproportionate. If the consumption of force in the seventeen hours of waking be like the consumption of force necessary for restoring an equilibrium in sleep, viz.. 100, and this be equal to seventeen hours of waking, and seven hours of sleep, the following proportions will take place. The mechanical effects are in proportion to the effects of formation in man, = 100:100; in the infant = 25:250; in the old man = 125:50. And the increase bears proportion to the decrease, in man = 100:100; in the infant = 100:10; in the old man 100:250. If one part of the body be surrounded with ice or snow, whilst the others remain in their usual temperature, the privation of heat causes, more or less rapidly, a material transformation in the cold part. The resistance of the living parts to the invasion of oxygen is smaller there than in other places, and this involves an increased resistance in those places. The whole effect of the inhaled oxygen is directed towards the cooled part. The ability of oxygen to enter into chemical combinations is heightened here in consequence of the diminished resistance ; once disengaged, all opposition ceases; and, in consequence of the combination of oxygen with the transformed structure, a greater quantity of heat is evolved. If the whole surface of the body be deprived of heat, the whole effect of oxygen is directed towards the skin; and in a short time transformation must increase in the whole body.

(To be concluded in our next.)

NOTICE TO CORRESPONDENTS.

M. Y.—*We decline*, having resolved to avoid the subject wholly ; *and besides our correspondent is not quite right, and impugns our efficiency, in supposing that the medical coroner is as bad as ever in his treatment of medical men at inquests. We have received several letters, and know of facts, which prove that we have succeeded in effecting considerable improvement. For instance, he has ceased in a great measure to carry his own friends round with him to give evidence on any occasion when a medical man is needed ; so that our correspondent's allusion to Mr. Wilson or Ancell, has lost much of its force. In reference to this matter, as in reference to several other benefactions we have procured the profession from the same quarter, (and he has done more, though little, for medical men in the last two months than he ever did in his life before) the grace of a witty fellow, who had enjoyed in a certain square an unexpected good supper, with ample supplies of claret and champaigne, is equally appropriate. "For these, and all other, thy bounties, the* Medical Times *be thanked."*

A Friend.—*We shall notice the trial next week.*

Mr. B., *who regrets having affixed his signature to the address before he had maturely considered its contents, should write to the parties the fact, or to the Secretary of the College.*

An Old Publisher *writes warning Mr. Carfrae against his opponent's ingenious manœuvres.* Mr. C. *has adopted the only successful defence, a plain and straightforward course. If it has not succeeded in bringing the parties to terms, it has at least shewn the want of a good cause.*

A Reformer.—*We must decline to give an opinion as to whether our correspondent should join or not ; but clearly the question of the "disreputability" depends on another, on which we have no information—our correspondent's* standing. *It will not be "disreputable," if our querist happen to be anything under a ——, but we must decline saying what.*

X. Y. Z.—*Not within ten miles of the city. By paying four guineas the Company will extend the license to include London.*

Tourist *writes in strong approval of Mr. Braid's paper, suggesting experiments on the brute creation, to see whether a fixed stare and arrested attention would be sufficient to hypnotize them. He refers particularly to the experiment of a chalk line with fowls, and the odd result following a rapid whirl of them with their heads under their wings. He directs Mr. Braid's attention to the alleged case of clairvoyance now exhibiting at Manchester, and reported in the* Sun, *and fears that it may be like the second sight of the Highland youth, who was exhibited some years since, and an account of whom appears in the* Isis Revelata *of Mr. Colquhoun. Our correspondent speculates on the* origin *of the experiment with the chalk line and the chicken, — and suggests that it may be a remnant of some previous mesmeric age. More probably, we think, it was an accident.*

X. Y.—*We cannot recommend by preference, Taylor's book on Jurisprudence. It is printed in such small type that it is a pain to read it. We know of nothing to supersede Beck in a good edition.*

Dr. Jeffreys' letter *has been received. It favours us with a useful hint.*

A Druggist *will do well to send his letter to the Pharmaceutical Society. They must notice it. We are sorry to hear that that body is creating such general dissatisfaction.*

An Old Man who hates Professional Quackery. —*We do not know the precise number in which a contemporary, in his* ad captandum vulgus *policy of translating every thing, translated* pulvis Jacobi,—"*powder of Jacob.*" *It was, however, within the last four months.*

A Student *must confidentially authenticate his note relating the actual examination,—questions of one of the Hall's examiners. Statements of facts must be authenticated.*

A Constant Reader.—*We believe that a fictitious musk is made of rectified oil of amber and nitric acid; but it can be of little value.*

Several Communications have this week been received, and are under consideration.

Declined for want of space.—"*Mr. H. W. B.*"—"*Argus*"—"*A Looker On*"—*Dr. M.*"—"*Mr. G. W.*" (*Lambeth*)—"*X. Y. Z.*"—"*Sigma*"—*and* "*A Member.*"

Our Pencilling of Orfila, our Bibliographical Record, and the second Letter of Dr. Carpenter on Mesmerism, are reluctantly postponed to our next, for reasons which must be an excuse to several Correspondents.

THE MEDICAL TIMES.

SATURDAY, MAY 4, 1844.

> And late the nation found, with fruitless skill,
> Its former strength was but plethoric ill.
>
> GOLDSMITH.

WE should like much to write a partisan article on the Factory question. It is the sort of thing, on either side, that admits an article like Dyer's earthquake, "down dashing, loud thundering to the moon." We are quite sure we could polish it off *secundum artem*, in a way to please our readers ; but they shall have it not. We have no partisan views on the matter ; and —laugh as you like at our strange fastidiousness—we shall not write as if we had.

Neither, for the same old-fashioned reason, will we be tempted to the next best thing, — a growling phillipic at both sides. How easy, how pleasing, to prove nobody right save the ever fluctuating, yet ever infallible, WE! As the man with one eye is a king in the country of blind people, the best chance of the half wise editor is to make the rest of the world fools. Like every other genius, he rises to distinction by the ladder of his brethren's insignificancy. The quarrels of political parties are not like those between man and wife. The writer interposing, whichever side he threshes, will be hallooed on by another—and get both parties' support, while successively pommelling both.

But we overcome the temptation. For once we will be as honest as if we had never been journalists. The attractive dash of a rounded falsehood shan't coax us to tell it; and though both sides come clapping

us on the back, their bright eyes cheering in advance each of our effective blows, we won't say a cross word of either that we don't really believe them to deserve.

One of the jokes about the Ten Hours' clause is, that one side supports, and another opposes it, for precisely the same good, logical reason—the well-being of the operative. How highly speaks this in favour of man's ratiocinative powers. How noble in reason! how infinite in faculties! in apprehension how like a God! when the two divisions of legislative Solomons who honour this august nation, are at each other's throats on the dispute whether the same plain matter of fact shall be ruin or salvation to one and the same body of men! Again, lordly agriculturists mean no harm to *parvenus* manufacturers—manufacturers mean nothing interested to themselves, in opposing the double-faced innovator: both have the best intentions. The party rustic would sacrifice the party civic—and the party civic would sacrifice itself, all to save the operative! Poor operative! how little thinks he, in his squalid pallet, by his ill-furnished cupboard, how much his happiness costs both manufacturer and agriculturist—*in talk*.

One circumstance, that gave us a still higher opinion of both classes of legislators, we will briefly record. Lord Ashley proposed to cut off the one-fifth of the proceeds of the whole capital vested in manufactories, and expressed the favourable opinion of manufacturers' generosity, that, from his knowledge of them, he had no doubt that, in addition to this loss, they would cheerfully pay two millions of persons daily, for two hours' work they did not perform. The worthy gentleman must have had a thorough confidence in the disinterestedness of his own class, who could count so clearly on that of his opponent's class. A Ten Hours' Bill for *rural* labourers, with sixpence an hour for all over work, is one that the manufacturers might press with a good grace and *perfect success* on their very kind friends, the agriculturists. We wonder whether benevolent landlords ever thought that this was practicable; and if so, whether the arrangement, if it cut short a few continental tours, broke down a few carriages—broke up a few town establishments—might not mightily thin the union houses, and tend to re-stock the country with the expiring race of "yeomen?" It would be a pleasant and Christian sight, thus to see the two great parties disposing of each other's all—or a fair portion of it—for the poor's good. Parliamentary benevolence, at Parliament men's cost, would be quite a novel spectacle.

The Ten Hours' Bill, having risen to the honour of being a national measure, has, as usual, been as prolific of unsound arguments as a late autumn of rotten apples. Of this kind we call, on one side, the talk about "over production"—as if our poor devils of labourers had ever too much to do;—"the doing as much in ten hours as twelve," the "increase of wages from abridged labour;" and on the other, the declamations about "improper meddlings between master and servant," and the "impropriety of Government interfering in the disposal of either labour or capital." Having no space to weary our readers with sundry weighty reasons in proof, we beg them to believe on *our* assurances, that the above arguments on both sides *are* unsound. A mistaken political faith does not, luckily, damn people,—and if it did, erring here with an editor, they will have the honour of being d—d in good company. Such are the pleasures of pinning one's faith judiciously!

Fortunately for the honour of the discussion—and it gives it a *rare* distinction—but most unfortunately for the poor operatives, the measure admits also of *sound* reasons on both sides, and more than one or two, though they sadly conflict. The manufacturers tell us of the vested rights of their embarked capital—the extent of our factory population—the necessity of commerce—the ruin to capitalists and workmen, arising from unfavourable terms of competition with foreign rivals; and Sir James Graham, for the nonce their mouth-piece, and who can take both sides, and, fortunately for the lucky side, be equally emphatic on each, exclaims:—"I feel as confident as I ever was of the truth of any mathematical proposition, that if this (Ten Hours) motion be carried, manufactures will be transferred to foreign rivals, and this will result in the utter downfall of our own manufactures."

Against all these State reasons of policy and convenience, our Profession interposes, supported by the sacred voice of humanity. We say that labour may be the primal curse of man, but is a curse which human wisdom "should sweeten to a blessing." Human ingenuity, that invoked first to its aid the mechanic force of the brute creation, has at length brought into its service herculean powers in things inanimate. Machinery, taught almost to think as well as to act, does much of that aggregate amount of labour the world requires: the work it leaves undone is not enough to occupy all those that have to live by work: let it be divided then, cries our Profession, among the candidates in more equal proportions, or this man shall languish idle in a workhouse, while that man pines, over-toiled, in his factory: and the great bulwark of a nation—the health, the strength, the happiness of its natives—shall suffer grievously, their whole organism undergo degeneration, and the causes of weakness and disease be diffused and made hereditary!

Great should be the commercial advantage for which we submit to an atrophied population—enormous the wealth for which we barter our men's decay!

We have no wish to join with those who so freely exaggerate the mischiefs of all factory labour, and according to whom a factory is little less horrible than a slaver's hold in her passage from the African coast. We have little doubt that, with lessened hours of work, the labouring inmates, in some of the better-managed factories, would be as favourably placed, as regards health, as nine-tenths of this country's mechanics. It is the non-intermittency of an unchanging, monotonous labour, lasting through a whole day, for unbroken weeks, months, and years, that makes up the peculiar misfortune of factory labour. It is not the atmosphere alone, nor the labour alone, nor the monotony alone, nor the combination of all three, that makes the mischief lethal: but the never-dying, never-changing excess. Variety is the order of healthy man as of beautiful nature, and we might as well expect the rich affluence and freshness of vegetation in the arid waste of an eternal and changeless summer, as the full development of man's physical nature when secluded from the day for nine-tenths of his waking life, in the warm, gaseous, and artificial atmosphere of a factory. Every instinct of his nature is at war with his condition, and he pines under an artificiality which is as destructive to him, when least felt, as a poisoned atmosphere. With a sense of the beautiful, he feels nothing grateful—with his eyes open, he has the blind man's curse.

> Not to him returns
> Day or the sweet approach of eve, or morn,
> Or sight of vernal bloom, or summer's rose,
> Or flocks, or herds, or Nature's face divine!

His long hours of free imprisonment is a slow blight to his whole organization. It is his transplantation from his native soil to a hothouse—to a locality in which—as says an able writer in the last week's "Leeds Times," one who has clearly well studied the matter—a man may live (and, we may add, shew a sickly bloom), but "where full health is scarcely ever known," where all his vital powers "fall under par," where he is "nourished on a kind of slow poison,"—"lives *more painfully* than any other part of the community,"—and where his whole life, realizing its definition by the old philosopher, is but "a long dying." For so much evil, how small a thing is the efficient remedy! Two short hours of healthful change, and civic habits are reconciled to nature's requisitions. But if, alas! on the aggregate of these two hours as given to labour instead of to health, depends that commercial superiority on which our greatness as a nation rests, in what a tremendous dilemma has mismanaged time placed us! What position can ever be fancied worse than that which opposes in stern antagonism to the *salus populi*—*another summa lex*—the *salus reipublicæ?* With such difficulties, our statesmen, if good (and what avail they if not *good?*) should be very wise, for nothing but an extreme of wisdom, it seems to our humble vision, can, in such circumstances, make social goodness nationally *safe*,—a sad, sad thought.

STRICTURE OF THE RECTUM.—A case is narrated from the practice of Mr. Gay, in which an annular stricture of the rectum not having been detected, the bowel ulcerated above the seat of disease, its contents were evacuated into the peritoneal cavity, inflammation followed, and terminated fatally. The nature of the obstruction was discovered at the post-mortem examination.

MR. CHURCHILL'S ADMISSION THAT THE "MEDICAL TIMES" IS THE LEADING MEDICAL JOURNAL.

Sir,—To my explicit letter of April 22, accepting Mr. Churchill's three proposals, and laying down the preliminaries essential to ensure a fair, full, and efficient investigation, I received a singugularly ingenious reply, in which Mr. Churchill declines entering into "*any correspondence with me, further than is absolutely necessary for the enquiry*," asserts that he can prove that I have been selling two distinct publications, different in size, matter, and price, but with the same Government stamp—a matter, which he says, is to be *instigated* (sic in MS.) at the Stamp Office—repeats his proposition to contest sales, and without noticing one proposal of my letter of the 22nd, states that he has deposited £150 with Mr. Renshaw, whom he says, *I* appointed (though I only named him after Messrs. Bailliere and Longman), and expresses an odd wish to avoid "all delay, shifting, or evasion!"

Though I could not but be certain, that this was rather a bombastic mode of effecting a real retreat, I thought I would try another effort, that must force Mr. Churchill either at once plainly to accept or decline the investigation, and I, therefore, wrote, in the shortest and plainest manner possible, the little that was required from him, and which the whole bookselling trade declared not only to be *reasonable*, but necessary, in order to try, whether in his very *great anxiety* for the trial, he would deign, from the *high elevation* in which he had entrenched himself, by his letter of the 23d ultimo, to utter to me a simple "yes" or "no." "Yes" or "no," I thought could not be classified under Mr. Churchill's *convenient* heading of "*unnecessary communication.*"

Sir,—I beg leave to say, with all due courtesy, that your letter, dated April 22d, is not only, in the first place, personally insulting to me, as if you, a bankrupt* bookseller, were something superior to me, but secondly, contains a gross fabrication, thirdly, omits carefully to mention the specific journal you challenge, and lastly, is no answer, *direct* or *indirect*, to my letter, dated April 22, which it professes to reply to. I leave the public to say if it be the sort of letter which indicates a sincere desire that we should meet to settle this investigation.

I now again put the WHOLE MATTER in a FEW WORDS PLAINLY before you. You proposed the challenge to me, after declining my challenge during six weeks. I at once agreed to it. You proposed, that it should be on three points. I at once agreed to that. You proposed, that £50 should be staked on each. I at once agreed to that. I now ask you, do you, on your side, yes or no agree to the points plainly proposed in my letter of April 22d, that to prevent all chance of a fictitious circulation, the enquiry shall be for a date not later than that when you received the challenge, March 6th, and that the whole preliminaries and results shall, as there stated, appear in the two journals fully, so as to allow of no after mystification or drawback. I have the best of authorities in the trade for saying, that my note of April 22d asks nothing unreasonable or unnecessary, and, therefore, to prevent any unmeaning letter, like your last, I ask you for a straightforward answer, "yes" or "no" To prevent evasion, I will treat as beneath notice any other.

Your obedient servant,
J. CARFRAE.

49, Essex Street, Strand, April 29th, 1844.

P.S.—Your imaginary objection about some journal, (which you do not name,) with different size and price, is ingenious, if you want to get out of the arbitration, but otherwise is wholly absurd. If you "CAN" prove such a thing, do it to the umpires, who will give you the benefit of the circumstance; if you cannot, you do wrong to say you can, or assert the thing at all. I pledge myself, that if you do not refer to our "Almanack," which is not different in "size" and "price," the charge is wholly false; and that if you do, it is both false and ridiculous. The sale of the "Almanack" could never be mooted by even an idiot against you.

To this letter I really thought that there could be no answer but one—acceptance, or refusal. Mr. Churchill, however, was ingenious enough to find a middle place, and writes, referring me to an enclosed letter of Mr. Renshaw's, as follows:—

DEAR SIR,—You have this day deposited with me One Hundred and Fifty Pounds to await the award of myself and Mr. Bailliere, on the question as to the comparative sale of the *Lancet* and other Medical Journals.

Yours truly,
H. RENSHAW.

To Mr. Churchill.

and my opponent then quaintly enough adds, that he, Mr. Churchill, declines, with me, "any further communication!" From this, I presume that Mr. Churchill, in challenging "*other*" medical journals, but carefully avoiding the mention of the MEDICAL TIMES, was preparing, in advance, a loophole that might serve him equally, either to get out of the challenge, when likely to be beaten, or save him from its consequences when beaten. The world will think the better of his prudence now that they see how wise he was in abstaining throughout from any specific reference, when specificness was so dangerous.

Here, I suppose, I must leave the matter. Though weary of finding that the more I try to get Mr. Churchill to the point, the more adroit he is in keeping away from it, I confess that if I was not afraid of wearying your readers also, I should go a bit further to see if he have any other shifts. As it is, it is best to leave it in the public's hands.

It is plain, from Mr. Churchill's bringing the challenge, and seeking personal relations with me, six weeks after date, he would have taken it up when presented, if he could; it is plain, from all his subsequent manœuvrings, that on my closing at once so frankly with all his proposals, and coming, without more ado, to the point at issue, I had completely thrown him aback in his calculations, and those who have seen him evade answering "yes" or "no" to the plainest questions, and which no reasonable or sincere party could hesitate at for a moment, refusing at once either to decline or accept, will understand why he *concocted* a cock-and-a-bull story about some publication he is too prudent to name, and made a ridiculous bravado about a *premature* delivery of a deposit, when he was all the while taking secure measures to keep it a long way out of any threatened danger. Our high position and (may I say?) straightforwardness must have reduced Mr. Churchill to a very awkward predicament, when all his tricks cannot get him out of it better than this.

I am Sir,
Your obedient Servant,
J. A. CARFRAE.

* I have to beg the disdainful Mr. Churchill's pardon. It appears that he never reached higher than the honours of insolvency. Having regularly taken his degree himself in the Court of In solvents, I understand he is now actively grinding an Hon. M.P. for a similar distinction.—J. A. C.

EXTRACTS FROM GERMAN AND ITALIAN JOURNALS.

GREECE: ITS MIDWIVES: REMEDIES IN POPULAR VOGUE. (Continued from page 31.)—The use of embalmed corpses for fumigations, to drive away bad spirits from stables (!) is general, not only in Greece, but through the east; they are said to be employed also by Turkish females to destroy sexual vigour. In the seraglios an electuary is known, composed of mummies, powdered pearls, and *syrupus alkermes*. Against the sterility of females, the midwives use a seed which resembles the head of a man, a monkey, or a dog; it is worn also as an amulet. This nostrum, which has really cured a great many females after a barrenness of several years, is the seed of the *antirrhinum orontium*. An Athenian matron, after having been married fourteen years without children has, to my own knowledge, become pregnant after the use of this seed, which she received from the city of Saloniki. It is used as a powder mixed with water. I received from Crete an *antidote for the wounds caused by serpents and scorpions*. A few drops must be taken in a wineglassful of brandy. The dose, varying with age and constitution, is from ten to fifty drops, and must be continued till the wound is completely cured. The tincture is prepared from a fresh plant which is said to grow on Mount Ida, and is, according to the description given of it, the *aristolochia sempervirens*.

COAL FIRES AND THEIR VAPOURS.—On account of the short and very mild winter in Greece, stoves are scarce. The customary plan is to put in the middle of the room a neat copper pan filled with coals, round which the inmates sit. To prevent the asphyxia, or other annoyances thence arising, they lay iron or orange-peel on the glowing coals—and if accidents then happen they are ascribed to other causes than the coals. For head-ache, giddiness, sickness, or vomiting arising from the coal fires, they apply externally orange-peel or burnt coffee, and wash the head with vinegar.

GREEK REMEDIES AGAINST SWOONING.—The patients' fingers, beginning with the thumb, are successively bit with much force; recovery soon follows. In the Maiua, they administer to the fainting person a glass of warm urine, after which the patient vomits violently and is said to recover speedily.—Their remedies against erysipelas are curious. In passion week, during the night, they carry the host about in procession, and then expose it in the church; the wax candles, now lighted and placed round the host, and the flowers strewed upon it, are consecrated, and possess, it is thought, power to protect against erysipelas, and to secure from misfortune on the sea. If a person suffers from erysipelas, they light three candles thus prepared, and place them in the form of a cross on a red cloth, which is laid on the affected part, after it has been strewed over with the ashes of cotton or oaknm. In the same way they fumigate the inflamed part with the lighted flowers. In storms, &c. sailors prepare a cross out of the holy wax of the candle and throw it into the sea, crossing themselves and praying during the time. —The greater number of common red and brittle stones are used as *styptics* by the common people internally and externally in hæmatemesis, uterine hæmorrhages, and wounds.

HAIR DYES, BY DR. WIMMER OF MUNICH.—Hair-dyes being sometimes attended with danger, it may be useful to give the two following, which are perfectly innocuous:—The first is *pyrogallic acid*, which gives the hair a beautiful brown colour. Is is prepared by subjecting nutgalls, coarsely powdered, to a dry distillation at a moderate heat in a retort. One part will sublime and rest in the neck of the retort, whilst the other will distil over as a fluid. Dissolve the sublimate in the neck of the retort in distilled water at a moderate heat, and dilute the distilled acid-liquid with it; after removing the greater part of the empyreumatic oil, by means of a filtering funnel, shake the watery solution of the pyrogallic acid, adding to it animal charcoal to diminish the bad smell, and filter it, washing it for some time with distilled water and removing the charcoal. The solution of pyrogallic acid thus becomes almost transparent and without smell, and must now be concentrated by evaporating at a moderate heat; it must then be diluted again with spirits of wine, and should some bad smell still adhere, it can easily be concealed by a few drops of a fragrant etherial oil. By using this tincture, the grey hair becomes gradually light coloured, and then permanently brown. Care must be taken not to soil the hands or other parts of the body with it, on account of the great difficulty in removing the colour. It must also be remarked, that the preparation of pyrogallic acid must not be interrupted, because it possesses the property of absorbing oxygen very rapidly from the air, and becomes transformed into a dark brown pigment (*humine*) almost insoluble in water and spirits of wine.—A *second very innocuous hair-dye* is the *sulphuret of silver*, which gives a durable black colour. To prepare it, two liquids are necessary; a diluted solution of *nitrate or acetate of silver*, and a rather concentrated one of *sulphuret of potassium*, or *sulphuret of sodium*, procured by reducing sulphate of potass, or sulphate of soda, by means of coals. The following is the mode of application:—At night, before going to bed, dip a small brush or a fine comb into the solution of silver, and brush or comb the hair carefully through, and then cover it by a close fitting oil skin cap; gloves ought to be used during the application, to prevent the fingers being soiled. The next morning, dip another fine comb into the solution of the sulphuret, and comb the hair through carefully; the latter operation produces sulphuret of silver. Lastly, dip the other comb into the solution of silver again, and comb the hair through repeatedly and carefully. As soon as the hair is perfectly dry, treat it in the usual way with pomatum, to give the natural suppleness and lustre.

A COMMON SUCCEDANEUM FOR THE TEETH.—To fill decayed teeth, prepare a concentrated solution of gum sandarac, mastich, colophonium, in ether or pure alcohol, which ought not to amount to more

than a third part of the weight of the whole mass. Take, for instance, twelve parts of sandarac, six parts of mastich, one part of powdered amber, and six parts of ether, and distribute the solution into small phials corked air-tight, bound over with a bladder, and kept in a cool place. It is the tooth-mastich—is like balsam of copaiva in colour and consistence. Exposed to the air, it thickens very rapidly, becoming viscid at first, and dries gradually, but remains for a long time soft. With alcohol the mass is turned into a white milky solution.

The Celebrated Dr. Gauger's Tooth Balsam, is a sort of mastich prepared with pure alcohol, and principally used in St. Petersburg. It is prepared in the following way :—Dissolve two ounces of choice mastich in three ounces of pure alcohol : decant the solution and pour it into a dry bottle capable of holding two pounds; add nine ounces of dry balsam of Tolu, and accelerate its solution by a moderate heat, and by turning and shaking the bottle, which must be corked air-tight all the time. Then place the fluid for some time on a warm place, in order that the insoluble parts may separate from the rest, and distribute the liquid into wide-mouthed little phials, which must be corked air-tight, immediately. This tooth-balsam is thick and tough, and becomes pretty solid by the contact of the air, and is neither affected by saliva nor by any other liquid. To fill hollow teeth and alleviate the tooth-ache, the hollow is first cleaned and dried by cotton or blotting-paper; then a piece of cotton is rolled up, dipped into the balsam, and introduced into the tooth. If the cement falls out after some time, the stopping must be repeated immediately. This is a substitute for the lead usually introduced in Germany.

Vienna Succedaneum for Teeth.—Herr Von Wirth, the learned apothecary of Vienna, has conceived the happy idea of substituting asbestos for cotton, and of keeping it mixed with the resinous mass. At the same time, a brown tooth-tincture is used, which is prepared with alcohol and acetic ether, from guiacum, myrrh, &c. M. Paul Ostermaier, of Munich, analysed the above cement and tincture, and succeeded in preparing them. West Indian copal is finely powdered, and exposed for some weeks to a moderately warm air ; then it is dissolved in absolute alcohol, mixed with a few drops of *oleum menthæ piperitæ*. After the evaporation of the alcohol, the mass will retain a certain elasticity and softness. The asbestos must be finely triturated before being mixed with the solution of copal; wide-mouthed phials must be used and closed air-tight. The prospectus given with the two phials sets forth, that the cement, by filling the tooth, will stop caries, remove the bad smell of the mouth, protect the nerve against external injury, and make the tooth fit again for mastication. The tooth which it to be stopped must first be cleansed by dry cotton, then filled with another cotton ball, previously dipped in the mixture ; the cotton is taken out and the cement pressed into the tooth with the finger ; the access of saliva must be prevented during the operation. In tooth-ache the tincture alone ought to be used. The stopper and neck of the phial must be carefully cleaned after being used.

Ostermaier's Succedaneum for Teeth.—M. Otto Ostermaier produced *phosphate of lime* within the tooth in the following manner :—he first obtained phosphoric acid by burning phosphorus in dry air under a large pot; with forty-eight parts of the acid he mixed fifty-two parts of newly burned quick-lime, and pressed them together into the hollow tooth, previously *dried with great care*. If the tooth be not carefully dried, the mass will expand and flow over. The remaining mass cannot be used afterwards, because it hardens after a few minutes.

Poudre Metallque, (the celebrated Parisian Succedaneum).—Having understood that it is kept in mercury, and that a smell of ammonia appears after removing the mercury, we suppose it to be prepared from ammonia, silver, and mercury in excess. If the excess of mercury be removed, and the mass exposed to air and water, the ammonium (N H4) loses one part of its hydrogen and escapes as ammonia (N H3), whilst the silver, with a small portion of mercury, remains in the tooth and becomes hard.

Taffeta et Charta Vesicatoria Adhæsiva. —Assessor Pripp communicated to the third assembly of Scandinavian naturalists the following mode of preparing a cheap adhesive taffeta of cantharides :—dissolve at a moderate heat four parts of resin of fir in six parts of oil of turpentine, and digest three parts of powdered cantharides in the solution. Press and filter this balsam of cantharides, and spread it on taffeta previously covered with isinglass glue on the other side. Paper plaisters of cantharides can, of course, be prepared in the same way and much cheaper.

TRANSACTIONS OF LEARNED SOCIETIES.

Royal Medical and Chirurgical Society, April 23.—Mr. Stanley. President, in the Chair. —Communications, of which the following are abstracts, were read.

On Paracentesis Thoracis, as a curative measure in Empyema and Inflammatory Hydrothorax. By Hamilton Roe, M.D., Physician to the Westminster Hospital.

The author commenced his paper by alluding to the very generally received opinion of the uselessness of paracentesis thoracis as a curative measure in the treatment of pleuritic effusions, as founded upon the supposed facts:—that re-accumulation of fluid necessarily takes place after its withdrawal by the operation, and that the frequent repetition of tapping subsequently demanded in those cases in which life had been prolonged by it, was only sufficient for the alleviation of certain urgent symptoms; and lastly, that recorded experience is completely opposed to the employment of the operation. His own experience had induced the author to dissent from these opinions, and a careful examination of the cases recorded by various writers during the period of thirty years, had supported him in the correctness of the results at which he had arrived. Of thirty-nine cases recorded in the British medical journals, between the years 1812 and 1842, (a period selected as that in which an acquaintance with auscultation had rendered the diagnosis more accurate) in all of which paracentesis had been had recourse to, he had found that eleven only had died. Twenty-four cases had occurred to himself, and the chief object of the author was to prove from the results he had obtained, that the operation is as far from danger as any other performed upon the human body; that most of the evil consequences supposed to attend it are far more imaginary than real; that it is commonly successful when employed at an early stage of either empyema or inflammatory hydrothorax, and the common cause of failure is to be found at the late period at which it is alone regarded as admissible. The author next proceeds to notice at length the objection of certain writers to the treatment of empyema by operation, and opposes the opinion that the ultimate removal of pleuritic effusion must depend upon the action of the absorbents, and observes that the proper function of the absorbents is to carry off the ordinary healthy secretion, but not a diseased one; that their power may be sufficient to take up the quantity usually secreted, and yet wholly unequal to take up many pints added to it; and that it is at least very probable that the action of the absorbents becomes paralysed partly by the over-distension of the membrane in which they are situated, and partly by the general prostration of strength produced by the great suffering and the disturbance which the other functions undergo, from the pressure upon vital organs. These views were supported by a case of inflammatory hydrothorax, in which the withdrawal of a small quantity of fluid from the chest was sufficient to lessen mechanical pressure upon the absorbent vessels, and thus to enable them to re-assume their healthy action, and by which the great bulk of the fluid was subsequently removed. With reference to the supposed dangers of the operation, the author had been unable to find one case on record in which mischievous results had occurred. In his own practice no precautions had been employed to prevent the admission of air into the pleural cavity, but no bad results had followed, and even in one case (the only example of the kind) in which the air failed to be absorbed with the rapidity commonly observed, it had been readily withdrawn by means of a syringe, the wound made in tapping the chest having been healed; but, although the accidental admission of air at the time of the operation was never productive of bad effects, yet its continued entrance in those cases in which a fistulous opening had been made into the pleura, had very commonly been followed by mischievous results. The author was, therefore, strongly in favour of the complete removal of the fluid, and the immediate closing of the aperture. Although it was difficult to determine what length of time might without danger be allowed for the exhibition of internal remedies, yet from his own experience the author was induced to believe that in the general class of cases, three weeks is the longest period that can with safety be permitted to elapse before the withdrawal of the fluid. In none of his own cases had complete restoration of the lung resulted, after it had been subjected to the pressure of pleuritic effusion for six weeks. It was important to understand rightly the exact state implied by the term 'cured empyema,' much of the difference of opinion relative to the propriety of tapping the chest depending upon the varied manner in which such expression is employed. Thus in the posthumous essay of Dr. Hope, a long list of cases of empyema are recorded, in which the continued action of mercury was followed by " cure." In the essay in question, however, it is not stated that in any one case the lung had been restored to its healthy condition. By the early employment of paracentesis, those changes in the pulmonary tissue, by which its expansibility is destroyed, are prevented, and thus not only is the removal of the pleuritic effusion effected, but the lung also restored to the full performance of its function. The author next describes at length the morbid changes produced in the pleura by the long continuance of purulent collections, more particularly alluding to the manner in which the pleural sac becomes ultimately obliterated in chronic cases of empyema, in which the effusion has been very slowly removed, and at a late period. As one of the secondary effects, he had also observed that tubercular disease of the opposite lung not unfrequently occurs in old cases of empyema. Amongst the several changes produced in the lung during the existence of pleuritic effusion, the most important were those by which it was rendered subsequently incapable of expansion. In old cases of hydrothorax, the author had observed such effects to result from the condensation of the pulmonary tissue, which was often so complete as to prevent even partial expansion by the artificial introduction of air. In the cases in which purulent secretion had resulted, it had been frequently found that the pleura had become wholly altered in character; in some cases adherent to the parietes of the chest, in others greatly thickened and contracted, and so binding down and compressing the lung, as to render its restoration impossible. Twenty-four cases had occurred to the author, which had been treated by paracentesis thoracis; of these eighteen recovered, and six died. Nine of them were cases of purulent effusion, of which eight recovered, and one died; thirteen were cases of inflammatory hydrothorax, of which nine recovered, and four died ; one was a case of hydrothorax dependant upon cardiac disease, in which relief was afforded by the operation, and the remaining case was one of pneumo-thorax, having a fatal termination. In conclusion, the author remarked on the comparative value of certain physical signs, alluding to one of them, viz., the distension of the intercostals, as a differential sign, serving to mark the character, rather than the quantity, of the contained fluid. He had repeatedly found that retraction of the intercostals had existed with a very large amount of pleuritic effusion, and, on the other hand, that very distinct bulging of those spaces had been present with a very small quantity of fluid. In the former class of cases the fluid had been serous, in the latter purulent, and he was disposed to adopt the opinion of Dr. Stokes, and

of some of the older writers, who believe that the projection of the intercostals depends upon the purulent character of the effusion. The inability for patients affected with pleuritic effusion to lie upon the healthy side, had not been observed to accord with the opinion commonly expressed in systematic works, but that the contrary rule obtained in nearly one half of the cases. It was somewhat remarkable that the disease more commonly existed on the left side of the chest, and of the twenty-four cases adduced by the author, the ratio had been as two and a half to one.

Account of a case of empyema which recovered after repeated punctures of the pleural sac, by Theophilus Thompson, M.D., visiting physician to the hospital for consumption, and diseases of the chest.—In the summer of 1843, Dr. Thompson visited with M. Robarts of Great Coram-street, a little boy between five and six years of age, who had suffered for two months from febrile symptoms. On examining the chest, conclusive indications were observed of purulent effusion in the right side, and the operation of paracentesis thoracis was performed on the 27th of June. The puncture was made though the fourth intercostal space, and fourteen ounces of pus were withdrawn, various precautions being adopted to prevent the access of air as much as possible. On the 30th of June, the operation was repeated, and about a pint of matter withdrawn. The relief obtained, although very considerable, proved only temporary; notwithstanding the use of appropriate remedies, the accumulation was renewed, and on the 10th of July the operation was performed for the third time, twenty ounces of pus being removed. After the performance of the fourth operation on the 21st of July, when twenty-two ounces of thick but not fœtid pus were removed, the boy improved in strength, and the excess in girth of the right side of the chest over the left was materially reduced. On the 25th of July, the puncture which had been for some days perfectly healed, opened spontaneously, and within twenty-four hours gave exit to above four ounces of pus. After three days the discharge ceased, but above the scar of the two last punctures, a swelling was found two inches in length, at the posterior part of which an aperture, discharging matter, appeared. On the 16th of August both openings were discharging, the anterior spontaneously, the posterior when pressed. The local symptoms gradually became more favourable, and the general health improved, so that in September the boy was able to walk out. The right side of the chest contracted, and in the month of November was an inch and a half less than the left in circumference. A partial healing of the aperture being followed by some aggravation of the symptoms, it was determined to attempt the gradual emptying of the sac, and approximation of its sides. This object was successfully obtained by means of plugs made of sponge firmly tied with pack thread, and saturated with wax. Matter which was to the last inoffensive was thus repeatedly removed from the cavity. The opening healed about the end of January, and the boy has since remained perfectly well. The author remarks that although serous effusion into the pleural sac is frequently removed with but little assistance from medical treatment, yet that in cases of considerable purulent effusion, there is little hope of relief without an operation, which, in most instances, should be performed *early* without losing time and hazarding strength by the use of mercury and diuretics. He argues that puncture of the thorax involves no circumstance of peculiar hazard, provided suitable precautions be adopted. Amongst these precautions, he urges the expediency of repeating the operation, in preference to removing a large quantity of pus at once, and especially insists on the conclusive evidence which recorded cases afford that the practice of leaving a canula in the wound is highly detrimental, in consequence of the increase of pleural inflammation, and decomposition of the enclosed matter owing to the *long-continued* contact of atmospheric air.

Dr. C. J. B. Williams enquired if the ages of the patients alluded to by Dr. Roe in the tabular view, had been mentioned?

Dr. Cursham answered in the affirmative.

Dr. J. C. B. Williams asked further for the average age of the patients, which it appeared had not been given.

Dr. Roe stated that there were few under twenty years of age, and few above thirty.

Dr. C. J. B. Williams observed that it would be scarcely right to discuss such a paper from the abstract that had been read, but there were some points to which he would allude. He was certainly surprised at some of the results, which did not correspond with the experience of others; the success attending the operation, especially in cases of empyema was very surprising, and, if confirmed by others, would prove very encouraging. As to the propriety of adopting means for the exclusion of the air during the operation, he (Dr. Williams) some years ago had the opportunity of seeing the operation performed several times, and in no case was it attended with favourable results, so that it fell into disrepute. The experience of others was to the same effect. In those cases in which the operation was generally performed, no attempt was made to exclude the air, and the canula was not unfrequently left in. The effects which followed were so immediately attributable to the influence produced by the entrance of air, as to particularly direct Dr. Williams' attention to the subject. Prior to the performance of the operation, the patient is oppressed by the accumulation of pus, but the character of the symptoms is changed afterwards. When the pus is first evacuated it is not fœtid. He (Dr. C. J. B. Williams) could not recollect any case where the pus was fœtid in the first instance. The primary symptoms are satisfactory, but in two or three days the patient becomes feverish, with night sweats, quick pulse, and the discharge, from the admission of air by the canula becomes more and more offensive and fœtid. These cases occur principally in adults. There is a remarkable exception with respect to children. The same fœtid condition of the pus occurs, but the constitution does not appear to suffer in an equal degree; there seems to be a greater power of resistance against the influence of the decomposed pus. The cases in which this fever has gone on to a fatal termination, led him to seek for means to prevent the admission of air, and subsequently to recommend those measures which were adopted by Dr. Thompson, the employment of which has not been followed by any unfavourable results, either in the shape of fœtor or irritative fever. With regard to the expediency of the operation, he agreed in opinion with Dr. Stokes, and others, that it is not so necessary as is generally supposed, and he thought that bye and bye the profession would come to the conclusion that it is principally requisite in cases of empyema. The nature of the effusion will be readily ascertained by an exploratory puncture, but the constitutional symptoms will assist in forming a diagnosis. In such a case, he (Dr. C. J. B. Williams) would not hesitate to recommend the operation. Within the last two or three years he had seen several cases, in which he would formerly have advised the operation, do well without it. The patients have seemed as if their dissolution were about to take place, when suddenly the malady has taken a turn for the better, and recovery has ultimately ensued. A lady last winter, labouring under pleuritic effusion, was becoming worse under the influence of mercury, when the plan of treatment was changed; tonics were administered, the effusion gradually diminished, and she recovered in the end. A point not sufficiently attended to, is the dependence of the effusion on want of tone, by which also it may be kept up. Another point of Dr. Roe's remarks had reference to the expediency of the admission of air, &c. The object of the operation is not merely to remove the fluid, but to restore the function of the lung; if air be allowed to enter, however, the proper function is not only not restored, but its action is more impeded by the presence of air than of the fluid. He would, therefore, recommend the operation to be practised in the manner employed, in the case narrated by Dr. Thompson, the pressure being exerted the moment the trocar was introduced, and sustained all the time the fluid is being evacuated. In that way the admission of air may be effectually prevented. Other methods have been adopted to prevent the entrance of air; the operation has been performed under water, that is to say the trocar has been introduced while the patient is in a bath, so that water might enter, but not air. This operation has been performed at Berlin. Dr. Skoda, of Vienna, employs an instrument so constructed with a valve, as to prevent the entrance of air, while it allows the fluid to flow out, but the objection to this is, that it is liable to be clogged with lymph. Another method is by attaching the intestine of a rabbit or chicken to the free end of the canula, and placing the gut under water, which then serves the part of a valve, allowing the contents of the pleural sac to escape, but not permitting anything to enter. There is then peculiar advantage attending this operation, this it allows of the opening being kept patent for some time, if requisite. The case of Dr. T. Thompson shows the propriety of repeating the operation several times, without evacuating all the fluid at once.

Dr. Mayo made some remarks on the treatment adopted in Dr. Thompson's case, but his observations were nearly inaudible to us. We understood him to object to the combination of calomel and quinine, as antagonizing medicines.

Dr. Cursham adverted to the statement in Dr. Roe's paper, that bulging of the intercostal spaces indicated the presence of purulent effusion, and it was not present in cases of hydrothorax. He was desirous of ascertaining whether this was in accordance with the experience of other practitioners?

Dr. C. J. B. Williams remarked that that opinion was quoted by Dr. Roe, from the works of Dr. Stokes.

Dr. Theophilus Thompson had noticed the bulging of the intercostal spaces in cases of both purulent and serous effusion: it was present in the case which he had brought before the society, and in other cases which, from the results, he had been led to believe were instances of serous effusion. He afterwards adverted to the case of a gentleman, who had been under his care, in whom the pleuritic effusion interfered considerably with the breathing, and who was getting worse, when he prescribed the chymaphila for it, as a tonic and diuretic, by the use of which he was rapidly relieved. A little boy who had effusion into the pleural cavity, was also relieved by demulcents and the sp. æth. nitr., when mercury had failed. Effusions into the cavity of the chest required, generally speaking, very little assistance from medicines for their removal.

Dr. C. J. B. Williams remarked that his objections applied rather to the mismanagement of the operation, than to the operation itself, the unfavourable results being chiefly referrible to the permanent use of the canula; and he thought that the cases alluded to by Dr. Roe and others, added force to his objections. They were cases which proved, not the injudiciousness of the operation, but the importance of being careful as to the manner in which it is performed. All the observations that have been made confirm the value of this opinion in regard to cases of empyema. When the effusion is serous, as it may be removed without having recourse to an operation, paracentesis should not be too hastily adopted.

Mr. Benjamin Phillips observed that he had tapped the chest some fifteen or sixteen times; in one or two only of the cases the effusion being purulent, while in the others it was of a serous nature. In these cases, the bulging, which is supposed by Dr. Roe to be peculiar to empyema, was very evident, shewing the incorrectness of Dr. Roe's position. In some of these cases a quantity of air was admitted, and no serious consequences resulted; but when the effusion is purulent, the symptoms described by Dr. C. J. B. Williams will follow. He had been requested, in some cases of hydrothorax, when operating, to draw off all the fluid, to which he had sometimes objected, as by doing so, air would enter, become expanded by heat, and cause inconvenience. In some of these instances the chest sounded like a drum afterwards, but no permanent inconvenience ensued, and the air disappeared in a few hours. The results of his experience with respect to the operation, were less favourable than that of Dr. Roe. He did not think that a single patient on whom he had ope-

rated, lived six months afterwards; in all cases, decided relief was obtained at first, which lasted for a few weeks, then the effusion re-appeared, and tapping became again requisite. Although there were not any indications of pleurisy after the first operation, yet the fluid evacuated by the second operation was always more albuminous.

Mr. Prescott Hewett felt equal surprise with Dr. Williams at the success met with by Dr. Roe. Within the last few years, he had seen several such cases, and with one exception, they had all terminated fatally. The diagnosis between serous and purulent effusion would be best ascertained by an exploratory incision. He had seen a case of serous effusion, in which tapping was practised with considerable relief; but the patient soon suffered from violent dyspnœa, and died two days afterwards. On examination of the body, the pleuræ were found to be covered with a large quantity of lymph, and the lung was so firmly bound down by it, that it was requisite to make incisions in it, before it could be inflated. He (Mr. Prescott Hewett) last year opened the body of a gentleman, who had died of some pulmonary complaint, the nature of which was not understood. It was supposed to be effusion into the cavity of the pleura, and paracentesis was proposed, but refused. After a time, he brought up a large quantity of matter, by which he was relieved. This was supposed to have been caused by an abscess in the lung; hæmoptysis followed, and he died. The examination of the body showed that the case was one of empyema opening into a bronchial tube. The fatal hæmorrhage was produced by ulceration of a bronchial arterial branch.

Dr. Kingston observed, that the remarks of Dr. Roe were not to be taken as in opposition to those advanced by other writers. Paracentesis thoracis at present is employed only when the constitution is broken and exhausted from the continuance of the disease, as a *dernier resort*; but Dr. Roe had advanced the question, whether it is not prudent to depart from this rule, and have recourse to the operation at an earlier period. Statistical results point out very strongly the fatal termination that attends the operation, when deferred to too late a period, but they are scarcely to be regarded as proofs against the same operation, when performed much earlier, as in Dr. Roe's twenty-four cases. He apprehended that in the cases that had been referred to, the operation was performed when the constitution was exhausted.

Mr. Lloyd remarked that bulging of the side is present in a variety of empyema, which had not been alluded to, that is in the cases where the matter is situated externally to the pleura, of which he had seen three examples, one of which was connected with diseased spine. The condition of the lung after the effused fluid has been removed, is not always such to leave the impression that it is bound down by effused lymph, and cannot be dilated. He had opened the body of the brother of a celebrated professor at Edinburgh, who died of empyema and pneumo-thorax, and he had found, among other phenomena, that there was a fistulous opening in the lung connected with a bronchial tube, and that the lung could be readily dilated. He (Mr. Lloyd) never saw a patient ultimately recover, who had been tapped for serous effusion into the pleural cavity. The operation afforded relief at the time, but the patient sank afterwards. This would be with him a reason for not operating, particularly as the patient has a chance of recovery by proper treatment, if the hydrothorax be not complicated by structural disease.

Mr. Arnott said that the bulging of the intercostal spaces was not to be depended upon as a diagnostic sign. He had seen it occur in serous effusion, and had also found it absent when the fluid effused was purulent. With regard to the withdrawal of the effusion, if it be serous, all of it may be evacuated, but if purulent, only about twelve or fourteen ounces should be withdrawn. The admission of air cannot be prevented, if all the fluid effused is withdrawn; he had seen it occur, and no injurious consequences result. With respect to the presence of pus, it is somewhat different; if only about fourteen ounces are evacuated, the mere resiliency of the parietes of the chest will suffice to prevent the admission of air. He could not offer an opinion as to the propriety of leaving the canula in the opening, but would prefer the operation as described by Dr. T. Thompson. The combination of calomel and quinine, condemned by Dr. Mayo is, surgically speaking, a very useful medicine, more especially in the treatment of some cases of syphilis.

Dr. Webster observed that the only case in which he had seen this operation performed, had terminated fatally. He thought its performance during the early period of the disease more likely to be attended with success, than it would be if deferred, as is usually the case, till a much later period.

Dr. A. P. Stuart mentioned the practice of Mackenzie, of Glasgow, who is in the habit of prescribing a combination of calomel and quinine in cases of strumous ophthalmia. As the nature of the constitution in those cases, and in some instances of empyema, is very much alike, he thought, by a parity of reasoning, that the combination might also be useful in the treatment of the latter disease.

Dr. Roe observed that in his paper he had distinctly stated, that when the air was allowed free ingress and egress, there was great danger of inflammation, and he had quoted Dr. Stroud's case to prove that, but the paper did not shew that when air is admitted during the operation, that it added greatly to the danger. The air then admitted disappears in a few hours; it did so in every case in his experience, save one, and in that it was afterwards pumped out. Dr. Williams' argument that more pressure is exerted by air than by fluid is difficult to admit. The facts mentioned by Mr. Arnott and Mr. Phillips disprove this, for if the air is so readily absorbed, it could not exert great pressure. The unfavourable results that had been alluded to, were caused by the delay in practising the operation, a delay recommended in books, where it is ordered to be deferred until threatened suffocation absolutely demands it. When the lung has lost its elasticity, is reduced to a small compass, and its substance is destroyed, the termination cannot be otherwise than fatal. With respect to the argument that the operation is not required;—certain cases occasionally occur, in which every remedy fails to be of service: in these, therefore, it is imperatively required. He did not mean to advise its use in every case, but instances now and then occur in which it is absolutely necessary.

Mr. Arnott enquired what was the largest quantity of fluid that had been withdrawn in any of Dr. Roe's cases?

Dr. Roe replied, eight pints.

Mr. Arnott had withdrawn nine pints from a patient in the hospital.

Mr. Stanley stated that within the last few years he had had five cases of paracentesis, three of serous effusion, and two of empyema. Three of these recovered, two proved fatal. With respect to the place where the operation should be performed, Laennec had stated it would be dangerous to tap lower then between the fifth and sixth ribs, and he had given two instances of this; in one the diaphragm was wounded, and in the other the kidney. The latter case terminated fatally in a few hours. By the physician's advice, however, he had in two cases performed the operation between the eighth and ninth ribs.

The next meeting of the society will be held on Tuesday, the 14th of May, at half-past 8. p. m.

ACTIVE DEPLETION FOR SCARLATINA.

Sir,—I am anxious to record my own obligation to Mr. Leney, of Bray, for an account of three cases inserted in the "*Medical Times*" of March 23, shewing the value of active depletory measures, for children labouring under the sequelæ of scarlatina. And I am especially anxious at this time to direct the attention of practitioners to his cases, whilst scarlet fever is so prevalent, and so peculiarly fatal in its after-states; the more so from the fact that such cases occurring in young children, and after a disease attended by so much debility, medical men do not generally have recourse to that activity of treatment so successfully employed by Mr. Leney.

I have lately, during the prevalence of a severe epidemic, seen several cases lost from effusion in the pericardium, and pleura, after scarlatina. Some of the cases having terminated suddenly and unexpectedly, others having got gradually worse, whilst the effects of the patent remedies, aperients and diuretics, have been anxiously, but too patiently, waited for. The little creatures have lain passive and uncomplaining, for many days, but with hurried breathing, rapid heart's action, hot skin, swollen limbs, with suppressed action of the kidnies, and then have died suddenly.

I would add one instance to those given by Mr. Leney, shewing the advantage and necessity of vene section in such cases.—Geo. Joyce, a healthy boy, six years old, had scarlatina pretty severely, with considerable sloughing of both tonsils; after about a fortnight's attention, I left him convalescent. In about a week I was sent for again to see him, and found him anasarcous, with a hot and dry, although blanched skin, furred tongue, with very rapid and tumultuous heart's action, and oppressed quick breathing; conjunctiva very pale, a blue white; urine very scanty, and tinged with blood. I bled him to eight ounces, and gave him calomel and active aperients, the blood intensely buffed and cupped. The anasarca very quickly subsided, and the boy appeared altogether relieved. The next day he was much better. I ordered him to continue calomel and nitrate of potash every four hours. The next day he was not nearly so well, anasarca increased, pulse very rapid, and breathing oppressed. I bled him to six ounces, again with great relief, and applied a blister to the chest, continuing the calomel, &c. Next day he was slightly better, but not much; urine rather more plentiful, but still bloody, heart's action very rapid, tongue still furred, and rather dry. I bled him again to five ounces, and refreshed the blister, continuing the calomel, &c. Blood still buffed and cupped. Next day the boy was much better; urine much improved, and increased in quantity, swelling quite gone, tongue moist and disposed to clean, and the breathing relieved. From that day he speedily improved, and is now rapidly gaining strength. The mouth was not affected by the calomel.

In conclusion, I would again refer to the circumstances under which this (for a child) active treatment was instituted, and leave the case as a practical hint for some of my medical brethren, who possibly might overlook the indication of the disease, or be deterred by the age, or the previous discipline through which their young patients may have passed, from being so prompt as such cases really need them to be. I am, Sir, your obedient servant,

Romsey FRANCIS TAYLOR.

MR. VERNON'S EXPERIMENTS AND THE MEDICAL SOCIETY.

To the Editor of the "Medical Times."

Sir,—I have seen in your last number a report of what took place at the meeting of the Medical Society, on the 22d instant, with regard to mesmerism; as not only the subject of mesmerism was alluded to, but I personally animadverted on, I trust to your sense of justice, and known impartiality, to allow me to take advantage of the only available means of replying, viz., through your Journal. The first gentleman who appears to have spoken on the subject was Dr. Willshire, who states he attended a lecture delivered by me at the Southwark Literary Institution, on which occasion Mr. Birt brought with him a very complete mask for the purpose of testing clairvoyance, and that all the mesmeric patients failed in reading through this mask. Now, sir, taking all this as perfectly correct, is it sufficient to justify medical gentlemen in imputing to me a desire to impose on the public? Is it not a notorious fact that scientific experiments, which are universally allowed to be true, often fail in consequence of attendant circumstances? The Monday evening previous to the experiment with the mask, Mr. Boast (a medical gentleman) covered the child's eyes with court plaster till he was satisfied every ray of light was excluded from the eye, he then gave her the cover of a letter from his own pocket which she immediately read, and on

examining the plaster after she had read, said he was perfectly convinced it had not been in the least removed; both he and Dr. Batchelor have declared in that institution that clairvoyance is a fact they can no longer resist. I stated at the time that the mask might so far interfere as to prevent the manifestation of the faculty, but did not object to the experiment being tried, not imagining that men of science (if that experiment did not succeed) could infer that other experiments, proved beyond the possibility of doubt, were impositions.

With regard to Dr. Waller, I am rather surprised at reading the statement attributed to that gentleman, because when he attended my lecture at Crosby Hall, he after witnessing the experiments frankly admitted that he considered them very extraordinary. Mr. Dendy, however, appears to possess a perfect knowledge of the subject: he stated "he thought there was a great deal in mesmerism, but nothing at all in animal magnetism that he considers me a thorough impostor, and one who ought to be exposed." I call upon Mr. Dendy to prove the position he has taken; when gentlemen make charges they ought to be able to substantiate them by facts and arguments; I can assure him the day has gone by for mesmerism to be put down by low and vulgar abuse. My lectures at the Adelaide Gallery have been constantly attended by sceptics, men of talent and science, and what has been the result there? Dr. Normandy who was one of my strongest opponents, and who objected to the patient's reading when the eyes were covered with adhesive plaister, at a meeting of the Mesmeric Society, held at Mr. Reynold's, Old Broad-street, on Wednesday last, completely plastered up the child's eyes, with an opaque adhesive substance, and then she read.

Dr. Normandy, on the following day, publicly stated the result of that experiment, and expressed his firm conviction of the truth of clairvoyance. An arrangement was then made for the experiment to be repeated there on Saturday the 27th inst., and there was a strong muster of sceptics on the occasion. The eyes of the girl were covered with the adhesive substance completely to the satisfaction of sceptical scrutineers, and she read anything that was presented to her with the greatest ease and facility. Mr. Chute (previously a determined opponent) principally conducted this experiment, and when concluded expressed as his most decided conviction that not the smallest ray of light could reach the eye. Mr. Day, one of the scrutineers, offered to submit himself to the same experiment, believing he could see to read under the same circumstances, but he soon found his mistake and gave up the task. The audience were highly gratified at the result, and passed a unanimous vote of thanks to the lecturer. I could multiply these facts by reports of committees formed both at the Southwark and Crosby Hall Institutions, but for the fear of intruding on your valuable space, I have produced the most decided results upon strangers brought by members of the committees; and while on this subject I have one request to make from the gentlemen who have spoken in such positive terms of me at the Medical Society, and if they are desirous of discovering the truth I conceive they must grant it, it is *that they will form themselves into a committee, appoint their own meetings, and produce their own patients, half males and half females, I will engage to meet them, and trust to be able to convince them that mesmerism is true*, and that its advocates are not the impostors they suppose, my only condition being that they will publish an authenticated report of the results in your journal. In conclusion I would quote a sentence, the sense of which, if not the words, I owe to Bishop Berkeley; "inclination is so much stronger than reason, that the strongest arguments will fail to convince men whom inclination sends in a different direction."

I am, Sir,

Your obedient Servant,

W. J. VERNON.

13, Newcastle-street, Strand.

HYPNOTISM, OR MR. BRAID'S MESMERISM.

(To the Editor of the "Medical Times.")

Sir,—Mr. Braid's communication in the *Medical Times* of the 13th instant, on hypnotism, cannot fail to attract the attention of all who are seeking for information on so curious, and in some respects, so mysterious and imperfectly understood a condition of the nervous system, of the nature and laws of which we can only hope, gradually, to acquire more accurate notions by the accumulation of facts vouched for by such competent and respectable authorities and observers. The continued devotion of a portion of the columns of a medical periodical, whose circulation is so extensive and so rapidly rising in public estimation, as the *Medical Times*, to the reception of communications and discussions on mesmerism, more especially by medical men of established name and reputation, must greatly contribute to the extension of our knowledge of this novel branch of physiological science, and redounds to your credit and liberality. It forms a striking contrast to the narrow-minded prejudices of a rival journalist, who has enrolled himself in the list of those enemies to free enquiry that refuse even to listen to the subject of mesmerism, declaring the whole of its psychical or physiological phenomena to be sheer "jugglery," "imposture," "humbug," and any person investigating them, a man "who should be hooted out of professional society."

The time, perhaps, is not far distant when such wholesale denouncers will be compelled, much to the fair man's amusement, to change their note, and admit, that as philosophically employed by Mr. Braid and others, as a curative agent in *nervous* diseases, its reality and virtues are beyond dispute. "The empire of medicine," says the *British and Foreign Medical Review*, No. XIV. for 1839, in a long and laboured article, "has just passed through one of those unaccountable paroxysms of credulity to which, from time to time, it seems ever to have been subject. Pass a few short months, and the delusion stands exposed; the actors are declared to be deceivers or deceived; the facts so lately boasted of are trampled upon with contempt, and the doctrines built upon them are laughed to scorn. The fashionable crowd flock to a new *prima donna*, or to a watering-place doctor, and the half-converted physicians and surgeons never mention the subject more; for although the folly will rise again, *it will scarcely be in their time.*" With a lurking sense, however, of the danger of his own positiveness, the writer of the article here quoted, provides a loophole for himself at the conclusion of his diatribe, and as if conscious that *this over-wise man's folly will rise again* in his time, in the shape of *reality* and *truth*, sagaciously adds, "neither would we be so far influenced by the impostures *occasionally* practised under the name of magnetism, as wholly to deny that some of the phenomena, from time to time, produced by all aspirers to the art, seem to result either from *some principle heretofore unknown, and not yet correctly designated, or from some modification of recognised principles in the animal economy which cannot yet be accurately limited or defined.*"

Mr. Braid has gone far, I conceive, to prove, that many of the marvels of mesmerism are capable of rational explanation, and that, as a curative process, it is deserving of the highest consideration and cultivation. The *rationale* of hypnotism we confess to be obscure, but it is not more so, perhaps, in reality, than that of the action of the most common drugs on the nervous system, which excites no surprise, because we have long been accustomed to their use. Shall we, then, distrust the evidence of our senses, when we see cures effected by men of eminence in their profession, by means of this novel mode of affecting the nervous system, merely because the agent is not presented to us in a material shape, like alcohol or opium—cannot be stored in a medicine-chest, weighed, mixed, and "well shaken before taken?"

Mr. Braid wishes, I presume, to distinguish hypnotism from animal magnetism, as disclaiming a belief in the existence of a peculiar fluid transmitted from the operator to the patient, and as explaining all the phenomena he has elicited in his practice, on the principle of merely an enhanced acuteness and exaltation of the organs of sense. At present the science is but in its infancy; we have facts and speculations, but no laws; and I look upon the general body of mesmerisers, now in nearly the same light as the alchymists of former days, who, in the idle pursuit of the *Elixir of Life*, and the *Philosopher's Stone* (the prevision, the clairvoyance of animal magnetism), laid the foundation of many of the real discoveries of modern chemistry. It cannot, be denied, I think, that the prosecution of mesmeric experiments by the *million*, under the temporary stimulus of curiosity, to produce or witness the miracles ascribed to its agency may, in many cases, be attended with injurious consequences to the health of the patients; but this is an unavoidable evil; and after all, if mesmerism *will have* its *victims*, can less be said of the dangers of quackery in medicine, when we see the abuse, and its consequences, of mineral and vegetable drugs, in the shape of patent drops and pills, which destroy their thousands and tens of thousands yearly. Once the edge of public curiosity is taken off by the phenomena of mesmerism becoming better known, and reconciled to philosophy by the discovery of the laws which regulate its action, and by the detection and exposure of the impostures practised in its name, there is every reason to believe that the rising generation, at least of medical men, will make it the subject of their study, and avail themselves of its agency in the cure or alleviation of disease, in common with that of the other immaterial agencies or influences of electricity and galvanism, many of the phenomena of which, if witnessed, by those ignorant of their nature, would be as incomprehensible, and as liable to be ascribed to Satanic agency as those of mesmerism itself. Let us then permit the mesmerisers who are so disposed, to talk of their magnetic fluid emanating from the points of their fingers, reflected from mirrors, penetrating walls, and pervading space; let us allow them to form any theory they please, so they give us their facts; let the reality of those facts be examined, and when we are satisfied of their reality, let us rather admit our ignorance of the cause, than obstinately withhold our belief in the effects, because of our inability to give an explanation. S.

THE EFFECT OF GARLIC ON THE MAGNETIC NEEDLE.

To the Editor of the "Medical Times."

Sir,—It has lately been published in some journal, and thence in the newspapers, that the application of the juice of the onion would destroy the polarity of the magnetic needle. This announcement immediately recalled to my mind a similar opinion, published two hundred years ago by Van Helmont, in respect to garlic. He accounted for the effects on the notion of *garlic* being the *natural opiate of the loadstone*, and the virtues imparted by it to the steel of the magnetic needle. As I never like to take anything of a doubtful nature for granted, which can be so readily and certainly determined by actual experiment, I determined to ascertain whether or not this was a fact, that such extraordinary effects could be produced by the juice of onion or garlic.

With this view I magnetised four sewing needles, and by floating them on pieces of cork, proved them to be well adapted for the experiments. I now passed two of them several times through garlic, and the other two through an onion, and tested them as before, but could discover no perceptible difference in the polarity of either of them. I now covered two of them with the juice of garlic, and the other two with the juice of onion, and having allowed them time to dry, so as to form a varnish over them, they were alternately tested as before, but I could discover no perceptible difference in either of them. They were now enveloped in pieces of paper soaked with the respective juices, and tested, but still the verticity remained the same. I now passed one needle into the garlic, and allowed it to remain buried in it *all night*, and another similarly treated with an onion. Next morning both were tested, but they still manifested the same magnetic susceptibility.

In all these experiments, care was taken to put the needles on the cork placed in the *centre* of a large glass only *half* full of water, thus guarding against the effects of a current of air, or the greater proximity to the edge of the vessel in any direction interfering with the accuracy of the results.

Without detailing other experiments, I presume that those already described will be deemed sufficient to prove that the juice of onion or garlic exercises no such influence on the magnetic needle, as was alleged in the propositions set forth by the parties referred to at the beginning of this letter.

I remain, Sir,
Your most obedient Servt.
JAMES BRAID,
M.R.C.S. Edinburgh.

3, St. Peter's-square,
Manchester, 30th April, 1841.

SELECTIONS FROM CORRESPONDENCE.

CLAIRVOYANCE.—On this subject we have been sent a quaint, but well digested letter which appeared in the Lincoln Herald. The writer after referring to poor Ophelia's description of Hamlet seeing without the use of his eyes, to Bacon's maxim that a sound philosopher never denies a fact merely because he cannot explain it, to the ancient's notion about Lynceus, to the story quoted in our Journal about the Petersburgh Jew, and which we took from Teste's last edition of his work on Mesmerism, proceeds thus :—"Philosophers seem now to be agreed, that light arises from the vibrations of an infinitely fine elastic fluid, or ether, spread through all space, and permeating all bodies. Diversity of colour, and perhaps heat, may be considered to originate from the vibrations of the air. These vibrations must pass with greater or less intensity, and varying in quantity, through all bodies, and such bodies will appear to be transparent, or translucent, or opaque, according to the power of the vibration, and the sensibility of the organ on which it impinges. There are certain classes of sound inaudible to certain ears, and a suitable force of sound is required in all cases, and the diversity in the power of sight is most remarkable, some seeing like a cat, in the dark, and others being in a state of nyctalopia, or virtually blind at dusk. The received notions of the solidity of the body are utterly erroneous, from our confounding body and matter, Body is a congeries of material points, or points in themselves without magnitude, but from which powers of attraction, and repulsion, emanate in all directions. On this view the porosity of body is indefinite. On the subject of polarised light I dare not venture.—It thus appearing that, however the great majority of the luminous vibrations may be diverted or modified, that some small portion may pass directly through any body whatsoever, I will not venture flatly to denounce the whole as a fraud, through I most certainly demand very much stronger evidence to admit their truth. In the mesmeric state it must now be admitted that a somnambulist condition is induced, that a state of double consciousness, such as we have in some extremely rare instances heard of, and not connected with mesmerism may exist, and finally that the sensibility of the system is thrown into an unnatural position, being withdrawn from some parts, and inordinately accumulated in others. The power of the will over the current of ideas seems also to be suspended or greatly impaired, as in dreaming or lunacy, and a preternatural mobility of ideas under exterior influence induced as in dreaming. But if we admit for a moment that light may pass through solid bodies, so as to be distinguished by the eyes of persons in a mesmerised state, what shall we say to the statement of a power of vision lying in other parts of the body ; and is there even a fragment of philosophical possibility for such a supposition ? If we admit it, it must be upon the principle that the sensitive tissue which lies at the bottom of the eye, and which requires a special organ for its excitement, is spread in some modified form under the whole surface of the body. Or we may state the case thus : let the word S. U. N. be cut through the shutters of a dark room, and let the light of the sun passing through the opening, fall upon the surface of the human body, and it is barely conceivable that any part of the surface which could distinguish figure impressed, might, in a state of preternatural sensibility, feel the impression of the light through the opening, and *feel* the figure of the word S. U. N. After such desperate efforts to bring Mr. Spencer Hall's projected experiments within the range of philosophical possibility, he cannot say that there is any indisposition to give him fair play, if we should happen to reject his conclusions, and consider the whole affair like *the* case of former years, of Miss Margaret Mc'Avoy at Liverpool.

But these probably wild speculations lead naturally to others as bold, and to an enquiry whether it would not be possible to effect a *transpareney of the human body.*

The patient is prepared by previous diet and training, until the body acquires that sort of translucency which it is said to possess when boxers are in very high condition, or such as the hand and skin of a very delicate consumptive body possess. The surface may also be prepared, as we induce transparency into paper, by oil. The observer may be also prepared, by being placed in an utterly dark room, the system having been previously properly dieted, and slightly excited by opium, while the eye is under the influence of *belladonna.* The body to be examined is then to be placed at an opening into the dark room under the action of some of those extremely powerful lights from lime or otherwise which have lately been discovered, while it is from within examined by a powerful instrument. Many small insects thus become more or less transparent, and if a medical man could thus look into his patient's inside, it would save some lives and many a *post mortem* examination.

DR. CARPENTER ON MESMERISM.—[The following letter, addressed first to the *Bristol Mercury*, and which, it is well understood, is from the pen of Dr. Carpenter, the eminent physiologist, was occasioned by the clever lectures of Mr. H. Brookes, at the Bristol Institution. The writer is more cautious, perhaps, in his admission of the facts of Mesmerism, than Cloquet, Elliotson, Itard, Neil Arnott, Hufeland, Jussieu, Cuvier, Broussais, La Place, Reil, Olbiers, Georget, Rostan, Sigmond, Herbert Mayo, Gregory of Edinburgh, Braid, Edwin Lee, and others, but he more than adopts the opinions which we alone, of British Medical Journals, have been in the habit of announcing, viz., that Mesmerism has, for various reasons, very strong claims on the medical man's attention; that the excitement it has created, and the belief it has won, constitute great moral facts, demanding a rigid investigation of the physical phenomena so leading or misleading the public mind; that it is our place to conduct that investigation, so that if Mesmerism be all "an immense hoax," as some think, we may do good service in laying, as we easily can, the imposture bare before the world ; that if it be not, we may do ourselves honour, and science a service, by singling out whatever it holds, much or little, of psychical or physiological virtue, and adding it to the never perishing accumulation of mankind's recognised and legitimate knowledge. We have always felt that all attempts to stifle discussion or enquiry on such subjects as this is an error of judgment, or defect in morality. Not to allow an alleged imposture the benefit of a fair trial is a proof that we have much doubt of *our* cleverness, or many fears of the accused's innocence. There is a triumph in the detection of deception, especially of that kind, which is at once extravagant and ingenuous, which men do not easily forego. The person who off-handedly cries "humbug," but will not take the trouble to enquire for himself because such an one proved that such another was deceived or deceiving, is just as foolish as the man who will believe the most extreme marvels of Mesmerism—because somebody else has seen them. In both cases the chance of his being right, depends on that of somebody else being right, and right, not only in judgment, but in intention.—ED.)

SIR,—As the attention of the Bristol public has been recently excited to the subject of Mesmerism, by the lectures and experiments of Mr. Brookes, and as an effort will be made, ere long, for the formation of a class for the private investigation of its claims to the character of a science, I think it may not be amiss to call the attention of your readers to the nature of the evidence on which, according to the opinion of many well-informed physicians and men of science in this country, as well as on the continent, a sufficient *appearance* of probability exists in these claims, to call for a full, candid, and searching inquiry into them. It is very easy to dispose of them in a superficial way, by asserting that some of the phenomena presented by Mesmeric subjects, are the result of "mental" influence, that some are occasioned by impressions on the *senses*, and that the remainder are the result of "collusion ;" and this is the common mode in which those who are indisposed, from *à priori* considerations, to admit any validity in the pretensions of Mesmerism, get rid of the statements made by its disciples. But, I would ask, is this the proper way to meet the question ? Is not that an overweening pride of intellect, which refuses even to examine alleged phenomena, because they lead to inferences inconsistent with our previous notions ? Is it the true way to advance science, to measure the validity of new facts (or those propounded as such) by the principles already attained ? What would be the astronomy of the present day, if the new facts which the teleseope reveals to us had been rejected, because they appeared to be inconsistent with the dogmas of the Ptolemaic system—founded, as that system was, upon the seemingly most convincing evidence of the senses, as to the earth's stationary position, and the movement of the heavenly bodies around it ? Or what do we *now* think of the men who refused to look at the satellites of Jupiter through Galileo's teleseope, imputing to magic the celestial appearances he would have exhibited to them ? Yet Mesmerism is no more repugnant to our most established and cherished ideas of truth, than the Copernican system was to theirs—perhaps not so much so ; for, as I shall presently endeavour to show, its principles, if true, rather constitute an addition to our previous knowledge, than stand in opposition to it.

Before I go further, I wish it to be distinctly understood by your readers, that I am not an advocate for Mesmerism, but that I desire to show that it presents a sufficient case for *inquiry.* For myself, I have no interest whatever in its establishment or its downfall ; but having, long since, taken as my motto the noble sentiment of Schiller respecting the true philosopher—"He has always loved truth better than his system"—and desiring to act, in all respects, in accordance with it, I feel convinced, by what I have seen, heard, and read, that the summary method of disposing of it to which I have already alluded, is most unjust as well as inconclusive ; and that nothing but the full, candid, and searching inquiry which I desire can entitle it to be pronounced either an illusion or an imposture.

I may commence by remarking that there is a very natural dislike, on the part of medical men—on whom, as a branch of physiology, this subject has a natural claim for attention—to enter upon an examination of it. So long as public opinion is such, that to uphold Mesmerism is to expose oneself to the imputation of being either credulous or unprincipled, it cannot be expected that those who depend for their livelihood on the estimation in which they are held, as to their mental and moral superiority, should be very ready to place themselves in the way of thus "losing caste" among their brethren and the public. A highly-respectable physician, to whom I had applied for information as to the character of Mr. Brookes, thus writes to me :—"I sincerely rejoice that the subject is likely to be taken up in Bristol, because I wish to see it in good hands, and really have the expectation of obtaining practical results from it. But, for my own part, I cannot afford to play with my children's prospects ; and have, therefore, limited myself to a few trials of its efficacy in nervous and spasmodic diseases only. In some of them it has been of use, but *how*, I am as ignorant as every other person appears to be." Another physician, in a position of high eminence and influence in London, thus writes to me :—"If you and a few more philosophical doubters will investigate the thing in private, and thoroughly, you will do great service to science." And the present professor of medicine in the University of Edinburgh, whose authority on subjects of this kind is deservedly high, thus expressed himself, in a review written in 1837 :—"We pronounce no judgment, as yet, on this question, further than by saying that it is one of the highest possible interest, and which it is incumbent on physiologists fairly and candidly to meet, as opportunities may occur, and decide on the evidence of sense and testimony, independently of all previous

prepossessions or opinions." I believe that there exists, in the mind of nearly every medical man who has fairly and impartially examined the evidence in its behalf, a general desire that this evidence should be fully enquired into; but, unfortunately, from the cause I have named, there has been an individual indisposition to do so. The association of a moderate number, however, in the class it is now proposed to form, with a few intelligent, non-medical gentlemen (especially those of the legal profession, who are accustomed to sift evidence), would go far to remove this objection, by placing the object of their inquiry in a proper light with the public.

I now come to the proper subject of my communication, which is, to examine how far the phenomena of Mesmerism, as they have been presented to observers in Bristol, are legitimate subjects of scientific inquiry. These phenomena may be divided into two classes—those which are of occasional "spontaneous" occurrence; and those which have never manifested themselves except in the "mesmeric" state. To the former class belong the mesmeric sleep, catalepsy, and sleep waking (or somnambulism); to the latter, traction, clairvoyance, transference of sensation, the detection of disease, excitement of the phrenological organs, &c. The reality of the former may be freely admitted by medical men, although it may be denied that they are brought about by mesmeric influence. The reality of the latter cannot be admitted without allowing the pretensions of the Mesmerist to the possession of a peculiar influence or power over the patient; and they are consequently attributed by his opponents to intentional deception, either on the part of the patient, the Mesmeriser, or both. It is necessary to bear this distinction in mind, with the view of determining the kind of evidence necessary for the establishment of each class of phenomena. If the reality of any one of the second class, traction, for instance—be admitted, the existence of a peculiar Mesmeric influence can scarcely be denied; and the power of the Mesmeriser, in inducing sleep or sleep-waking, may be more readily believed.

The Mesmeric Sleep (supposing it to be real) is precisely analogous to the state known as hysteric coma—with this remarkable exception, that whilst the duration of the latter is quite uncertain, that of the former may be determined (so, at least says the Mesmeriser) by his peculiar agency. A similar condition may be induced, in many persons, by fixing the eyes intently on a near object for a short time; and it has been inferred that the means by which the Mesmeriser induces it are of this kind. It is positively stated, however, by Mesmerisers, that, in favourable cases, they can produce the sleep without the patient being aware that he or she is being acted on. The Committee of the Royal Academy of Medicine in France, which was appointed to investigate the subject in 1826, gave its sanction to this statement—"We hold it as demonstrated (say they) that the somnambulism has been produced in circumstances in which the persons magnetized could not see, or were ignorant of, the means employed to occasion it." I have been informed, by a highly-respectable provincial physician, that a patient of his own fell into a state of profound coma, after he had mesmerised her for a short time, in such a manner that she could not have been aware of what was going on. It was his first time of seeing the patient; and he was led to try the experiment from thinking her a very likely subject for the operation. He remains to this time doubtful if the effect were really produced by his agency, or if it were the result of an accidental coincidence; but he informs me that the sleep was so far different from the ordinary hysteric coma, that the patient could not be aroused by the usual means, but was at once awoke by the method practised by Mesmerisers. Since we have ourselves witnessed the sleep, as produced by Mr. Brookes, we are surely bound to afford him an opportunity of demonstrating that which he undertakes to do—that it may be induced without any action on the senses of the person under influence.

In this sleep we have also seen a phenomenon which *seems*, more than anything in the sleep itself, to indicate a peculiar or special mesmeric influence—I allude to that of traction. Now, if the reality of the sleep be admitted, in the three cases which exhibited the movement, it is impossible to deny the existence of a peculiar agency, because the subjects of it must have been unconscious of the Mesmeriser's intentions. If they were not asleep, it is, then, necessary to explain *how* they can have been made aware of these intentions by the Mesmeriser. In two of the subjects of Mr. B.'s public experiments, the traction was exhibited the very first time they were operated on by that gentleman (the first experiment in one of them having been a private one), and they were previously unaware of the phenomena they were intended to exhibit; independently, therefore, of the situation and character of the parties, it would seem as if collusion were impossible. And, when the Mesmeriser's movements were performed behind, and at a distance from the subject, it seems difficult to conceive how they could have been guessed at with such uniform correctness by a person intending to deceive. Moreover, in the case of Mrs. N. (which, in other respects, might be deemed by objectors a suspicious one, on account of Mr. B.'s previous acquaintance with her), the same results followed when the eyes were bandaged. It appears to me that this is, of all Mesmeric phenomena, the one most capable of being satisfactorily tested. If its reality be established, it must lead to the admission of a peculiar power exercised by the nervous system of one individual over that of another. Whether we choose to call this power *Mesmeric*, or not, is of no consequence. Having previously been myself a complete sceptic in regard to the existence of such an agency, I have been more staggered by these phenomena than by any others I have witnessed; and I would urge the opponents of Mesmerism to give them a fair examination.

The state of somnambulism, or sleep-waking, is one of great interest to the physiologist and metaphysician, putting out of view its connexion with mesmerism The inquirer will find many curious examples of this state in Dr. Abercrombie's "Treatise on the Intellectual powers." It is characterized by an entire unconsciousness of what is taking place around, except of what falls in with the sleep-waker's peculiar train of thought. Every one must be conscious of the occasional occurrence in himself of the "partial" state of this kind, known under the name of reverie. It is a peculiar character of the complete sleep-waking state, however, that its occurrences are completely forgotten when the patient returns to natural consciousness; although they are remembered on the next recurrence of the state. A regular conversation may be carried on, "upon the patient's own subject," but no sounds appear to be heard, or at least to excite any attention, which do not fall in with the presiding state; and there is a similar unconsciousness in regard to impressions made upon the body. In other states, however, there does not seem altogether this limitation; for the patient may be led to converse upon any subject, and the state more nearly resembles the natural one,—its peculiarity, however, still being, that its occurrences are not remembered in the ordinary condition, but are recollected on the next time of sleep-waking. I have myself had under observation two cases of natural somnambulism, in which all these phenomena were well marked, and in which there was not the remotest suspicion of imposture in either of them. Now, the ordinary phenomena of the Mesmeric somnambulism are very similar to these; so that the reality of that state may be more readily admitted. But the question then arises, whether the state can be induced by peculiar mesmeric influence; or, whether the patient being strongly predisposed to it, it results from the "mental" impression made upon her by the Mesmeriser's operations. Surely this is a topic worthy of elucidation. The statement already quoted from the report to the French Academy, shows us that a number of competent observers have come to a conclusion in favour of this claim on the part of Mesmerism. "We can not only act on the magnetized person, but even place him in a complete state of somnambulism, and bring him out of it, without his knowledge, out of his sight at a certain distance, and with doors intervening." Another question is, how far such a peculiar relation exists between the Mesmeriser and the sleep-waker, that the latter shall always be able to hear him speak, when insensible to other voices, and shall be conscious of his various affections of sensation, emotion, &c., without communication with him. If this connexion can be proved,—and it appears to me that experiments may be devised which shall put it satisfactorily to the test,—the original production of the Mesmeric somnambulism may with more probability be imputed to his influence. Mr. Brookes offers to prove it to those who will give him the opportunity, and expresses himself as ready to submit to any tests that can be devised for detecting the truth. I will only ask, if any of ourselves, believing himself to be in possession of novel and important scientific facts, would think himself fairly treated, if men of science refused to witness the experiments by which he would prove them?

In another communication I intend treating of the "higher phenomena," as they are commonly termed; and examining how far Mr. Brookes's public or private experiments could lead to any conclusions, *pro* or *con.*, respecting them. I do not aim at making converts to Mesmerism, being still but a sceptic myself. But I do desire to see the question fairly met by competent investigators, who may be willing to unite themselves with

Your obedient servant,

AN INQUIRER.

ELECTRO-LITHOTOMY.—In your very valuable Publication for March 9th last, page 417, is a communication from Dr. Gore, of Limerick, laying claim to the discovery of ELECTRO-LITHOTOMY. By Dr. Gore's statement it appears that he has entertained the idea of applying galvanic agency to the solution of urinary calculi, for the last eighteen months; and that, he has succeeded in his experiments on such calculi *without* the viscus. If the claim to originality of *suggestion* (because it is to suggestion only that any claim appears to be made) depend on the evidence mentioned by Dr. Gore, I can assure him that I am in possession of testimony, both personal and documentary, which would prove my having forestalled him. A short time, however, after I became possessed of the idea, which, of course, engendered *a little longing after immortality*, I stumbled on a remark in the 5th edition of Turner's Chemistry, page 1010, at bottom, which dispelled my fond hopes, as they must dispel Dr. Gore's: it is thus—"The last suggestion of this nature was made by Prevost and Dumas, who proposed to disunite the elements of calculi, by means of galvanism. This agent, however, though it may produce this effect out of the body, will scarcely, I conceive, be found admissible in practice." WM. SAMUEL, M.R.C.S.

Llandilo, April 20th, 1844.

CASE OF DENTAL HÆMORRHAGE, by Thomas Stainthorpe, M.R.C.S., &c., of Bankhead House, Hexham. On Wednesday evening, the 13th ultimo, a female patient, called at my residence for the purpose of having a molar tooth in the upper jaw extracted; the one anterior and posterior were decayed to the gums—it was removed without any difficulty. On examining the tooth after, I found a portion of the other tooth firmly united by osseous deposit. A little after midnight I was called to her in consequence of hæmorrhage to a great extent, having continued from the time of the operation, without any appearance of ceasing: the means used were first Mr. Ray's plan of introducing the stick of nitrate of silver, rounded at the point; this, however, was ineffectual. I then cut a cork so long as to project beyond the teeth, and have the effect of keeping the mouth about an inch open, to allow the admission of air; on the smaller end (which was purposely made too small for the cavity) I rolled a piece of lint; this was dipped in cold water, and sprinkled with powdered nitrate of silver, then introduced firmly into the cavity, with the effect of staunching the hæmorrhage in a few minutes. My next plan was to cut a cork of such size, that when it was covered with lint, and the powdered caustic, it might fill the cavity, and allow the mouth to be quite closed, this immediately and effectually stopped the hæmorrhage. After remaining an hour with my patient, I gave

strict orders for her not to be allowed to sleep for three hours, and at the expiration of twenty hours the plug was removed with perfect safety.

Sir Henry Halford.—Although by no means an admirer of Sir Henry Halford's medical character, I think, Sir, in your pencilling of the untoward event of Lockley, you have omitted one strong argument in his favour. I remember being shocked at the time, and speaking with contempt of a courtly President of physicians, who could not bleed a friend in immediate danger. I did not then know Sir Henry's great age. He must have been in some degree in his dotage, and certainly unable to bleed. This seems a strong palliative. His age, at all events, should have prevented such repeated attacks; but after all, the story resembles that of the Irish pilferer, who being asked what he had to say for himself, answered "nothing at all," your honour—"in my opinion there has been a d——d deal too much said about it already." X. X.

Mr. Brookes on Mr. Vernon's Experiments.—Sir, in your last number I observe a report of the discussion at the "Medical Society of London," on the recent mesmeric exhibitions at the Southwark Institution, &c., and I trust it may not be deemed utterly superfluous to remind those gentlemen and your readers generally, that they cannot be justified in condemning a subject so complicated and important, upon the evidence of such facts and cases, any more than they would be in condemning the science of medicine upon the facts and cases daily published by innumerable quacks in medicine. Clairvoyance is only one fact—and a very rare one too—in mesmerism, and many others of equal interest, and far greater importance may be perfectly true, though that may not prove so. Parties who are really qualified, and professionally bound, to examine the subject philosophically, can never be excused for not doing so, by the crude and hasty judgments they may form of the expositions and demonstrations of others, not so qualified;—the best evidence for them must, indubitably, be *facts developed by carefully conducted experiments of their own*. I witnessed "the experiments with regard to catalepsy" to which Dr. Waller alludes, and was as strongly convinced as Dr. Waller could be that the apparent condition was simulated, but it was very different to the catalepsy, induced by other mesmerisers, as those who have witnessed the cases of Dr. Elliotson and others, would at once perceive. Yours, &c.

H. Brookes.

1, Paul Street, Finsbury Square.

Mesmerism.—Dr. Collier has sent us a report drawn up by a committee that sat in Boston, in America, on some experiments submitted by him. On the Committee were eight clergymen, nine medical men, and seven laymen. The first experiment exhibited somnambulism and unconsciousness of external objects. Dr. C. at this moment operating on a second subject, labouring under St. Vitus's dance, the latter's involuntary twitchings disappeared, and were exhibited by the first patient. The first patient was a youth of Dr. C.'s; the second was a stranger. The next day's experiment was on a stranger, a gentlemen, who made great resistance, but showed symptoms of sleep, and complete inability to resist the mesmeric power. He spoke of a "pleasant thrill in his arms and body," and tried to speak twice, but could not. The next day Dr. Collier's boy was mesmerised in presence of the person labouring under chorea, and again there were the same symptoms of the transferred malady. Subsequently he showed clairvoyance, entering mentally the jail, and describing all its different parts, in agreement with facts as ascertained by some of the Committee on inquiry: and many other experiments were made, marked with greater or less success—the most conclusive with the Committee being the following, which we give from their report. We should premise that the subject was a gentlemen, unknown to Dr. Collier, and who had been accidentally mesmerised the night before by one of the Committee. The name is not given publicly at the gentleman's request. "Mr. Storer and others, who are still sceptics, express themselves as entirely satisfied of the conscientious and veracious character of Mr. ——, and that there is no collusion between him and Dr. C. Age 26. The sub-committee report a soft pulse in the patient, at 96 per minute—skin moist—hands rather cold and moist—Dr. C.'s pulse at 96. He commences the operation at twenty minutes before five. At thirteen minutes before five, the patient having appeared asleep for a few minutes, Dr. C. applies his hand above the patient's, as if to attract it upward—when directly the fingers of the sleeper begin to twitch and tremble, and presently his whole hand to tremble or vibrate through the space of at least an inch. Dr. C. now applies his, above the patient's other hand, and then that too twitches and trembles in like manner. In the same manner Dr. C. applies a common horse-shoe magnet, and with the same effect. Dr. C. says the patient is now in a semi-state. At two minutes before five o'clock, Dr. C. performs a few more passes, and asks, "Mr. ——, do you see me?" to which Mr. —— answers, "Yes." "Any one else?" Answer, "No." To calls, first imitating those of Dr. C., and then very loud calls of Mr. —— made at his ears, by Dr. Storer, Dr. Morrell, Dr. Adams, and others, he returns no answer. Dr. C. then says more gently, "Did you hear any noise, Mr. ——?" He answers, "No." A loud noise was here made, and Dr. C. asks, "Did you hear any noise then?" Answer, "No." Other loud and very loud noises were then made, and after each of them, the same question was put by Dr. C., and the same answer given. The patient's eyes were opened. Dr. Storer reports that "the eye-ball seems to be uncontrolled, and to have an involuntary vibrating or rolling motion." The patient's pulse is reported at 96, the same as before. Endeavours to tickle the nose, ears, ribs, and other sensitive parts, fail entirely; while his brother, now present, states that, "compared with other persons, he is very easily tickled, indeed." Dr. C. procures several answers from him in a "mental" journey to the Tremont House. Then being asked by Dr. C. "in which room are we?" he says "in the bar." Further questioned, he says, "there are three persons in the bar." A most trustworthy gentleman, hitherto a sceptic, goes as quick as possible to the boat, and finds three persons there, who had been there, they assured him, for more than fifteen minutes, and that no other person had been about there in the mean time. In a somnambulic journey to the lower room in the Temple, being questioned by Dr. C. as to how many persons there are there, he says "Five." In fact there were four—but Dr. C. asks, "Did you count yourself?" and he answers, "Yes." Dr. C. put the following, by request: "What has one of them in his hand?" He replies, "—— foot." It is reported that the thing held up was, in fact, a chair, and that it was held by the foot of it. Dr. C. now asked the patient what foot it was he meant, and he says, "of a stool." At fourteen minutes before six, Dr. C. commences the upward passes to awake the patient. At twelve minutes before six he begins gradually to move his head, and at ten minutes before six has it erect against the chair, sighs deeply—shrugs the shoulders—and presses the hands against his face and eyes—rubbing the latter, and stretching as if just waked from a deep sleep. Thus his sleeping lasted for an hour and ten minutes, during all which time every part of him, unless moved by persons present, was perfectly composed as in sleep, except so far as was necessary to perform the acts above described, and except that a clapping of hands at his ear produced a slight motion of the head—and did the same on repetition. The Committee were unanimous that appearances had been presented in the various experiments not explicable on the supposition of collusion, or by reference to any physiological principles known to them."

UNEXPECTED TERMINATION OF PROGRESSIVE LABOUR PAINS.

By CHARLES RENDELL, Esq., Surgeon, Westbury.

As the subjoined case presents features (as far as my experience goes), somewhat unusual, I am desirous, by bringing it before your readers, to ascertain what may be their opinions on it:—

Mrs. H., aged thirty-five years, of a healthy and robust constitution, then pregnant with her sixth child, sent for me on the 4th ult. about 6 p.m. On my arrival I found her walking about. Observing that the pains were strong and frequent, I requested her to lie on the bed. On examination, I readily detected the os uteri dilated to the extent of a half-crown piece; the liquor amnii was discharged very shortly after, when I found the head presenting in the natural position; as the head continued to progress with each pain, I did not examine her again for nearly an hour, when the head was much lower, and every thing appeared going on well until half past nine; she then complained of faintness; this increasing, I gave her some gin in her gruel, the only stimulant at hand, (as she resided three miles from my house). Not being relieved, I laid her head low, and she wished to be placed on her back, being previously on her left side; she afterwards became very restless, and the pains gradually ceased; finding the pulse very low and rapid, I sent for some ether; in the meantime, I gave her some hot gin and water without the least benefit. She lastly wished to be put on her right side; whilst in this position I examined her, and found the head nearly on the perineum, and no sanguineous discharge; before I could obtain further stimulants, death closed this melancholy scene, at 10 minutes to 10 p.m.

About thirty-eight hours elapsed before I could gain permission to examine the body. The general surface of the body was unusually pale; and little or no blood appeared, until the uterus and intestines were exposed. The uterus was placed rather to the left side, and the intestines occupied the right and upper part of the abdomen; before either was disturbed, I observed a dark spot on the right side of the uterus, when, on pushing the intestines aside, I found it occupied nearly the whole of that side; and that, in the centre of the discolouration, there was a laceration to the extent of four inches, in the direction of the axis of the uterus, through which appeared the shoulder of the child. The walls of the uterus, throughout the entire extent of the discolouration (which was of a dark red colour), were very much thinned, varying from an eighth of an inch to two or three eighths, and gave way with the slightest pressure or tension on them. The smell arising from the blood which had escaped into the abdomen was of the usual parturient character; the quantity of this fluid was to the amount of five or six pints. I remarked that there was no peculiar fœtor, as if mortification had been present. The left side of the uterus appeared quite healthy, and nearly three-fourths of an inch thick; colour, rather of a pinkish red. On laying open the uterus, the child was found wedged down in the pelvis, and was removed with some difficulty. It was unusually fat and large. The placenta was attached to the left side and the fundus of the uterus, and was partially separated; nothing unhealthy appeared in any of the other viscera.

Considering the previous good health of the woman, having done nearly all her domestic work up to the morning of the labour commencing in the evening; the short duration of the labour (about four hours); the regularity and progressive character of the pains; I am at a loss to account for the condition of the uterus, and therefore beg to express a hope that, if any of my professional brethren have had a similar case, they will be induced to report it in your valuable journal.

PERITONITIS AND APOPLEXY SUCCESSFULLY TREATED WITHOUT BLEEDING; BY J. P. BALDY, M.R.C.S.

James Brown, æt. sixty-three, was, on the 16th of March last, attacked with apoplexy, attended with paralysis of the left side, and total loss of speech. I ordered several quarts of cold water to be poured on the head, and two drops of ol. croton on sugar. 17th. The medicine had acted freely: head to be shaved, and cloths wetted with cold water to be constantly used. Hyd. sub. gr. i. every hour. 18th. Returning sensibility: treatment to be continued. 19th. Speech returning; mouth sore;

able to move the arm; medicine and cold application to be continued. 20th. Mouth very sore; speech better, but incoherent; enabled to move the leg Ordered a blister to be applied to the nape of the neck;—the calomel to be discontinued. 21st. Head much relieved; speech improved; he is perfectly conscious. The cold water to be continued. 22nd. Going on very well; both the speech and use of the limbs restored. Ordered a purgative draught. 23rd. Still improving; and on the 25th dismissed him cured, he being able to walk out of doors.—Mrs. S. æt. 25, sent for me on the 6th February last; was labouring under acute peritonitis, having caught a cold after seven days confinement of her first child. Prescribed ant. tart. gr. ij., p. ipecac. gr. x, ft. emet.; also tr. opii. m. 40. aq. puræ ℥i. ft. haust; to be taken two hours after the emetic. 7th. On my morning visit, the patient said that she felt quite well, and that in half an hour after taking the emetic, all the swelling and pain of the abdomen subsided, and she had had a good night. Ordered ol. ricini ℥i. 8th. The oil had acted freely. Dismissed cured. I would remark that, in these cases, not one drop of blood was taken either by leech or lancet.

Union Surgeons.—The editors of the *Dublin Medical Press*, in commenting on the letter of an apothecary published in the *Times* newspaper, have committed the very error for which they most courteously charge the *Times* correspondent with being "an ass, and as asses go, an ignorant one." They say, "he persuades himself that it has been decided that no licentiate in medicine and surgery from the other side of the Tweed and St. George's Channel, unless qualified by an English apothecary's certificate, could be appointed surgeon to an union,' while it happens that the decision has been recently given the other way." The error in this statement is supported by a quibble, for, say our learned brethren, Irish and Scotch graduates are eligible as surgeons of unions, but not as apothecaries. Now, as the office of an union surgeon is essentially that of the general practitioner, that is the surgeon and apothecary, it is very evident that Irish and Scotch surgeons, unless possessing the English apothecary's license, are not eligible as union surgeons, inasmuch as the act of 1815 expressly declares against persons supplying medicines in medical cases, unless possessed of that license. The only advantage that the recent decision had gained for the graduates of the Dublin and Edinburgh Colleges, is that they are placed in possession of privileges equal to those enjoyed by the London surgeon, and no others. [We suspect that our learned collaborateur is here in error.—Ed.]

Inversion of the uterus.—Mr. Barber concludes that inversion of the uterus may occur spontaneously, and without that degree of force which has been too generally regarded as almost the only cause; that certain circumstances, capable of producing relaxation or irregular contraction of the uterus, are therefore in every case to be guarded against; that inversion may be accompanied with profuse hæmorrhage; that in all cases of hæmorrhage following the expulsion of the placenta, it should be the first duty of the practitioner to ascertain if it proceed from displacement of the uterus, and that reinversion should be attempted as soon as possible after the accident. When the placenta is still adherent, it should be first removed; the mode of reduction likely to be the most efficient is by grasping the tumour in the hand, and exerting some degree of pressure on it, after the manner of reducing a strangulated hernia.

Injuries to the eye.—Mr. Holmes Coote observes, that when effusion of blood into the anterior chamber of the eye follows an injury inflicted on that organ, and its absorption is much retarded, so that three, four, or five weeks pass over, and the iris yet remains concealed from view, the violence must have been great, the tissues of the eye have sustained severe injury, and, in consequence, chronic inflammation of the deeper parts takes place, and eventually terminates in atrophy of the globe, and complete loss of vision. If the blood in such a case then be rapidly absorbed, it may be regarded as a favourable symptom, showing that the interior of the eye is in a quiet state, and that the deeper seated structures have not sustained any very serious injury. The blood which is effused into the anterior chamber most probably derives its source from some of the vessels of the iris, and perhaps the marks or stains which remain upon the anterior surface of that membrane, long after the mass of extravasated blood has been removed, point out the spots where the vessels gave way, and whence the hæmorrhage proceeded. The blood sometimes coagulates, sometimes remains in a fluid state; when fluid, it moves with the position of the body, and falls to that side to which the head is inclined. Whether fluid or not, it does not mingle with the aqueous humour. It rarely happens that this accident to the eye exists uncombined with other injury. Most usually the conjunctiva is torn, and extensive ecchymosis takes place between it and the sclerotica. In this latter situation absorption does not go on so rapidly as in the anterior chamber. In very severe cases, concussion of the retina may follow.

Secondary cancer.—A woman was admitted into University College Hospital, with cancerous tumours in both breasts; the one in the left breast beginning to enlarge and become painful, it was removed, the wound cicatrizing in about five weeks. The woman was then discharged, but was re-admitted in the spring of the following year, with cancerous degeneration of the left arm and shoulder, and symptoms of cancer of the lungs. Her body was examined after death, and a large mass of carcinomatous deposit was found to be attached both to the upper and lower part of the pericardium; there was also a rather extensive and thick lamina adherent to the lower part of the sternum; the inner surface of the pericardium was studded with cancerous spots, and cancerous tumours were found in the liver and right kidney. The cellular tissue of the left shoulder was much indurated and infiltrated with cancerous matter; there were several masses of the same adventitious substance in the tissue of the deltoid muscle. The cephalic vein in the upper part of its course was much compressed, if its cavity was not obliterated, by the pressure of the surrounding hard tissues: near the middle of the arm it contained a coagulum. There was some enlargement of the anterior parts of the right side of the vertebral column in the dorsal region; it was apparently produced by the addition of some semi-cartilaginous substance.

The automaton with articulated voice.—We have had says Dr. Forry, of the *New York Journal of Medicine*. the pleasure of examining privately this *chef-d'œuvre* of human ingenuity,—the result of eighteen years' unceasing labour, by a German, named Faber. It is constructed upon the model of the human organs of voice, the tongue, larynx, &c., being made of caoutchouc. As voice is the sound produced by air driven from the lungs through the larynx, causing a vibration of the chordæ vocales, it is a function of *animal* life; but this function, in animals inferior to man, as well as in the idiot, is limited to the production of the *simple* or *instinctive* voice; while, in intellectual man, it becomes sufficiently complicated for the purpose of articulation. This is regarded as an evidence of man's intellectual superiority. Here, however, we find the same phenomena produced by an apparatus of caoutchouc and a bellows! The automaton is represented by a bearded Turk, and the articulations are produced by playing upon sixteen keys. We were quite surprised at being addressed by the automaton, in words very distinctly articulated, thus: "Wel-come Doc-tor For-ry." "Please ex-cuse my slow e-nun-ci-a-tion." After giving various other illustrations of his vocal powers, the automaton sang "Hail Columbia, &c.;" as we were about leaving, he said, "Gen-tle-men, I thank you for your vis-it." But, after all, *cui est bono?*

GOSSIP OF THE WEEK.

Arago, in his funeral panegyric on Bailly, lately delivered at the Academy of Sciences, mentions, that when Marie Antoinette complained to her physician, Petit, of his neglect of the Dauphin, he answered—"Madame, my reason for not coming yesterday to Versailles, was that I was detained at the bedside of a poor woman in labour, and in the greatest danger. Your Majesty is, however, much deceived in supposing that I neglect the Dauphin for the poor. I attend him with the same attention as if he were the son of one of your grooms!"

Influence of Medical Men.—An ingenious fellow, whom we will call Monsieur, wanted something from Prince Talleyrand, and had no means of access, except through the Prince's Physician, and to him he was a perfect stranger. The doctor, however, was a great amateur of paintings, and Monsieur had, by a piece of luck, a charming Van Ostade left him by his aunt. With these two facts, Monsieur felt he had the means of laying hold of the Prince. Suddenly, therefore, becoming a neuralgic patient in horrible suffering, the Prince's physician was sent for: the prescription was a miracle in the way of immediate cure of a twenty years' malady; the patient was all gratitude at the wonderful skill; the Ostade was its small testimony; visits between two of such similar tastes, and in such happy relations, were, of course, repeatedly exchanged, and the wily Prince one day found himself doing a favour, he hardly knew wherefore. Fontenelle, speaking to a litigating party, who stood ill with a President of Parliament (a judge), is reported to have said, "Do you know his confessor?" "No." "His mistress?" "No." "His doctor?" "No." "Then, my good fellow, you are a lost man!"

Charing Cross Hospital Med. School.—The Annual Distribution of Prizes to the pupils and students most distinguished for their acquirements in the various branches of medical study, during the past Sessions, took place on Wednesday, 1st May, 1844. The Rev. Dr. Worthington in the Chair.—Summer Session, 1843: Botany—Messrs. Alfred Clark and William Bainbridge.—Midwifery: Messrs. G. F. Burroughs, Elisha Noyce, John Terry, J. E. Hinxley, R. R. Crucifix, Alfred Clark, Frank Cooper.—Medical Jurisprudence: R. R. Crucifix. Winter Session, 1843-4—Exhibition of £15 per Ann.: Mr. Joseph Bennet.—Medicine: Messrs. T. W. Cook and R. R. Crucifix:—Surgery: Messrs. R. R. Crucifix, G. Cheesman, Alfred Clark, F. Mialle.—Midwifery: Messrs. G. Cheesman, R. C. M. Norris, F. Mialle.—Physiology: Messrs. A. Clark and J. Bennett.—Practical Anatomy: Messrs. F. Mialle, A. Clark, J. Bennett, C. R. Darell.—Chemistry: Mr. R. H. Harpur.—Materia Medica: Messrs. J. Bennett 1st Prize, Do. 2nd Prize, F. Mialle.

On April 2, the distribution of medical prizes in University College took place. One thousand persons were present, and Lord Brougham presided, supported by Lord Auckland. It was stated that the number of medical students was the same as last year, 300, of whom 93 entered this year.—Chemistry: Gold Medal, Mr. E. W. Randall, of London; 1st Silver Medal, Mr. Ed. Cousins of London; 2d ditto, Mr. James Morris, of London.—Prize Essay: 1st Silver Medal, Mr. Robt. Ellis, of Ruthin, N.W.; 2d ditto, Mr. Edw. Palmer, of London.—Botany (Summer Term, 1843): Gold Medal, Mr. Chas. Prentiee, of Kinston-on-Thames; Silver Medal, Mr. W. H. Colborne, of Chippenham, Wilts.—Medicine: Gold Medal, Mr. John Gabb, of Bewdley; 1st Silver Medal, Mr. W. F. Marshall, of Norwich; 2d ditto, Mt. W. H. Allching, of East Malling.—Anatomy and Physiology: Gold Medal, Mr. Wm. W. Moore, of Doncaster; 1st Silver Medal, Mr. H. Crookers, of London; 2d ditto, Mr. J. A. Cumnack, of Spalding.—Comparative Anatomy: Gold Medal, Mr. W. H. Colborne.—Anatomy: Senior Class Gold Medal, Mr. Wm. Cadge, of Honiton, Norfolk; 1st Silver Medal, Mr. Wm. Brown, Altarorum, Cornwall; 2d ditto, Mr. W. L. Dickinson, of London; Junior Class Silver Medal, Mr. S. Littleton, of Saltash.—Materia Medica: Gold Medal, Mr. R. Babington, of Hornecastle; 1st Silver Medal, Mr. J. E. Wood, of Rochdale; 2d ditto, Mr. Ed. Cousins.—Midwifery: Gold Medal, Mr. Jas. Hakes, of London; 1st Silver Medal, Mr. Alfred Jaekson, of Portsmouth; 2d ditto, Mr. Jas. Clifton, of Broughton.—Surgery: Gold Medal, Mr. Robt. Ellis; 1st Silver Medal, Mr. H. J. W. Dougall, of Exeter; 2d ditto. Mr. Henry Vevers, of Herefordshire..—Fellows' Medals for Clinical Instruction, (Summer, 1843): Gold Medal, Mr. H. Fearnside, of Otley, near Leeds.—(Winter, 1843 4): Gold Medal, Mr. F. W. Marshall; Silver Medal, Mr. G S. Deane, of Liverpool. —Lord Brougham remarked, that of 233 degrees conferred by the Central College, 114, or nearly one-half, had been conferred on Students of University College. The number of degrees conferred on medical students of King's College was only one-sixth of 114. He expressed the most thorough scorn and contempt he felt for the citizens of London for sending their sons to Oxford and Cambridge, when this College offered such advantages.

The following gentleman were admitted Members of the Royal College of Surgeons, on Friday, April 26th, 1844:—J. P. M'Donald, J. T. Mosgrove, W. H. Benson, H. E. F. Shaw, B. S. Browne, R. W. Coe, R. King, H. F. Dakers.

Apothecaries' Hall.—The following gentlemen were admitted Licentiates on April 25th, 1844.—Alfred Charles Barker, Henry Edmond Brewer, Charles Townsend, Richard Clark, Milton John Taylor, George Stansfield Deane, Kitt Tomson, Thomas Clark, Henry Fearnside, Alfred Joseph Tapson, Charles James Rix, and Noah Brangwin.

Among the appointments are, Assistant-Surgeons, G. Horniblow, M.D., from the Staff to be Assistant-Surgeon, vice Logie, appointed to the 6th Dragoons. James Crispin Walsh, 1840, of the Lark, surveying schooner, and James Laird, 1841, of the Illustrious, flag-ship, in the West Indies, additionals to that ship for Hospital Service at Bermuda; L. T, Cunningham, Surgeon to the Tortoise; Asst. Surgeon C. D. A. Newman (1829) reappointed to the Lucifer; J. K'Greish, M D. (1836) to the Bonneter; C. C. Easton, late of the Etna, to the Sparrow; H. H. M'Kenzie (additional) to the Penelope—23d foot, Asst. Surgeon W. J. Watt, from the Staff to be Asst. Surgeon, vice Loinsworth, who resigns, April 26th.

Errata.—In the last week's *Gossip, for* "Lord Elliot said Government had an intention to bring in a bill on the Irish Medical Charities," *read* "no intention." In a preceding week, the anecdote attributed to Velpeau really occurred to another gentleman, an eminent veterinary professor.

A COURSE OF CLINICAL LECTURES ON SOME IMPORTANT POINTS OF SURGERY,

Delivered at St. George's Hospital, by Sir Benjamin C. Brodie, Bart.

Lecture V.

(Lithotomy—Fistula in Ano—Prolapsus of the Rectum.)

It is not my intention to enter into any systematic description of lithotomy, but merely to make some practical observations upon it, and the first question which suggests itself is, what are the causes which produce death after this operation? That it is always attended by some hazard is proved by the experience of all surgeons, but if we would avoid this danger, we must find out what is its cause. The bladder is surrounded by a quantity of loose cellular membrane, like cobweb, which also envelopes the prostate gland. The first, and one of the principal causes of danger, is a communication being made between the interior of the bladder and this texture, during the operation. Why, what must happen in such a case as this? You know what happens in a case of hydrocele if some of the injection gets into the cellular membrane. You almost invariably get sloughing of the part. Now is not the urine as stimulating as port wine and water; and if it gets here will it not produce sloughing, and will not this occuring to an internal part, cause death. This is the most common cause of death after the operation; I will relate to you some cases which have come under my own observation. When I was young I went to assist Sir E. Home at a private case of lithotomy; the operation was performed in a very short space of time, but the man soon became very ill, had low fever, sickness, his belly was blown up and tympanitic, and this was accompanied with cold sweating; he died in forty-eight hours. Sir E. Home, though an expert operator, used to open the forceps too rapidly in the bladder, and in this case he felt something give way; and when I opened the body, I found on one side the bladder a considerable rent; not only the lining membrane, but the muscular coat also was torn, and inflammation had taken place, and had spread nearly as high as the kidney; it exhaled a very offensive smell, and in many parts sloughing had taken place; and this was of course produced by the escape of urine into the cellular membrane. I saw another case immediately after this, where the surgeon had done the same thing, and the same result ensued. In this operation, the prostate has to be divided; and for a moderate stone, cutting it on one side will be sufficient; if it is cut quite through, the urine escapes into the cellular membrane. From these cases I learned a lesson; but I operated upon a little boy, and employed a knife for cutting; and having been instructed never to use force, I made a large opening, and he died the next day, and from the same cause, the urine had escaped into the surrounding cellular membrane; and in one case since then, where I cut further than I intended, the cellular membrane sloughed and the patient died. The symptoms are the same in all these cases: the patient goes on well for twenty-four hours, then you observe suddenly an anxiety of countenance, and intermittent pulse; the hands are cold, and he gradually sinks and dies perhaps in forty-eight hours.

Sometimes you find, perhaps, a slight blush of inflammation about the abdominal viscera, with effusion of lymph; but this is when the patient has lived sometime, with a puffed belly; or else it occurs in the cellular texture between the bladder and rectum. In the lateral operation, you will make an opening in the membranous portion of the urethra, then divide the prostate where the urethra passes through it, but take care not to cut through the whole of the gland. Mr. Cheseldon cut into the membranous part with a knife, and (as he supposed) cut also the neck of the urethra, and then introduced a blunt gorget; but I think he did not cut the neck at all, as this is extremely difficult with an ordinary scalpel; the introduction of the gorget cut it after a fashion, but its principal use was to stretch the part. Mr. Martineau, of Norwich, is said to have performed the operation in this way; but a friend of mine, Dr. Macartney, after seeing him perform it one day, asked him what he had done; he said, I cut the neck of the bladder; Dr. Macartney said he thought not, but Mr. Martineau said he was certain he had;—however, the man died, and on examining the body, it was found the neck of the urethra had only been stretched, so that Dr. Macartney was right. This danger is avoided by making small incisions. Formerly when I was in the habit of making large openings, I lost several patients; but since I have been more careful, I have only lost one patient from this cause, and it was because the stone was very large, and consequently the parts were very much lacerated. There are several ways of cutting into the bladder. Mr. Hawkins's cutting gorget answers very well. Mr. Cline's is also a very good instrument;—you would suppose from its being so broad, it would cut entirely through the prostate, but this is prevented by its being sharpened only a certain distance; still I think you should not trust to it in young persons. I should also tell you that in Mr. Cline's instrument there is only one cutting side; but where is the danger of cutting on both sides? Sir Astley Cooper also invented an instrument, which I think is rather too wide. This knife, which has a beak at one end (showing the instrument), makes a narrow incision, and slides along the groove in the staff very easily. It is also less likely to be thrown out of the groove by an accident. When you want to make a large opening, it is better to employ a blunt gorget, as this partly cuts and then stretches it, without risk of injuring the cellular membrane surrounding. The *bistoire cachè* makes a good incision, but requires to be used very carefully. Not only does it require to be introduced with care, but also to be withdrawn cautiously, or you will cut a large opening in the bladder; to avoid this, draw it out perfectly straight. I prefer those instruments which cut going in, to those which cut coming out. When the beak or point of the instrument is not in the groove, you cannot tell how long may be the incision you make.

The instrument employed by Mr. Blizard is for cutting laterally; it enters very easily, and is preferable for young children. But the evil in these instruments is, that you do not know to what extent you are cutting, and therefore, in my opinion, they should be rejected altogether. M. Dupuytren's bistoury I do not think at all a safe instrument: he lost most of the cases in which he operated. It has a double edge, but with the same objection as the other instruments of which I have been speaking, viz.: that it makes the incision coming out instead of going in; and a slight difference in drawing it out, makes a great deal of difference in the length of the incision. If you would avoid danger, always make your opening small first; and then if the stone does not come out readily, you can dilate the opening with a blunt gorget. But if the stone is very large, the parts must be torn to a certain extent; so that the removal of a large stone is always attended with danger, but more especially between the ages of forty and fifty: more so at this age than in advanced life; because there, the prostate becomes considerably enlarged, which does not at all increase the danger of the operation, and gives you more room to make your incision. Another circumstance which must be attended to is, always to make your incision low down, as, by so doing, you will be less likely to cut into the cellular membrane, which would be sure to cause effusion of urine. The handle of the staff should also be held downwards, and also the knife, in order to avoid the above accident, which, as I said before, is the most common source of danger in lithotomy. Another source of danger is hæmorrhage, and let no one tell you it is not; I have seen several cases where the patient has bled to death. Sir E. Home operated on a patient, and bleeding came on afterwards, and the man died at midnight. The same thing occurred in a case operated on by another surgeon whom I knew. I went into the country some time ago, to perform the operation upon a farmer. In his case there appeared to be varicose veins about the neck of the bladder; however, the bleeding could not be stopped, and he also died. Some little time ago, an hospital surgeon was so bold and imprudent, as to say this ought never to occur, and that when it did, it was always the fault of the operator; but as though it was a judgment on him for his uncharitable expression—the very next patient on whom he operated died from this cause. I do not mean that this is very common, or that hæmorrhage is the direct cause of death; but certainly I do say it contributes materially to this result. If you make your incision in the upper part of the perinæum, you will be sure to have bleeding. Surgeons will tell you, and you will find it in books, that you ought not to cut the artery of the bulb: this is all very true, but it cannot always be avoided. The perinæum is of different depths in different individuals, and it is impossible sometimes to say where the bulb is situate. Not that I think it is from this vessel that large hæmorrhages occur, but from vessels about the neck of the bladder. From the pressure of the stone, the parts become more vascular, and the vessels of the prostate are enlarged, and these sometimes bleed largely into the bladder, even before any incision has been made, but from the vessels giving way; it, however, occurs more frequently where they have been cut in the operation. I have said patients sometimes die of hæmorrhage from the neck of the bladder; in the man who died yesterday, it was from the prostate gland; but, of course, whenever you make a free incision, you are in greater danger of hæmorrhage; always, therefore, make your openings small, and if they will not admit the stone, stretch them with a blunt gorget. The next cause of danger, is cutting into parts that are unsound. The shock of the operation is nothing to a patient who is otherwise in good health, and whose urinary organs are sound; but if he is out of health, and the irritation of the calculus has produced any disorganisation of the parts, death not unfrequently follows. When a patient has disease of the kidneys, any operation will upset him, more especially lithotomy;—I could mention many cases where the death was to be traced to disease of the urinary organs. A man came into this hospital some years ago, when we did not understand diseases of the urinary organs so well as we do now; Sir E. Home operated upon him; during the operation the man said he felt something crack in his loins; forty-eight hours afterwards he died; and on examining the body, I found an abscess in the kidney which had burst, and the pus was diffused through the surrounding cellular membrane, and this seemed to be the immediate cause of his death. Some time ago I attended a gentleman with disease of the bladder, for which I made him use a catheter daily; after a time he became tired of the little trouble it gave him, and discontinued its use: the consequence of which was the formation of a phosphate of lime calculus, which irritated him so much, and gave such a great deal of pain, that at the request of himself and his family, I operated upon him; but he died in a week without any symptoms of effusion of urine, but gradually became weaker, so that his death seemed to be the result of total exhaustion. He refused to take any food after the operation. I have seen two cases where the surgeon was bold enough to operate when there was evident disease of the kidneys and also of the prostate. Of course they died. A nobleman who had stone in the bladder, and in whom there was extensive disease of the prostate (but which was not known at the time), was operated upon by Sir E. Home, assisted by Mr. Cline; the stone was extracted very easily, and no difficulty of any kind occurred during the operation. I was then quite young, and was cleaning the instruments in the next room, when the nurse came running in, and said he was dying, and before I could get to him he was dead. Here I think the death was produced from the violent shock given to the nervous system. I could tell you of many similar cases; so that where there is disease of this kind, you should never perform the operation unless the patient urgently requests you to do it. Hæmorrhage may also prove fatal indirectly; if the patient is in good health, and is of a strong constitution, loss of blood will not be injurious; but if there is any disease of the kidneys more especially, bleeding destroys all chance of recovery, because the disease of itself lowers the system to an alarming extent. In

another case, where the gentleman had disease of the kidneys, and a large secretion of ropy mucus in the bladder, with the formation of calculi, his distress was so great, that he requested that I would operate upon him; I did so, and he gradually sunk, and died in ten days. I should mention that he lost about a pint of blood by the operation; when I examined the body, I only found inflammation of the mucous membrane lining the bladder, and I think if he had not lost the blood, he would have recovered: the same remark applies to the patient who died in the hospital yesterday.

I have been also requested to lecture on "*Fistula;*" but as it is but a short time since I delivered a course of Lectures on that subject, and as those lectures were published, I think I should be wasting your time by going fully into that subject again; I shall, therefore, content myself with mentioning to you such views as may have occurred to me since the publication of the former lectures. There is a woman up stairs who has a fistula of very long standing; there are several openings on the right side of the rectum, and the cellular tissue is indurated and thickened round them; I passed the probe through an opening about 1½ inches up the gut. The disease commenced fourteen years ago, and she was operated upon shortly after it first made its appearance, but one of the sinuses never healed, and others opened very shortly after. When admitted here, there were several small openings which terminated in one large opening, as I just mentioned, about 1½ inches above the sphincter muscle, and through this I passed a probe and laid it open. Recollect, then, with respect to this case, that, besides the internal opening, there are several externally; that the disease is of very long standing; that the woman has been operated upon before, but without success. In my former lectures I don't think I gave a proper account of the formation of fistula in ano. Now there is always an opening in the rectum which may be found with a small probe, and this communicates with the fistula; but as yet it is unintelligible why it should burst internally first, then externally afterwards. In fistula in perineo, there is first a small opening by which the urine gets into the cellular membrane; ulceration takes place, and an abscess is formed, so that in a few days the urine makes its escape by the external opening of the abscess. The ulceration takes place first, and terminates in abscess. From this I suppose, in fistula in ano, there is first inflammation of the mucous membrane lining the intestine; this ulcerates, and a small portion of fæces gets into the surrounding cellular tissue, and inflammation and abscess follow. It is not uncommon for a patient to come to you with pain about the rectum, and when you examine, you find a small ulcer in the gut. Some time ago, I was called to a lady with disease of this kind; when I examined her I found a small opening. I ordered her to take some cubebs, as these kinds of stimulants are frequently very beneficial; but I saw her six weeks afterwards, and then there was an opening into the gut through which I could pass a probe readily, so that here I had evidence of ulceration preceding the abscess. This explains why persons who have disease of the lungs and liver should have abscesses form elsewhere; and it is just as reasonable to suppose that ulceration of the mucous membrane in these parts should produce the same disease in the rectum, and thus allow the fæces to escape and produce abscess; and this last explains the cause of the extremely fœtid smell of anal abscesses. The smell of large abscesses is always bad, but in these it seems as if fæces and matter were mixed together. Being unable to explain this formerly, I said in the lectures to which I have referred, that it might result from transudation; but it is much more likely to suppose the contents of the gut should pass through an ulcer than by transudation. You will probably ask "Why does not the ulceration take place to a greater extent?" In some cases it does, so that large quantities of fæces escape, and produce a very large abscess. It will sometimes do as much mischief as the escape of urine from the bladder into the surrounding cellular membrane. In a young man who was under my care, there was an immense ulcer in the side of the rectum, by which feculent matter had escaped and produced an enormous abscess in the nates. I am aware these are rare cases, but still it may occur. If the views I have stated to you be correct, it leads to an important point in practice. Baron Larrey, in his work on military surgery, I think says, (for it is more than twenty years since I read the work) there is always an opening into the gut; and that the great rule to be attended to in the treatment, is to pass a probe into this, and lay it open; and I believe this is perfectly correct.

The cutting instrument should be passed through this opening so as to include it in the incision. If this is not attended to, your patient will be liable to a return of the disease. If you only cut below or on one side of it, there will be a place for the fæces to escape, and the abscess will form again; but if you include it in the incision, they will not escape there more than lower down, and the whole wound will close gradually, and soundly. Since I have taken this view of the subject, I have always sought for this opening, and have generally found it. It is better to examine the part first with a rather large probe, and if you do not succeed in finding the opening, send the patient away and examine another time with a somewhat smaller probe; and do this three or four times should you not succeed, in short, repeat the trial every few days till you do succeed. Sometimes when you think all the sinuses have been laid open, the abscesses continue to form; but on a very close examination, you find a very small sinus which has been overlooked; you lay it open, and the cure is at once effected. Precisely the above circumstances occurred in a lady whom I attended a short time since. When you have found the internal opening, the cure is very simple; sometimes it is best found with a common director, at other times with a large probe; whilst in some cases you will only succeed by employing a very small probe; but when you employ the latter it should have a small rounded head. If you find the opening, pass a director up by the probe: then bend it, and bring it out at the anus, and, with a common scalpel, lay the whole open, or, if you prefer it, you may employ a bistoury. In doing this you must necessarily divide some fibres of the sphincter muscle; and when it opens just outside this, it will be requisite to divide the muscle entirely; in ordinary cases however this is not required, all that is necessary being to include the inner opening in your first incision. But when you cannot find the inner opening, I think it is better to include the whole of the sphincter in your incision, so that no liquid fæces may be retained in the rectum; if this is done, the disposition of the fæces to escape at the small opening no longer exists. When you cannot find the opening at all, treat it as you would a fistula in perineo. In these cases, you know it is the plan to dilate the stricture in front of the inner opening, by doing which the urine is enabled to flow through its proper course; but when this is not done of course it will pass through the internal opening. Having then laid open the sinuses, the dressing is very simple. Prevent for a few days the edges of the wound from skinning over, but do not cram in lint tightly; lay it in the wound gently, so that it may prevent the edges of the wound coming together, at the same time that it may allow the matter to escape freely. There is no occasion to lay it open above the ulcerated part. Sometimes when you introduce the probe, it will pass up several inches by the side of the rectum, and this cavity may perhaps (if the case be one of long standing) be capable of containing half a pint of matter; but there is no necessity for laying the whole of this open, as there are numerous large vessels about these parts which, if wounded, will bleed profusely, and you will have great difficulty in stopping hæmorrhage in such a situation; it will be quite sufficient to lay it open as high as the orifice which connects it with the gut; it may however in these cases be advisable to divide entirely the sphincter muscle. There is another disease connected with these parts to which I would direct your attention, viz.:

Prolapsus of the Rectum.

Now, this disease, as it occurs in adults is, in the majority of cases, internal piles; which, in coming down, bring the lining membrane of the intestine with them; so that it is not disease of the gut itself, but is merely an affection of its lining membrane, produced by the piles. But in children you do not have piles; and in them prolapsus frequently occurs; the gut in children is very thin, in consequence of which intus-susception also is common in children; and this partly accounts for the prolapsus taking place. The extreme thinness of the gut, then, appears to be one cause; another is, that, at this early period, the organs of generation are not perfected; the prostate and vesiculæ seminales are not completely formed, so that the parts are not so well supported, cellular tissue and fat occupying the place of these organs. I have frequently recommended in these cases, the repeated application of a lotion, containing one drachm of the tr. ferri mur. in a pint of distilled water, and the patients have been much relieved by it. There is another circumstance I have made out since the publication of my lectures, viz.: that as the child grows up, the disease occasionally disappears without any treatment, but this is not always the case; the remedy which I recommend is, nevertheless, very simple; make the child learn to use a bed-pan, so as not to sit up when it has a stool; or what, perhaps, is still better, if you can persuade the friends to purchase an invalid bedstead, such as we have in the hospital, where you know a cushion can be removed from the middle of the bed, and the pan being fixed beneath, the patient always passes his stools whilst in the recumbent posture; there is no difficulty in teaching a child to pass his motions in this position, and then the rectum will not come down. This plan should be followed for a year or two, and then, as the child gets stronger, the disposition to prolapsus will be overcome, and the treatment may be discontinued. Whilst conversing a short time since with a friend of mine (Mr. Maudsley, of Hanover Square), he mentioned that in his old patients who suffered from internal piles, he had observed, that where they were bedridden for any length of time by any other disease, the piles always disappeared; and it was from this circumstance that I first tried the recumbent posture for the cure of prolapsus, which, as I have mentioned, I find to answer most perfectly. The simple operation of tying piles is not always unattended with danger. When I delivered the lecture to which I have adverted, I had performed the operation several hundred times, and had only lost one patient; but I am sorry to say, since that time, I have lost no less than three patients after this operation. But a patient may die from the piles; so that if there is a little danger attending the operation, it is no reason why it should not be performed. But in all cases, gentlemen, where you think there is danger, endeavour (as I recommended to you in my last lecture,) to make out what is the cause of that danger. In those cases which have proved fatal, I have always found diffuse cellular inflammation about the rectum, which has risen as high up as the mesentery; or else there has been effusion of lymph in the part surrounding the rectum; in short, they all died of diffuse cellular inflammation. Now, this affection is principally dependent upon the state of the patient's general health; those who die from this cause in the hospital, are generally persons who have been largely addicted to drinking; the same cause, in the higher classes, tends to the formation of carbuncle. In the first who died here, the kidneys were soft, and precisely in that state in which they are found to secrete albuminous urine; and in the bladder I found a fibrinous calculus, the only one I ever saw; when dried, it shrunk almost to nothing; its formation can only be accounted for from the overloaded albuminous state of the urine. This patient was, of course, in an unfavourable state for any operation, but I did not previously ascertain the state of his water: and if I had, I did not know sufficient of the disease to have cured it. The next patient had a great deal of bleeding from the piles, but here I examined the state of the urine with Dr. Prout, and found it to be loaded with albumen. In all cases, if the patient is not in perfect health, and you find the albuminous state of the urine, you may suspect the disease of the kidneys. The third patient was a man who had always been ailing, and was a sallow, miserable looking person. I told him he had better

not have the piles tied; but he said they were extremely troublesome, and begged I would do it. I did so, and in a few days, he died from the same cause as the two former; but here I operated at the patient's own particular request. Of course, it is always important that the patient should run no unnecessary risk; therefore, at all times previous to operating, ascertain whether his general health is good, and never omit examining the urine; if it contains no albumen, and the patient's health is otherwise good, there is no more danger attending it, than there is in bleeding a person from the arm; there is no operation which, under certain circumstances, may not be dangerous. I have known many die from cellular inflammation following blood-letting; so also, after cupping, erysipelas may follow. I have known persons die from the sting of a bee, and others from pricking minute abscesses to let out the matter. In all these cases, the fatal result is to be attributed to the state of the constitution, and not to the operation.

ON THE PHYSIOLOGY OF HEALTH AND DISEASE.

APPLIED TO ANIMALS AND VEGETABLES, BUT MORE ESPECIALLY TO MAN.

By M RASPAIL.

Signs by which we may Recognise the Presence of the Vermicular Ascaris in our Organs.—1° The first consists in a tingling pain, similar to what might be experienced by the puncture of some sharp pointed instrument suddenly thrust into the tissues and as quickly withdrawn. The greater number of these tingling sensations pass unnoticed, when they take place singly or in trifling numbers; it is their sum or accumulation that makes them so painful of endurance; when performed over a large surface at the same moment, the bowels seem, as it were, to be torn to pieces. These pains are principally felt whilst fasting, for it is then that the worm being famished seeks, in the products thus artificially provoked, a substitute for the food which the digestive assimilation naturally affords to it. 2° The second sign consists in an impression altogether analogous to that which is produced, upon the skin, by the suction of a cupping glass or of some organ of apprehension, at the instant in which the apparatus is somewhat suddenly drawn off. We perceive the intestinal surface, so to speak, drawn forcibly inwards. When the worm changes its place spontaneously, nothing of this kind is produced; but if the surface invaded by these small insects be considerable, their displacement occasions unaccustomed and violent peristaltic movements, which are attended with a species of pleasurable sensation. 3° The third sign consists in the intestinal *bruits*, which acquire various acoustic characters, according to the media traversed by the gases disengaged through the titillation of the caudal extremity of the *ascaris*. These *bruits* are divided into several varieties: the *spumescent*, or frothy bruit; the *bruit de piston;* the *bruit de sifflet*, or whistling sound; the *bruit de glouglou*, or gurgling noise; the *aspiratory bruit*, and several others; all depending on the greater or less amount of obstruction offered to the passage of these gases through the intestinal canal. These acoustic signs may in fact be varied *ad infinitum*, according to the healthy or morbid condition of the passages; but they do not the less infallibly prove the presence of worms in the intestines, and probably also in other organs, in which it is impossible to suppose that these *bruits* can arise from the aspiration and expiration of atmospheric air. 4°. The fourth sign of the presence of these insects in the alimentary canal is, that an instant after swallowing any anthelmintic medicine, a quantity of wind is discharged by the anus; this is produced by the *ascarides* flying from the approach of the medicine, and retreating towards the colon and rectum, where they provoke, by their titillation, a disengagement of gas, which this portion of the intestine is incapable of retaining. 5°. The *globus hystericus* is an infallible sign of the presence of the vermicular or lumbricoid *ascaris*, which, from some cause or other, is compelled to mount upwards along the intestinal canal. A cluster of these worms, rolled one around the other, would readily induce in the individual a sensation as of a ball mounting from the uterus towards the mouth; and women and children, by reason of their mode of diet, are more exposed than men to the invasion of *ascarides*. This ball seems to fall down again into the intestines, like a lump of lead, and to be dissipated, as it were, by enchantment, immediately on taking some gentle vermifuge, or by inhaling the vapour of an essential oil, as peppermint, penny-royal, camphor, &c. 6°. The sixth sign is a feeling of pruritus in the interior of the nose, a sign regarded as sympathetic of the presence of worms in the intestinal canal, even by those who believed that the *ascaris* inhabited only the *rectum* in man. The doctrine of the sympathy of organs has been greatly exaggerated; the organs act one on another by communication and by interchange; not by occult influences residing at a distance. Every tingling on the skin is an immediate effect of some adjacent cause, and not the mysterious result of a distant relation. When the nose itches in children, it is owing to the vermicular ascaris arriving at this surface, by gliding behind the velum of the palate; a pinch of snuff, in fact, will put a stop to this nasal pruritus, although the *ascaris* may continue its work of destruction in the intestinal canal. Thus the absence of itching in the nose is no proof of the absence of the vermicular *ascaris* in the human body; and it may happen that an individual shall be a prey to swarms of worms, without his experiencing the slightest nasal pruritus, or being subject to fœtid breath,—especially if he be in the habit of using tobacco; and in like manner a person may labour under itching in the nose, without possessing, as a consequence, any disposition to *ascarides* in the alimentary canal. 7°. The presence of *ascarides* in the stools is an evident sign of their having existed in the alimentary canal; but it does not prove that there are any in the body still; their absence does not signify that a person is free from them: often quite the contrary. Another circumstance which should be mentioned is, that in some countries, and especially in large towns, from the system of cleanliness which is adopted, we seldom have an opportunity of observing the stools, whereas the reverse is the case in country places; consequently in the latter, worms are more often observed, than among the more refined inhabitants of the former.

Morbid Effects of the Vermicular Ascaris upon the Human Body.—1° When the *ascarides* have taken up their seat in the stomach, we perceive prickling sensations in this organ, as well as a derangement of its function, which may eventually lead to *gastritis* or *gastralgia*. A degree of relief may be experienced while eating, according to the nature of the food; but renewed torture succeeds during digestion. If the worms affix themselves on the surfaces bordering on the pylorus, the patient is seized with vomiting of a frothy liquid; and this antiperistaltic movement drawing the bile into the stomach, we shortly find this secretion mixed with the ejected matters. The prolonged titillations of the caudal point of the ascaris on the mucous surface of the stomach can not fail to produce disordered secretions or the development of parasitic tissues, which paralyse the aspiratory faculty of this organ, that is to say its faculty of nutrition and digestion. The digestive surface in fact, being thus covered with an inert production, is no longer capable of acting directly on the alimentary mass, and modifying it in a manner favourable to digestion.—2° So also when these abnormal developments take place in the duodenum, below the opening of the choledic canal: this viscus being obstructed in whole or in part, the bile and the chyme are pushed back into the stomach by this mechanical obstacle, and vomiting may then take place after each ingestion of food.—3° If the ascaris take up its seat within the choledic canal and its various ramifications, we shall, in consequence of these developments, have a suppression of the conversion of chyme into chyle,—an arrest of the duodenal digestion, with all its consecutive effects upon the general economy; sometimes, also, this may lead to the formation of biliary calculi, and finally of ascites.—4° Each little sting will leave a trace somewhat similar to the puncture of the flea, which may become converted into a small tubercle or phlyctæna, and subsequently into a gangrenous spot, according to the modifications induced by diet or by medicine upon these tissues. The seat of these morbid products will depend on the predilection of the ascaris for such or such a surface, or according as the plan of treatment shall have compelled it to fly from one spot to another; so that, in some cases, the rubefaction and inflammation produced by the immediate and mechanical action of the ascaris, or by the corrosive action of its effects, may extend along the whole surface of the alimentary canal, especially on the delicate and sensitive tissues of the two extreme points of this tube, the mouth and the anus.—5° But if these titillations be accomplished upon the nervous papillæ, instead of the cellular or adipose tissues, convulsions of the most varied character may arise, according as the nerves attacked shall be distributed to such or such an organ of locomotion;—convulsions which may be produced in all their modifications upon living animals, by subjecting them to artificial punctures or titillations of a like character.—6° The general consequences of this morbific cause will be constipation and straining at stool; the blood, oxygenated in the lungs, but not renewed by chylification, will be rendered thick and congested in various parts. Hence, the pulse becomes rapid and jerking, afterwards slow and obscure; head-ache, stupor, and vertigo supervene, and sooner or later, fever, principally affecting the brain.

Now if, from any cause, the stomachic and duodenal digestion be no longer suitable to the alimentation of these parasites, they may escape from the danger which threatens them, either upwards through the œsophagus, or downwards through the rectum; should they choose the former course, they may pass.—1° Behind the velum of the palate, either into the nasal cavities, where they would cause an *insupportable itching*, or into the frontal sinuses, producing *head-ache* and *coryza;* 2° into the Eustachian tube, producing *tinnitus aurium*, a difficulty of hearing, and perhaps eventually a total loss of this sense; 3° into the larynx and trachea, and thence into the bronchi and the anfractuosities of the lung, giving rise to cough, catarrh, bronchitis, asthma, inflammations of the chest, and all the varied effects of tubercular phthisis, according as the worm shall insert its caudal extremity into the more superficial, or the deeper seated tissues of the arterial or venous capillaries. Should, however, the insect direct its passage downwards towards the rectum, we then find an insupportable pruritus and prickling sensation around the orifice of the anus. In some individuals, this irritation alone is productive of hæmorrhoidal excrescences and discharges of blood. The disorder is not, however, confined to the anal orifice; for the worm may altogether quit the intestine, and gliding between the mucous surfaces of the sexual organs,—between the *glans* and the *prepuce* in the male, or the *labia majora* and *minora*, in the female—may there produce a troublesome itching or *pruritus*, extending even to the degree of satyriasis or nymphomania, according to the spot on which it may affix its hold. In young children, the flesh being more tender, and the epidermis habitually moist,—all the tissues in fine being impregnated with a saccharine substance which abounds in the fœtus: the *ascarides*, on escaping from the anus, do not appear to have quitted the mucous surfaces, especially if they stray upon parts which are not in contact with the light. If the child be asleep, and the humid warmth of the bed favour the migrations of these insects, it often happens that the skin surrounding the anus, as well as the buttocks, will be found covered with minute scarlet pimples, which quickly disappear on using a little ablution. But it is especially in female children that this eruption is most frequently to be met with, around the orifice of the *vulva* and on the perineum, extending thence under the form of a rose-coloured band, two or three *centimètres* in breadth. Persons who live habitually on a mucilaginous diet; who drink but little wine and that of a bad quality; who take very little exercise, and neither smoke nor inhale strong scents; such persons, I say, are quickly

nvaded with *ascarides* which become the cause of a variety of evils.

Again, this worm may pass directly through the lining membranes, without leaving behind it the least trace of perforation; this evidently depends on the rigidity of its body, the silicated structure of its tail, the spiral direction of its movements, and on the almost immeasurable smallness of its calibre. Now, this fact granted, we can no longer refuse to admit the possibility of the *ascaris* penetrating into all the tissues and organs of our body, there acting as the cause of various disorders, and giving rise to the development of tissues of superfœtation, similar to what we have already seen engendered upon the surface of the intestinal canal. And let us not suppose that the worm is unable,in the midst of these tissues, to find the air necessary to its respiration ; the atmospheric air penetrates and impregnates all our organs ; the *ascaris* would respire, in the substance of the walls of the heart or in the tissue of the liver, as readily as it would in our stomach or even in our lungs. Now, if it happen that the intestinal canal, instead of offering to the worm the nutritive conditions which it seeks, present to it but a poisonous medium: yielding then to the instinct of self-preservation, the *ascaris* will fly the danger which menaces it, by escaping through the walls of the canal, and emigrating into the neighbouring organs, there to obtain, upon the serous membranes, the alimentation which the mucous surfaces no longer afford to it. So also it might live with equal readiness, within the sheaths of the nerves or between the fibres of the muscles, paralysing their influence and their motion, and becoming thus, by its simple migration, the author of symptoms characteristic of rheumatism, sciatica, coxalgia, and a thousand other states accompanied by loss of motion.

Emigration of the vermicular ascaris out of the human body.—When, from any of the foregoing causes, these worms make their exit by the anus, they will either be deposited with the fæces, or else, if the patient be confined to his bed, they will escape into the linen or the bedding. If due attention were paid to this point, I am convinced that, in worm diseases, we should discover the *ascarides* or their ova in great numbers in the bed. Now, we have said before, that each of these worms carries at least three thousand ova which survive the parent, and may become hatched without the aid of its incubation ; these ova are laid, before the life of the insect leaves it, under the form of a fine powder which is raised by the least movement of the air, like any other kind of dust, —for instance that of starch, the grains of which often surpass in size the largest of these vermicular ova. We see here, then, how the contagion is propagated through the vehicle of the air ; I might add, even, through the vehicle of the waters, since the inundation of our rivers, washing away the impurities of the soil, must carry back into the stream the innumerable vermicular ova which were spread over the surface of the ground ;—how it is communicated from one patient to another, by means of the mattress and sheets, and even by the clothes. May we not truly regard this as one of the varied causes of those verminous typhoid fevers which suddenly attack, at certain seasons, large congregations of men subjected to the same regimen, as in our hospitals, our prisons, our colleges ;—all collections of human beings, in fact, who do not direct their attention towards the removal of this cause. Those who live in the midst of families containing young children cannot fail to observe that, if one among them show signs of the presence of *ascarides*, and that none of the precautions we have indicated be adopted, in a few days all the members of the family will fall a prey to this contagion. The vermicular ova will become introduced into their organs by the respiration, and by ingestion ; they will be served up to them by the hands of their domestics, upon their finest porcelain and silver plates. There is nothing ridiculous in these notions ; facts of this kind are occurring every day, and may be observed by each one in the bosom of his own family.

We have thus shown that the *ascarides* may become the causes of contagion by the communication of their ova ; we may add that they may in like manner become so, as simple vehicles. Suppose, in fact, that the *ascaris* shall have plunged its caudal extremity into the walls of an infected sexual organ, into the centre of a bubo, a chancre, or some aphthous ulceration, and that it abandon these parts to perform its titillations on a sound tissue ; will it not inoculate from point to point, and at each puncture, the virus with which its tail may have become elsewhere infected ; and thus, by passing from one individual to another, without the aid of any sexual intercourse, communicate the syphilitic contagion, at least, so far as its local effects are concerned. Why should not such be the case, since the point of a needle, under similar circumstances, would determine the same effects, and become an instrument of contagion !

In what tissues does the vermicular ascaris deposit its ova ?—We have already said that, though inhabiting by preference the intestinal canal, the *ascaris* does not deposit its ova by mere chance, or in the vehicle of the fæces ; like the superior animals, those at the bottom of the scale have an instinct of maternal foresight which invariably indicates to them, when laying their eggs, the most suitable place for the incubation of these ova ; they are enabled to foresee that, if carried along with the human excrement, their offspring would be exposed to utter annihilation. We must then admit that, in its normal conditions, it is in our tissues—in our flesh itself, that the *ascaris* deposits its ova. The only point, then, which remains for our consideration, in reference to the history of this worm, is to discover the tissue into which this poison is infiltrated. A research of this nature can be pursued only by means of the microscope; the most careful dissection is incapable of rendering such minute objects visible to our sight ; and even with the microscope, how can we succeed in distinguishing ova the twelfth part of a *millimetre* in size, and which are contained in the torn and divided meshes of the cellular tissue. That which I despaired of discovering by direct means was, however, revealed to me by analogical reasoning, while pursuing some researches on portions of membrane which I myself expectorated, a short time since, while labouring under epidemic catarrh. With the aid of a mere magnifying glass, I convinced myself that each of these sputa was possessed of a lobulated organization, very different to that presented by the albuminous and shapeless *coagula* and masses produced as an effect of tumultuous precipitation. On examining them more attentively, I succeeded in demonstrating that the bluish and lobulated clots which I there found, were formed of glandular masses, possessing a structure somewhat analogous to that of the adipose tissue described in my "*Nouv. Syst. de Chim. Organ.*, vol. 2." On *enucleating* each of these lobules, and spreading them out to their utmost extent, I was enabled, on every occasion, to show, with the microscope, a tisssue paved with ovoid globules, the aspect and dimensions of which exactly corresponded with the ova of the *vermicular ascaris*, as already described. Now, bearing in mind the analogy between these developments and the morbid effects resulting from the introduction of the *vermicular ascaris* into the trachea and the pulmonary organ, we can hardly refuse to believe that we have here discovered the tissue in which this insect deposits its ova. By laying its eggs in the substance of the mucous membrane, the *ascaris* has, so to speak, deposited the germ of an organised and parasitic development, which, if allowed to continue its growth without interruption, may obstruct the canal of the trachea, and, in fact, produce asphyxia by occlusion. In like manner, the *grippe* or catarrh, above instanced, passing through the characters of *hooping-cough*, would, in some cases, eventually assume those of *croup*— three species of disorder, differing only in intensity. Again, the mucosities which escape from the nose, in some forms of coryza, &c., present the same lobules, the same coloration, and the same ovoid granulations, as the sputa in certain affections of the lungs; consequently, what we have said of these latter, must also apply directly to the former kind of products. We have here, then, at least a sufficient proof of two separate localities, in which the *vermicular ascaris* deposits its ova ; and by and bye, the new impulse given to microscopic studies cannot fail to reveal to us others.

LECTURES ON THE ANATOMY AND PHYSIOLOGY OF THE EYE,

FORMING PART OF THE COURSE OF LECTURES ON ANATOMY AND PHYSIOLOGY, DELIVERED AT CHARING-CROSS HOSPITAL.

By T. WHARTON JONES, F.R.S.

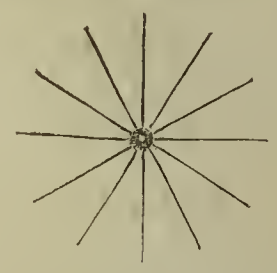
Lecture VII.—February 28, 1844.

We have now arrived at that part of our course which includes the physiology of the eye, more strictly so called.

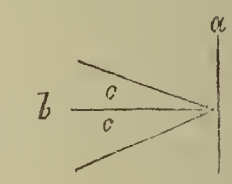
But before going farther into this subject, we must notice the *agent* which produces the sensation of vision—that is *light*.

What are termed the laws of light are the following.

1. From every luminous point, rays of light proceed in all directions, thus :—



2. When rays of light encounter certain surfaces, they are reflected from them, at certain angles, between the perpendicular ray, and the surface upon which that ray falls. These are termed angles of incidence.



a.—Surface
b.—Perpendicular
c.—Angles of incidence.

3. In passing obliquely from one transparent medium into another of different density, the rays of light no longer proceed in the same straight line, but are bent or refracted.

4. The rays of light from the sun are analysable and excite in the retina the sensation of different colours; and these colours depend upon their being possessed of different degrees of refrangibility. Of the seven colours, original and compound, the most refrangible is violet, and that property diminishes in the following order :—

Violet, compound.
Indigo, ditto.
Blue, original.
Green, compound.
Yellow, original.
Orange, compound.
Red, original.

These four laws of light are each of them respectively the foundation of a different division of the science of optics. The first law is the foundation of *optics proper*, or the theory of *direct light*. The second law is the foundation of *catoptrics*, or the theory of reflected light. The third law, the foundation of *dioptrics*, or the theory of refracted light. The fourth law is the foundation of chromatics, or the theory of colours. The third law is the most interesting to us, with reference to the present subjects of our enquiries, but the others are also of importance, and by no means to be passed over without observation. In the fourth law we are more particularly interested when we come to

ask what is *chromatic*. It will here be necessary to explain the terms in common use on this subject.

1. *Medium.*—A medium is any transparent space through which light passes, such as air, water, and glass. Even empty space may be considered to be a medium.

2. *Ray.*—A ray is the smallest portion of light which can emanate from a luminous body. It is commonly represented as a mathematical line, although in reality it is an infinitesimal pyramid.

3. *Pencil.*—A pencil is a slender portion of rays, a small bundle of rays, while a beam is merely an aggregation of these portions, a larger bundle.

4. *Diverging* rays scatter or separate from each other, as they depart from the luminous point.

5. *Converging* rays unite or approach closer to each other, according as they approach nearer to the recipient surface.

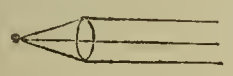
All rays are in their own nature divergent, but they are made to converge by the interposition of some substance having a reflective or refractive power.

6. *Parellel* rays are those which continue a direct course alongside of each other. There are no such rays, however, strictly speaking, but for all essential purposes we may so consider them.

7. The *radiant* point is that from which the rays proceed.

8. *Focus.*—The principal focus is the point towards which parallel rays converge by reflection or refraction.

9. The *focal* distance, or length, is the distance between the focus and the reflecting or refracting medium.



10. *Reflected* rays are thrown back from the surface upon which they fall.

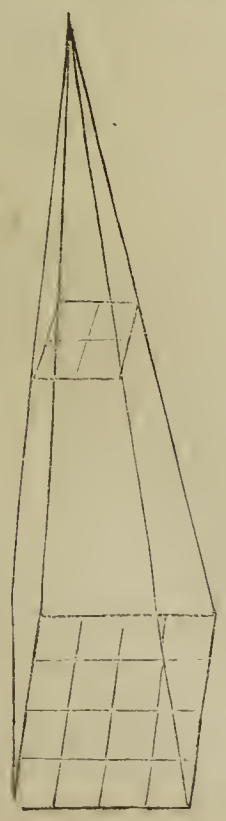
11. *Refracted* rays are not thrown back, but are changed in their direction.

12. *Angles.*—The angle of incision is that which a ray forms with the surface upon which it falls. The angle of reflection that which it forms with the surface from which it is reflected; the angle of refraction, that from which it is refracted, while the angle of deviation depends entirely upon the nature of the substance interposed.

Rectilineal progression of light and formation of images by refraction

1. We must recur to the first law of light, and call to mind that it proceeds in straight lines in all directions, and from every point of the luminous body.

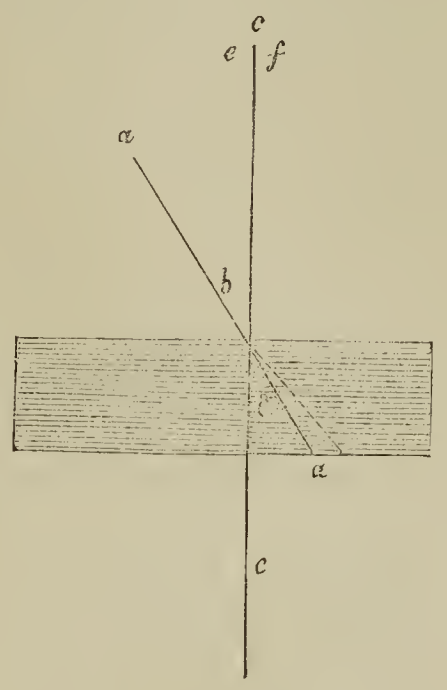
2. But these rays of direct light, as they become diffused in extent, diminish in intensity. Thus in a large room the rays from a candle reach every part of it, but at the extreme points they become more and more feeble.



Radiation is thus directly concerned in the formation of images, and converts the eye into a *camera obscura.*

It is also upon radiation that inversion of the image in the eye is produced. The size of the pupil is entirely formed by radiation. The absolute size increases in proportion according to the square of the distance of a screen interposed between a luminous point and the retina.

Rays of light in passing from a rarer into a denser medium, are bent towards the perpendicular, if they fall obliquely; but if they fall in the direction of the perpendicular their course is unchanged; there is no refraction.



The opposite of this takes place in every respect where the rays pass from a denser into a rarer medium.

The incident ray, the refracted ray, and the perpendicular, are in the same plane. The angle *a b c* is the angle of incidence; the angle *d e f* is that of refraction.

A very simple, and to the uninformed, surprising experiment, depends upon this prineiple of refraction. If a sixpenee be put into an empty teacup, and so placed as to be just a little beyond the limits of vision, and if then there be clear water poured into the cup the coin will be rendered visible by the refracting power of the water, which is greater than that of air.

And this leads me to remark that different substances have very different refractive powers. Thus a solution of salt is a more powerful refractor than pure water, oil of turpentine still more powerful than water, and oil of aniseed one of the most powerful refractors with which we are acquainted.

3. The image of a luminous body is rendered more defined by refraction through a dense medium, bounded by parallel planes.

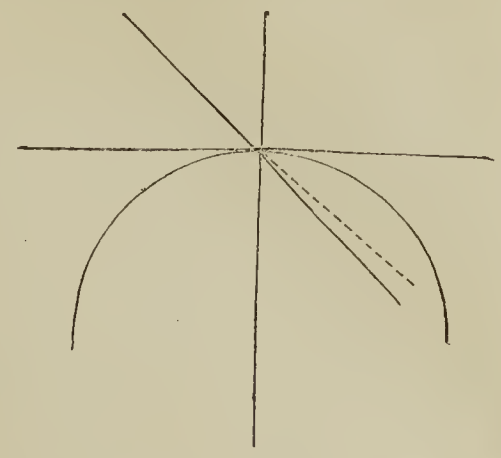
The law that transparent inflammable bodies have strong refracting powers, first led Sir Isaac Newton to the opinion that the *diamond* was an inflammable substance, an opinion which subsequent experiment has proved to be founded upon a sound induction. But it must be remarked that besides the density of the refractive substance, its form exercises great influence, particularly on the relations of the refracted rays.

4. By varying the obliquity of the refracting substance, the degree and direction of the refractive rays are varied.

5. If rays diverge from a rarer into a denser medium, the central rays fall perpendicularly, but the circumferential ones diverge.

6. Curve.—It is to be remarked that a curved surface is an infinite number of planes.

Now when a ray of light falls on any part of a curved surface of a refrangent medium, the tangent of the point of incidence is the refracting surface of the perpendicular; to the tangent that towards, or from which the ray is bent, according as the refrangent medium may be denser or rarer.

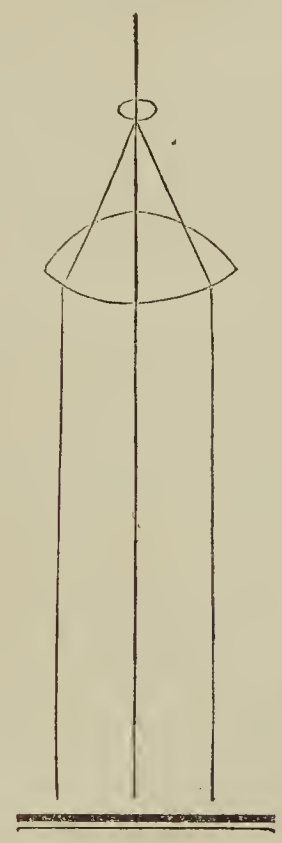


7. On the refraction of light by refrangent media, with curved surfaces, depends the reunion of divergent or parallel rays into foci, and the formation of images.

Refraction by two surfaces inclined to each other.

If parallel rays fall on the curved surfaces of refrangent media they are made to converge.

All rays equally distant from the central ray are refraeted in the same manner, and brought to one focus. The distance of the focus of the parallel rays from the principal focus, and [the lens, depends on the refractive power of the substance and degree of convexity of surfaces, the more convex the nearer. If the luminous body be in the focus of the lens, the rays will be divergent when they fall on it, and on passing through it will be so refracted as to become parallel.



CLINICAL LECTURES ON MEDICINE;

Delivered at the GREAT CHARITY HOSPITAL, Berlin, by Dr. SCHONLEIN, first Physician to the King of Prussia, founder of the Natural System of Medicine in Germany, and Professor o Pathology and Therapeutics in the University of Berlin.

Prepared from the German expressly for "The Medical Times."

LECTURE XI.

Rheumatism of the Abdominal Muscles—Inflammation of the Peritonæum, terminating in effusion—Removal of the Inflammation—Gradual disappearance of the swelling, caused by the inflammation—Recovery.

June 30th, 1841.—Henrietta Schmidt, a chandler's shop-keeper, twenty-eight years of age, was attacked a fortnight ago with acute pains in the abdomen, which at first were of an unsettled character, transplanting themselves from one locality to another; but, for some days, they have become fixed more around the navel, and have at the same time increased in intensity. With this, there was a simultaneous distension of the abdomen, which now exhibits a considerable prominency. The movement of the patient, towards

one or the other side, causes no change in the position of the tumour; the latter feels firm to the touch, but fluctuating, and is very painful on pressure: percussion here gives a rather fainter sound than in the surrounding parts. Derangement of the digestive organs had existed, inasmuch as the patient had had frequent attacks of vomiting, and the bowels were constipated at the time of her reception in the hospital; this state lasted for three days, and we were then obliged to remove it by a clyster. The malady commenced exactly at the termination of her menstrual period. The examination of the internal genitals has proved that the uterus is free from disease, and is retained in its normal position; this is deserving of notice, inasmuch as it might have been conjectured from the position of the tumour, that it depended on some uterine affection; this suspicion is removed on examination, and especially by the sound on percussion in this locality. A series of febrile symptoms have also developed themselves: the pulse is small and compressible, 80 per minute; tongue rather furred; taste vitiated; great thirst; urine throwing down a sediment. The examination, then, leads us to believe that rheumatism of the abdominal muscles was the original complaint in this instance, at least the unsettled character of the pain speaks in favour of this conjecture; the external layer of the peritonæum, and subsequently also the intestinal foid, became attacked; and, as a consequence of it, the abdomen has become enlarged and painful. The position, the form, the peculiar intestinal sound heard over the tumour, and the change exhibited in the functions of the intestines, may be adduced in favour of this inference. I believe that adhesions have already taken place in consequence of this inflammation between the surfaces of the peritonæum, and also an effusion of a purulent fluid into the intervening space. A general, as well as a local, abstraction of blood has already been instituted; the latter will have to be repeated instantly; besides this we shall cause an inunction of mercurial ointment to be made on the painful part of the abdomen, and administer an emulsion with *aqua laurocerasi*, to the patient.

July 2nd.—In this case we have, then, an inflammation of the peritonæum, in consequence of the original rheumatism of the abdominal muscles, with partial adhesion of the two layers of the peritonæum, and, perhaps, purulent effusion into the abdominal cavity. It is our task, therefore, to overcome the existing inflammation; as regards the effusion of pus, it will terminate either by re-absorption, or by evacuation through the intestines or kidneys, as you have already seen in several instances; nature will remove it, whilst we limit ourselves to the task of destroying the still existing inflammation. We yesterday instituted a topical abstraction of blood; and last night, on an increase of the inflammation and fever being apparent, we once more had recourse to general bleeding,—ordered emollient fomentations, embrocation of unguentum hydrarg., and a warm bath. The result of this treatment, up to the present hour, cannot be called successful; the only thing we have gained, consists in the fact, that the inflammation has not increased in extent; the tumour has become more soft within this boundary, but is very susceptible to pain; an application of a clyster was followed merely by one intestinal evacuation. Nausea and vomiting again took place, on which account we prescribed a saline for the patient; the fever is moderate; the extremities are certainly not warm, but far removed from that icy coldness, so frequently observed in cases of peritonitis.

July 3rd.—The mode of treatment to be adopted with regard to the patient, whom we left yesterday in a favourable state, so far, at least, as the inflammatory symptoms had become somewhat ameliorated, whilst the phenomena resulting from the effusion remain the same, was governed by one leading principle: namely—by the especial importance of removing the continued inflammation; we considered it beyond the reach of art, to effect the immediate removal of the products of the inflammation, and for the present did not pay so much attention to that point, relying upon the aid of nature, which we had witnessed in so many similar cases. The favourable state of the patient, which existed yesterday morning, gave way to a sudden exacerbation towards evening; this, indeed, forms the characteristic feature of these diseases, and requires the immediate application of medical skill so soon as this paroxysm commences. Pain, proceeding from the old point, again suddenly took place; great susceptibility and tension of the tumour; nausea. A general, as well as a local, abstraction of blood, and fomentations, soon removed this increase of inflammation; but a remarkable phenomenon exhibited itself on this occasion, regarding the nature of which we could have had no doubt, if an attack of shivering had simultaneously existed: an urgent inclination to intestinal and urinal evacuations took place; a small quantity of urine with a mucous, suspicious, sediment was discharged, followed by a feculent intestinal evacuation. To-day we find the patient again in a very tolerable state: the tumour is more soft and doughy to the touch, less susceptible, but still giving a faint intestinal sound; the fever is also lessened; skin and tongue moist. But it remains to be seen, whether a new relapse may not take place in the evening; and whether pus will not then be evacuated, indications of which exhibited themselves yesterday, when the urgency to stools and urinary evacuations existed. We shall continue the same treatment, adding only *aqua laurocerasi*, to the already prescribed saline.

July 5th.—The sediment in the urine, which, according to external appearance, seemed to be a purulent one, did not contain pus, as we supposed; for, on a more minute examination, we found only a few mucous globules and a quantity of urinal salts. The state of the patient is now more satisfactory; the tumour is diminished, still rather painful, but less so than before; more soft and flexible; the functional disturbances of the intestines have disappeared; some feculent stools have taken place; nausea and vomiting are certainly still experienced, but these symptoms may be attributed to the effect of the mercury, and cannot surprise us, when we consider that we have caused nearly ℥iiss. of grey mercurial ointment to be rubbed into the abdomen. All the symptoms of salivation are likewise existing in consequence of it. I am also inclined to attribute to this, the frequency of the pulse, which is still excessive (ninety per minute), and does not seem to be the consequence of inflammation, but rather of mercurial irritation, especially as the skin has become moist, and as the urine throws down a copious sediment.

Prescription.—Cleanse the mouth with a solution of borax. Continue the saline with laurel water.

July 7th.—No injurious consequences have taken place, although the patient has eaten cherries without our knowledge, swallowing the stones at the same time, which were found in the intestinal evacuations. I have frequently witnessed the most injurious consequences from swallowing cherry stones. Abdominal inflammations, combined with the most obstinate costiveness, frequently develop themselves after so doing, or ulcerations form in the intestinal mucous membrane, succeeded by marasmus; or, as I have also witnessed, a stone gets into the *processus vermicularis*, where it remains, and causes inflammation and gangrene, followed by fatal results.

July 9th.—The irritation of the vascular system is but slight; pulse scarcely eighty per minute; and there are no other febrile symptoms. With regard to the local affection, the tumour has very much diminished in size; the sound on percussion also commences to be clearer; but the patient, during the last two days, has again manifested a continued urgent inclination to intestinal evacuations, whilst the urgency to urinary discharge has entirely disappeared. I have already stated that we may entertain hopes of the morbid product being removed from the system by some such process; indeed we, at one time, thought that the urine contained pus, but this idea was not confirmed by microscopical investigation.

On making an examination by the rectum, we feel a tumour on the right side, which compresses the gut, and thereby produces a continual urgency to stools. It remains to be seen whether the tumour will discharge itself into the rectum; we shall take good care, however, not to hasten the discharge by perforation. The stools hitherto have been purely feculent.

July 10th.—The abdominal tumour is not only invisible to the eye, but also offers a considerable diminution on examining the walls of the abdomen; the sound on percussion has become clearer. The urgency to go to stool has considerably decreased; the tumour, examining it from the rectum, appears to be much smaller; some days ago it could still be felt from the vagina, but it cannot be felt from there to-day. This is certainly all very favourable; but the disease can not yet be considered at an end, for the tumour is still perceptible; the consequence of its pressure on the rectum has not yet disappeared; besides this, the circulation still maintains an excited state (pulse ninety-six per minute).—All this shows that the morbid product, the consequence of the inflammation, has not yet been entirely removed. There are now two possibilities before us: 1stly, the discharge of the tumour into the rectum, and the removal of its contents by the stools; or, 2ndly, the discharge of it internally into the abdomen, and peritonitis, as a consequence, rapidly developing itself. These are cases which frequently place the medical man in a most disagreeable dilemma. Be cautious in pronouncing a precipitate prognosis in such instances, so long as traces of the morbid product are still existing. It is also possible that a new increase of the inflammation may take place, without a removal of the effused matter, which again keeps the physician in suspense; and which, if he has not been cautious in pronouncing his opinion, may bring him into bad repute among his patients. We shall, therefore, continue a moderately antiphlogistic treatment, principally consisting in limited diet and rest.

July 16th.—The malady progresses slowly, but with tolerable certainty, towards a satisfactory termination. The local phenomena are now of particular importance. The patient no longer complains of pain; the tumour has entirely disappeared; no trace of it can be perceived on applying the hand; the sound on percussion now consists in a clear, sonorous, intestinal sound; no "tumescency" is to be felt through the vagina; the tumour in the rectum has very nearly disappeared, and, in consequence, we have no further urgency to stools; the rheumatic sediment continues in the urine; perspiration is still abundant; the pulse has become more calm; there is, however, some vascular excitement still perceptible towards evening. We must not consider the patient as perfectly convalescent, so long as this critical secretion of the urine and skin is still going on, and while traces of the tumour can still be felt in the rectum.

The patient remained in the hospital until the commencement of the ensuing month, when she left it perfectly cured.

PARISIAN INTELLIGENCE.

(FROM OUR OWN CORRESPONDENT.)

Paris, April 25, 1844.

On Diseases of the Eyes, by Professor Velpeau. In the preceding lecture (see *Medical Times*, No. 240) I described the characteristic signs of blepharitis of the edges of the eye-lids; to day I purpose studying those that affect the mucous apparatus. They may be divided into three species.

1°. *Blepharitis Mucosa.*—This variety is, properly speaking, the simple diffused inflammation of the conjunctiva, and affects only the mucous membrane. If we wished to compare it with the inflammation of any other part of the body, we should say it presented some analogy with that of the throat; for in both cases, the phlegmasia attacks the mucous membrane only without tumefaction, or extends itself to the subjacent tissues, and then it causes the parts to swell more or less, to suppurate, &c.—*Symptoms.* The internal surface of the lid presents an abnormal redness, which increases in intensity as you examine it further from the edge of the lid; in other words, as you approach nearer the spot where the conjunctiva is reflected from the palpebræ on the globe of the eye. The

redness is sometimes slightly violet, arborescent, and evidently produced by a multitude of small capillary vessels, crossing one another in various directions. This is principally visible near the edge of the lid where the vessels are less numerous; whereas, further in, the red tint is more uniform; little or no swelling, in the generality of cases; heat; pain; moderate degree of itching; exudation (this is one of its pathognomonic characters) of a liquid, at first serous, then mucous, and finally sero-purulent, when the disease is very intense. Almost always, the ocular conjunctiva becomes affected, but vision is no-wise impeded; neither is there any considerable degree of epiphora or photophobia, and the eye may be examined without producing the flow of tears, characteristic of another affection, which I purpose describing on a future occasion. This is easily conceived, as phlegmasia of the palpebral conjunctiva could have no influence on the functions of the lachrymal organs, or of the retina. Therefore, when, on examining a patient, you remark the arborescent redness just signalized, with serous, mucous, or sero-purulent secretion without epiphora or photophobia, the disease is a *blepharitis mucosa.*

But there is a circumstance with which you must be acquainted. It has been affirmed that the under lid is more frequently the seat of this species of blepharitis than the upper; but this is not the case, the latter being affected quite as often as the former; what gave rise to this opinion, is the difficulty experienced in diagnosticating it, and consequently it exists very often without being discovered. It would appear, *à priori*, that the internal surface of the upper lid, from its size, and elasticity, could be more easily examined than the under, which is shorter, and more resistant; but it can soon be proved that this opinion is erroneous. The former is attached at a little distance from the upper edge of the orbit, and covers a considerable portion of the globe of the eye: so as to form, interiorly, a concave surface—a disposition, which prevents its being easily everted. Now, as this affection is principally to be met with in the oculo-palpebral groove, and in order to discover it the eversion of the lid must be considerable, a circumstance rendered difficult by the conformation of the parts, it is not astonishing that in the generality of cases it has escaped notice. Its prognosis presents little or no danger when it is alone, but it ought not to be neglected, as it is frequently complicated with other species. When free of complication, it generally terminates by resolution after six, eight, or ten days, under a very simple treatment, which will be mentioned when I speak of the treatment of blepharitis in general.

Blepharitis Granulosa.—Two cases are now in my wards; one complicated with keratitis and blepharitis glandulosa, on the left eye of a woman; —the other a man who came to the hospital for a conjunctivitis granulosa, and is now affected with blepharitis granulosa only. *Symptoms:* redness of the palpebral conjunctiva, covering the whole of its surface, not arborescent (a symptom which distinguishes it from the preceding); the tint is uniform, forming a layer perfectly homogeneous, varying in thickness and colour; but the principal and characteristic sign is its granular aspect —its surface is covered, as it were with sand; in short the conjunctiva offers the appearance of a piece of shagreen. These are the symptoms by which it may be distinguished when recent; but when it has lasted some time, the palpebral conjunctiva presents several folds more or less apparent, on whose convexity granulations, similar to those already described as affecting primitively the whole surface of the mucous membrane, are to be found. This variety is accompanied by heat; pain; smart itching; sensation of a foreign body in the eye, as if sand were under the lids, which excites the patient to rub his eye constantly; secretion more abundant, and becomes purulent much earlier, than in the preceding; lids frequently swoln, and the skin presents a peculiar dry aspect; when it is complicated with a thickening of the conjunctiva, the swoln state of the palpebræ augments, because the resistence offered by the globe of the eye to the abnormal folds of the conjunctiva prevents their extending inwards, and the lids in these cases appear infiltrated. As in the former, the sight is not impaired; there is neither photophobia nor epiphora. In order to ascertain the exact condition of the affected parts, the lids must be completely everted, and the patient made to look up or down, according as it is the upper or under lid you examine. Here, then, are two kinds of inflammation, which *apparently* have the same seat, and to a certain degree, the same symptoms; and which, notwithstanding, ought never to be confounded. I say *apparently* the same seat, as, in all probability, the anatomical elements affected by the phlegmasia are not the same in both; and were it necessary to give a proof, we would find it in their mode of development, and termination; for whilst the former yields easily to the simplest treatment, the latter resists months, and even years, to the most appropriate and most energetic measures. But what difference exists in these phlegmasiæ, with respect to their anatomical seat? I candidly confess that I am unable to say precisely. Are the small granulations peculiar organs? This is not at all impossible. I might have admitted, for the second species, the inflammation of the follicles; but, as yet, no anatomist has been able to prove their existence, beyond a doubt, even with the microscope; it would, therefore, be rather too venturesome to admit the possibility of inflammation of an organ, or organs, which do not exist. Villosities, papillæ, are said to be met with; but it must be confessed, all these elements, follicles, villosities, papillæ, are but very imperfectly known, and, consequently, badly defined. Modern researches, instead of confirming those made previously, which seemed to have removed all doubts on this question, have, on the contrary, rendered it as perplexing, and as intricate as ever. Some authors have gone even so far as to say, that glands do not exist in the intestines; and that, in certain organs in which papillæ were supposed to be met with, this is not the case, there being only villosities; some anatomists admit the presence of villosities, papillæ, and glands; others, that there are only villosities grouped together; but in my opinion, they are organs of a peculiar nature, containing an amorphous matter which, in all probability, is not without its utility. Let it, however, be what it may, and however exact these different opinions are, what is positive is, that we are obliged to endeavour to ascertain the precise seat of the disease; and in saying that it invades certain small bodies which form a portion of the mucous membrane, I confess frankly that I am totally ignorant as to the nature of these bodies. All that I will affirm is, that if my supposition proves to be correct, and that the seat of the disease is where I state it, *blepharitis granulosa* may be defined as a phlegmasia of the papillæ of the conjunctiva.

It developes itself under three different forms — 1° Acute—2° Chronic—3° Consecutive to another inflammation. This last is not unfrequent; for instance, it generally follows epidemic ophthalmia, such as is seen in Egypt; that which occurred long ago in Belgium, and on which numerous memoirs were written: finally after those observed in Paris. Very frequently it offers exacerbations, and sometimes is converted into ophthalmia purulenta, in which case it is far more dangerous.

Blepharitis glandulosa.—This species, the most frequent, affects the *glandulæ meibomianæ*. A case is now at No. 49 men's ward; unfortunately the patient is affected with a keratitis, and iritis complicated with syphilitic symptoms, rendering the diagnosis very difficult.—*Symptoms:*—Redness of the internal surface of the lid, extending, like a ribband, from one angle to the other, and diminishing in intensity as the distance from the edge increases; does not form a relievo on the conjunctiva; is not arborescent; has not the white spots to be met with in *blepharitis mucosa;* is convex posteriorly, and follows exactly the form of the tarsus. It may be distinguished from the first, because the arborescent redness, increasing as it proceeds onwards, does not exist; and from the second, because the redness is not uniform, and there are no granulations. There is a disagreeable sensation, as if sand were under the lid, and itching pain on its edge. All these different shades may be difficult to establish, and, indeed, can only be done by a careful and attentive examination.—It may be acute or chronic, primary or secondary, affect the whole or only part of the mucous membrane. The acute form may present two varieties—1° The acute form properly so called—2° That which may be denominated *diphtheric.* The first is characterized by a slight swelling of the edge of the lid, especially posteriorly, where the orifices of the glandulæ Meibomiæ are to be found; the second, by a white or greyish band on the edge itself, not on the conjunctiva, formed by a certain number of small spangles, about half a line in breadth, regular or irregular, in short, presents all the pathognomonic signs of diphtheritis. This variety is with difficulty got rid of, and is deserving of the serious attention of practitioners, especially as it is of very frequent occurrence. Sometimes it persists for years, and then it gives rise to little or no pain, but almost all the remedies employed fail in curing it; at others, the glands swell, the lids are destroyed, the square edge disappears, and very often they become fungous. *To resume:* the different species of blepharitis may be divided into—1° *blepharitis furfuracea,* characterised by the presence of small scales and an itching.—2° *blepharitis follliculosa,* by small pimples at the root of the lashes, these last united in clusters, scabs.—3° *blepharitis exulcerosa,* excoriations of the edges of the lids, burning heat.—4° *blepharitis mucosa,* by the arborescent redness which increases as it proceeds inwards.—5° *blepharitis granulosa,* by the uniformity and equality of the redness, and by small granulations.—6° *blepharitis glandulosa,* by a redness near the edge of the lid, and sometimes by a greyish band in the same spot.

New method of putting a stop to the flow of blood from leech-bites.—Dr. Berthold, professor at the University of Gottingen, proposes the following method, which may be useful, in children especially, in whom the blood is sometimes stopped with considerable difficulty. According to the author it never fails, and its action is instantaneous. Take a bit of caoutchouc, about a line in thickness, and four lines in length; melt one of its surfaces by the heat of a candle; when cool, equalize it by rubbing it gently with a piece of thin paper; apply it on the spot where the leech had fixed itself, having previously wiped the part perfectly dry, and finally keep it motionless by means of a band or a bit of sticking plaister. This little dressing must not be touched before twelve or even twenty-four hours have elapsed.

Coffee, a remedy.—The last number of the *Annales de Therapeutique*, contains an article from the pen of Dr. Rognetta, showing how erroneous are the ideas generally received as to the mode in which this substance acts when taken internally. The first fact, says the author, that attracts our attention is the development of the aroma by torrefaction; a fixed oil being burnt is changed into an essential one, whence the ether, which may be isolated and even seen in the ordinary infusion under the form of small drops of oil. Berzelius stated that it is the caffeic acid which produces the aroma, and this is very probable, for the acid obtained from unburnt coffee has the aromatic smell it presents when torrefied. Boiling water dissolves all its extractive properties and all the aroma; alcohol somewhat less; consequently as a remedy the former is preferable. It is doubtful whether, when administered in powder, it yields to the economy all its absorbable elements; but as we daily witness the fact that mustard seeds when swallowed are returned, completely deprived of their aroma and essential oil, it is probable that the digestive organs have the means of performing more than we can obtain by boiling water. Several curious experiments remain to be performed, in order to ascertain the modifications powdered coffee, burnt or unburnt, undergoes in the digestive organs. Chemical analysis has proved that the latter contains a fixed oil analogous to tallow or butter of cacao; and that it differs from the former from its elements being less soluble; it is, notwithstanding, impossible to state precisely what modifications are produced in its composition by torrefaction. Burnt until it acquires a yellowish tint, it loses

twelve and one-third per cent. of its weight; to a brown or mahogany colour eighteen per cent.; and to a black twenty-three and three-quarters per cent. Carried to this last degree it loses all its aroma, and retains only its empyreumatic acrid qualities, and is of a bitter and disagreeable taste. Torrefaction ought therefore never to pass the second degree, and the burnt grain ought to be cooled rapidly by spreading it over a *large surface*. The opinion generally received is that the dynamic action of coffee is stimulant, tonic, and exciting. Messrs. Merat and Delens, in their work on Materia Medica, state that coffee acts principally on the brain and stomach; that it aggravates gout, consequently that persons subject to this disease ought never to take it. Galt'er goes still further, and assimilates it to cinnamon, alcohol, and other diffusible stimulants. This opinion is repeated in all the dictionaries recently published, with one exception only, in which the author (M. Cottereau) adopts the opinion of the Italian school, and considers it as calming the action of the heart, and circulation. But coffee in its action on the human body produces two effects very different from each other, and yet worthy of remark; first, that which is apparent to all around, and which by non-professional persons is supposed to be its principal and only mode of action--2° That which is dynamic, organic, vital, and appreciable only to the physiologist. The latter alone is really useful in a therapeutical point of view, and yet has been overlooked by almost every practitioner, who, seeing merely the former, affirm that it is an excitant. But when is it that coffee appears to be a stimulant? Principally after a hearty meal, when one has made rather freer with the bottle than usual: and were it really from its stimulating properties that it acts, how comes it that brandy, or alcohol, taken in similar cases, do not produce similar effects? —When an infusion of coffee (it ought not to be taken tepid, in order to avoid the effect produced by the exciting properties of the caloric) is given in small doses, in half a glass of sugar and water, frequently repeated, or in a small enema (ʒiv) morning and evening, the pulse, instead of being stronger and more frequent, becomes fuller and softer, indicating evidently a hyposthenia of the vascular system; the renal secretion is augmented; the skin becomes moist and supple; expectoration is easier; when deranged, the functions of the intestinal canal are re-established, and the cerebral circulation and functions are performed with more ease and facility. The following fact is sufficient to prove the hyposthenisating qualities of the infusion of coffee. When a cup is taken on an empty stomach, we are affected with a general sense of weariness, which increases gradually; the lower limbs tremble, and are unable to support the frame; the hands and arms hang listless by the side of the body; pulse weak; apathy; urine increased in quantity; uneasiness; agitation. If more be taken, the hyposthenia may augment, so as to constitute a true asthenic intoxication: a fact proved by the experiments performed by Colet, (Vide *Lond. Med. Gaz.* 1833) and by Zimmermann on himself. Coffee, therefore, causes insomnia, not by the excitation it produces, but by giving rise on the contrary to a sort of vacuum in the vascular system of the brain, by which this organ is placed in an abnormal condition; and it is by diminishing the flow of blood to the brain, that a cup of coffee in cases of insomnia, owing to a congestion of that organ, produces sleep. These facts established, what are the diseases in which an infusion of coffee may be administered with advantage. 1° *in hyperæmia*, especially of very vascular organs, such as the brain, and in inflammation of the large vessels. 2° *in certain cephalic affections*, cephalalgia, megrim, congestions, coma, apoplexy, the infusion must be given *cold* in small doses. It may likewise be given as a tisanne in meningitis, insanity, and in all cases of wounds of the head.—3° *In chronic affections of the eyes.* Choroiditis, amaurosis, ophthalmia externa, *intus et extra.*—4° *Diseases of the chest and abdomen.* M. Mojon has given it, after bleeding, in whey, in pneumonia, enteritis, peritonitis, &c; it is likewise useful in asthma, nephritis caused by the presence of a calculus, bronchitis, amenorrhœa, dysmenorrhœa. In these, probably, it is useful in diminishing the inflammatory element. A remark was made by Linnœus, and confirmed by subsequent observers, that coffee, taken in large and long continued doses, produces anaphrodisia, which assimilates it to camphor, and is far from establishing its supposed stimulating properties. 5° Finally it has been given with advantage in hysteria, chlorosis, intermittent fever, paralysis, scorbutus, visceral obstructions, delirium tremens, rheumatismus, ulcerations produced by a long decubitus, intoxication, poisoning by opium, and even in podagra and leucorrhœa.

Academy of Sciences—Sitting of the 29th April—Baron C. Dupin in the Chair.—Dr. Deleau addressed a letter with his treatise on disease of the middle ear, to shew by the observations therein published that, contrary to the opinion expressed by Dr. Bonafonds, gaseous bodies may be advantageously employed as dilatators of the Eustachian tube.

Professor Dumas made a verbal report on a work of M. Gehradt, professor at the Faculty of Sciences, Montpellier, being the first part of his *precis de Chimie Organique.* This author, said the Professor, after having translated into French Liebig's treatise on Chemistry, a task which he accomplished in a masterly manner, became convinced of the insufficiency of the theory of organic radicals adopted by Liebig as the basis of his treatise. He was consequently led to compose a work on organic chemistry, in which he employs equivalents of his own invention, which are worthy of note, and though it may be doubted that the method will be adopted by chemists, still it cannot fail to attract attention. He endeavours to class organic substances into families, shews great penetration in discussing the different analyses and formulas hitherto received, corrects many of them, and the formulas he proposes are much more simple than those for which they are substituted. This work expresses the opinion of modern French authors on this subject, and will contribute to make known the ideas which I have long since sought to propagate.

On the Coloration of the Chyle by Madder, (rubia tinctorum) by Dr. G. Bonisson, Professor at the Faculty of Medicine, Montpellier.—Some physiologists, with Haller, Hunter, Lister, Blumenbach, Ficinus, &c., affirm that a coloured substance introduced into the stomach with the food, passes into the chyle by absorption, and communicates its colour to that liquid; whilst others, with Messrs. Magendie, Tiedemann, Kruner, Lawrence, and Coates, state that this did not take place in their experiments. This could only be from the manner in which their researches were performed, and the following experiments will prove the truth of this assertion. 1° Two rabbits after having been deprived of food for several days, were fed with bran, to which some madder was added, and after having been allowed to eat it for three hours, were killed during their digestion. The mesenteric lymphatics and their ganglions, and the ductus thoracicus, were filled with chyle of a slight opaline colour, but *no traces of the colouring matter of the madder.* The serum of the blood evidently contained this substance. 2° Two rabbits were fed with the same substance, and were killed the day after; *nothing in the chyle*; but the serum of the blood, and certain excretions, especially the urine, were coloured by this substance. 3° Two rabbits were fed for ten days on the same, after which they were deprived of food for two days, and then killed. *The colouring matter of the madder existed in most liquids, especially in the lymph contained in the thoracic duct.* 4° Two rabbits were fed with the same, the one for ten, the other fifteen days, and killed during digestion. In both the chyle in the thoracic duct presented evident proofs of the presence of madder, though less than the lymph in the preceding; the other liquids and bones were red. From these experiments it may be concluded, that the colouring matter of the rubia tinctorum is absorbed by the venous system, and consequently does not colour the chyle in a direct manner; that when this food is given a sufficient length of time, so as to permit its being diffused through all the organism, the lymph contains it as well as other liquids, and transmits it to the chyle in mixing with it; that this coloration is subservient to the length of time the colouring matter has been taken as food.

New Apparatus for Fractures.—M. Baudens, chief surgeon of the Hospital Val de Grace, addressed a memoir containing the description: 1° of an apparatus for fractures of the neck and body of the femur. It is formed of a long and narrow box, without a cover, and whose bottom and extremity present several openings. A bandage, rendered solid by a thick coating of a solution of gum arabic, is placed on the foot, leg, and lower part of the thigh, to which a longitudinal band is fixed, so as to perform extension. Counter extension is performed by means of a circular band of leather, which takes its fulcrum on the branch of the os pubis. To the outside of this species of ring is attached a band, which, crossing the box, passes underneath, and proceeding downwards is attached to the bands by which extension is performed. Coaptation is obtained by means of bands, whose centre is placed on the part of the limb on which the surgeon wishes to act, and whose extremeties are attached to the sides of the box. The limb must be slightly bent. —2° *An apparatus for the transverse fractures of the patella.* As in the preceding, this box is open superiorly, and likewise is shorter, for it does not descend below the middle of the leg, or reach higher than the centre of the thigh. The limb must be placed on an inclined plane, and the heel elevated. To unite the two fragments, it is sufficient to place the centre of a band above the patella, and another below; to pass their extremities in openings made in the sides of the box, and by drawing them, tight coaptation is obtained. This method is advantageous, inasmuch as it exercises no circular compression, and the circulation is not impeded in the popliteal space.

On Rachidian Myotomy.—Dr. J. Guérin read a memoir in reply to the late attacks made against rachidian myotomy. "Among the various reproaches to which this method and myself, says the author, have been of late the object, is a memoir presented on the 15th April, and a letter read in the previous sitting. The author of the former affirms, that on twenty-four patients treated by me, not one was cured, and therefore concludes that rachidian myotomy is of no utility; and then proceeds to argue, that the cases in which no amelioration took place were complete failures, and productive of serious accidents; that those in which there was an amelioration were unsuccessful; and that those cured were only ameliorated." In answer, Dr. Guérin asserts that the letter writer was formerly employed at the Muette, as translator and teacher of foreign languages, and was never employed in a medical capacity in the establishment; consequently, he could not take any notes on the state of the patients—an office which Dr. Guérin's colleague and friend, Dr. Kuhn, had filled for the last eight years. Such an attack would be astonishing had not the author declared, on quitting the Muette, that he would be revenged. "In conclusion," says Dr. Guérin, "may I be permitted to mention, that in 1837, on the report of an Academic Commission, and after mature deliberation, the first prize of surgery was awarded to me for my researches on the deformities of the spine; and that at the present moment a commission, chosen among the members of the Academy of Sciences and Academy of Medicine, is occupied in examining the various methods adopted by me—rachidian myotomy included,—and its report will clear up all doubts on this subject."

Dr. Jobert de Lamballe read a memoir on the anatomy of the electric organ of the torpedo.

Dr. Robt. Remak addressed the copy of a letter written by him to Professor Tan Vander Flowen, M. D., of Leyden, on the development of the chick in the egg.

Academy of Medicine. Sitting of the 30th April.—Inauguration of the New Assembly Room.—M. Caventou, V. P., after announcing that M. Ferras was prevented from presiding, as he purposed, from illness, requested MM. P. Dubois and Baffos to call on him, in the name of the Academy, expressing their regret, with hopes of his speedy recovery.

M. Bousquet then read a panegyric on Dou-

ble, and M. Pariset, one on Bourdois de la Motte. (Extracts from this last, from the kindness of the author, will shortly be published in the *Medical Times.*)

GARLAND DE BEAUMONT, D.M.P., B.L., & S., &c.
Honorary Physician to the Spanish Embassy.

DISTEMPER AMONGST CATTLE.

By Dr. ARMSTRONG, Moate, Westmeath.

During the past week, information has reached me from various quarters, that the epizootic which raged with such fearful destruction in England and Ireland for the last two years, still continues its ravages, and has made its appearance in many districts, where until lately it has been unknown. I am therefore induced to submit to you the following description of the symptoms, nature of the disease, and the mode of treatment I have prescribed.

Symptom 1st. The animal droops the head; there is slight running from the mouth; it appears dull; feeds but seldom; separates from the herd, and seeks shelter. 2nd, The appetite is further diminished. If a milch cow, the milk is scanty or vitiated in quality, and a slight cough may be noticed. 3rd. Total loss of appetite. The respiration becomes short, hurried, and difficult. The cough is hard and short, frequently dry, and suppressed. The animal gathers herself up, and seems to suffer much torture during the exertion of coughing; the action of the heart is violent and tumultuous; the expired air is hot and moist; the hide is dry, and generally sticks closely to the ribs; pressure over the region of the liver and kidneys causes the animal to yield.—4th. The respiration (which appears to be now chiefly carried on by the diaphragm or midriff, and abdominal muscles) becomes still more rapid; an opaque film covers the eyes, which appear starting from their sockets. The diaphragm sometimes acts convulsively, when the animal catches her breath, starts, and gasps, as if from a stab; the body swells, and acquires a doughy feel; the soft parts pit on pressure; the breath, during all the foregoing stages disagreeable, now becomes horribly offensive; the stench from the excretions is insupportable. Yet the animal may exist in this horrible state, (almost deprived of instinct, but obstinately struggling against every description of nourishment) a seeming solecism, a living mass of putrefaction. The pulse, according to the severity of the disease, ranges from 43 to 100 strokes in a minute. It is full, hard, wiry, and labours as if under strong pressure, up to the third stage. In the fourth stage, it is generally small, but rapid, yet vibrates seldom, and but little under the fingers. The expectorated matter in the early stages is scanty and mucous; in the latter viscid, tenacious, streaked with blood; sometimes a sort of bloody purulent matter. In *post-mortem* examinations, I have found the lungs congested, dark coloured, swollen, and breaking readily under the pressure of the fingers. The liver frequently enlarged (to an extent that would be supposed scarcely possible), its entire surface of a dark greenish colour; on making an incision into it a quantity of dark coloured, offensive, and fluid blood escapes, as in animals killed by the electric fluid. The tissues of this organ are so softened, and the vital cohesion has evidently been so much destroyed, that the viscus assumes the appearance of a dark, friable, and pulpy mass, which breaks on being handled. The heart presents all the appearance of deeply seated and violent inflammation. The ventricles of the brain I have frequently found filled with purulent matter, and the enclosing parts bearing all the evidence of inflammation. By professional men, this disease has been termed epizootic, the most correct name certainly, and as such I adopt it, though by no means so explicit to the generality as "epidemic;" some have asserted it to be endemic. However, I will not enter at present into those matters, but proceed to a more material subject, the nature of the disease." An extreme diversity of opinion exists amongst many of my medical friends, on this subject, some asserting it to be inflammation of the heart, some considering the lungs alone to be affected, others maintaining the liver to be the great seat of the disease. The general symptoms are those of inflammation of any of these parts. The anatomical appearances indicate inflammation in different degrees of all these organs. I consider the primary impression to be made on the mucous membrane of the throat, whence it passes along the bronchial membrane (or windpipe) to the substance of the lungs, which, owing to causes that will be explained, are predisposed to inflammation, which generally takes place in a violent manner; when owing to the imperfect æration of the blood, the heart, liver, and brain, are subsequently attacked. The secretions are increased by the inflammation, at first. The excretions are diminished; their retention adds fuel to fire; parts already in a state of inflammation become more excited by the obstruction of those functions, designed by nature to remove injurious and useless matter from the system. Unless the balance be speedily restored, the very violence of the disease in the beginning so exhausts the nervous energy, and diminishes the vital cohesion of the affected organs, and changes their secretions, that the distant parts, previously unaffected, become attacked in a like manner, when the disease assumes a malignant or asthenic type, and the animal speedily shows the horrible suffering, which I have pointed out in the fourth stage. When we reflect on the activity of the perspiratory organs in horned cattle, organs in them vastly more active than in man, then on the obstruction (in any great degree) of their functions, we shall not be surprised at the sudden congestion of the internal parts. And when we consider that this very obstruction, by driving the blood in large and unusual quantities to the central parts, gives rise to that predisposition to inflammation of the lungs to which I have alluded above, we can understand the effect of this obstruction, the consequent congestion of the respiratory organs. Thus inflammation, the vitiation of the blood, the necessary implication of other parts, always exist in a climate so variable as ours. Cattle when exposed to the night air take little exercise, and necessarily sweat less, but the unceasing loss of animal heat, owing to the continual impression of cold which congests the interior parts, diminishes those conservative powers of the system which in health enable the organs to resist injurious impressions. In favour of this, I have known cattle but slightly affected one day to be violently attaeked the next, after the night's exposure to a chilling atmosphere. House-fed cattle seldom take this disease; they sometimes do, however: and in some instances, where I had an opportunity of investigating the matter, I found it to be owing to the irritating effects of a vitiated atmosphere, the result of bad ventilation, by which cattle respired again and again the same vapour, its irritating qualities becoming increased every hour by the exhalations from the excretions. The anatomical appearances given above will be seldom observed sooner than the third stage; but I have known cattle to die in the second, without exhibiting any severe symptoms of disease. In the fourth stage, dissection was out of the question, every tissue and organ running into a putrefactive mass on the slightest pressure, and the attempt in itself would be hazardous. I have known one man (whom I attended, and who recovered with great difficulty) to be attacked by a fever of the most malignant type, and his arm to be swollen, and present the appearance of "an hospital wound," from a slight cut, which he received whilst skinning a bullock that died in the fourth stage. Having, I consider, now given a faithful description of the symptoms of this disease, the appearances presented on dissection, and having described what I deem the nature of the disease, and the chief causes of it, the preventative measures necessary must strike every intelligent reader of this paper. I have heard it strenuously urged by several members of the medical profession that this disease is of the same nature, in the early stages, as influenza in the human subject, and that bleeding and antiphlogistic remedies would be injurious. This may appear very fine theory, but in practice it will be found lamentably false. The value of comparative anatomy and pathology is now so generally allowed by those best calculated to appreciate its merits, that it requires merely an allusion from me when I state that I applied myself assiduously to the investigation of the epizootic, for the purpose of elucidating disease in the human subject. I derived considerably more information than I looked for, when I began the prosecution of my enquiries, although the treatment of the disease in any but the human subject is not strictly within my province. I tried in this case the medicines which I deemed most likely to succeed, and which I have known to fail but seldom in curing the same disease in man: namely tartar-emetic, foxglove, and the cooling regimen. My success with them was very partial, and would by no means warrant me in now advising them to be tried. I have known some gentlemen, to whom the treatment of these seases belongs, to prescribe emetine, morphine, and several other alkaloids, in quantities that surprised me. The expence of such medicines is beyond the reach of the poor cattle owner, and to the wealthy they would scarcely be acceptable, as it would take the price of a middling cow, to pay for those medicines so largely administered, and by no means with a commensurate effect.

[Our correspondent then enters on the subject of treatment, but as its "sheet anchor" is a secret remedy (of his own discovering) we must content ourselves with the above portion of his interesting communication.—ED.]

ANIMALCULÆ FOUND IN THE STOMACH OF THE LEPAS ANATIFERA.—In a short paper on this subject, Mr. Hamlin Lee says, that having obtained some living specimens of the lepas anatifera (duck barnacle), he submitted a portion of the pulpy contents of the stomach to a microscopical examination, and found it to consist almost wholly of polythalamia and infusoria of the same genera and species as those which abound in the Richmond eocene deposits. So perfect is the resemblance, not only of the individual forms, but also of their allocation, that a slice of the substance obtained from the lepas was supposed, by an observer familiar with the infusorial earths, to be a collection of the fossils; the only difference in the appearance of the recent and fossil organisms consisting in some of the former, which were but partially digested, containing some colouring matter.

ON THE FORMATION OF HYDROCYANIC ACID IN THE PREPARATION OF SPIRITUS ÆTHERIS NITRICI.—M. Dalpiaz, in a communication to the *Journal de Pharmacie*, observes, that having had occasion to prepare some sweet spirits of nitre according to the London Pharmacopœia, he found that the product gave, with nitrate of silver, a floeculent white precipitate, resembling the cyanide of silver, upon which he resolved to investigate the influence which various proportions of acid and alcohol might have on this phenomenon at different degrees of temperature; for which purpose he distilled a mixture containing alcohol of spec. grav. 0.848, 360 grammes; distilled water 180; nitric acid of spec. grav. 1.35. The products were received separately in five different proportions, all of which afforded a precipitate with nitrate of silver, which weighed 0.65 grammes. A fresh mixture of alcohol of sp. gr. 0,829—100 grammes, nitric acid of sp. gr. 1.35—100 grammes was now boiled slowly in a retort, and in two minutes, without the solution of nitrate of silver, in which the products were received, presenting the least opacity; in a few moments more, when a larger quantity of the hydrocyanic acid was disengaged, the liquid became instantly thick and milky. M. Dalpiaz considers that the elevation of temperature is favourable to the production of hydrocyanic acid; and observes that he seldom or ever succeeded in detecting hydrocyanic acid in the nitrous acid of commerce, but always found in it a large amount of formic acid. Similar experiments have been performed by M. Bernard de Rosue and Chatier, who found hydrocyanic acid produced during the reaction of nitric acid on fatty bodies. The formation of hydrocyanic acid during the reaction of nitric acid on certain organic substances, is not new. In 1839, M. Gauthier de Claubry satisfactorily proved the presence of hydrocyanic acid in the alcohol, obtained in the preparation of the fulminates. M. Sobrero and M. Thenard have also shown that it is produced when nitric acid is distilled with volatile oils, resins, and by the action of nitric acid on sugar, &c

NOTICE TO CORRESPONDENTS.

In addition to the papers already promised us by distingnished contributors, we have the pleasure of announcing others from the pens of Dr. Hodgkin and Dr. Holt Yates. In an early number we shall be enabled to lay before the public Dr. Hodgkin's views on Medical Reform; as, also, a valuable paper by Dr. Muspratt, of Giessen, containing original researches on the Sulphites, a paper to which Professor Liebig has awarded the highest commendation,

Dr. Dickson's *letter appears to us to have been written in haste. The question of bleeding, or no bleeding, is older than Dr. Dickson, or we much mistake his age; and, even if he have patented the question as his own invention, such a topic may surely be discussed without injuring his modesty by the unnecessary obtrusion of his name before the public.* Great *discoverers—out of a moment of impetuosity—always blush to find themselves in fame. Our Journal does not exist to establish doctors, but principles—not to puff practitioners, but to register* facts; *and Dr. Dickson must allow us to say that, while our paramount rule is to do no man injustice, we may yet claim to use discretion in our distribution of gratuitous benefactions. We are not his organ, but that of the Profession he opposes; and if over* all *communications sent us, we claim editorial sovereignty, he must not be surprised if we decline letting him and his friends appropriate our columns* á la discretion. *If we were to publish one-fourth of the letters we receive, our circulation would soon approximate to that of an unfortunate and doom-smitten contemporary. A chrono-thermal journal, giving two-thirds of its space to the "successfully treated cases" of Dr. Sangrado, of such a square, would be as reasonable as the* Medical Times, *according to Dr. Dickson's wishes.*

Mr. Roberts *has sent us the copy of his petition on the working of the Anatomy Bill. It makes some extraordinary allegations, and we may probably before long have to direct attention to them.*

Dr. Clay *is thanked. He will hear from us shortly,*

Dr. Armstrong *must accept our excuses for the delay. We are so overwhelmed with communications that we find it extremely difficult to satisfy the expectations of even the less exacting of our correspondents.*

Communications have been received from Mr. Ed. Phillips, Manchester; Mr. Jenkins, Newport; Mr. James Anderson, Leicester; Mr. Braid; Dr. Muspratt, of Seaforth Hall; Adolescens, and Dr. H. Burt.

Disproof of Pretensions to Clairvoyance.—*We learn from Manchester, that Mr. Hewes, a very respectable gentleman of that town, has been recently exhibiting at its literary institution, a boy, who pretended, and with a great deal of success, the extraordinary powers of clairvoyance. On Monday last, however, Mr. Dunn, a surgeon of that town, delivered a lecture in the theatre of the Athenæum, and cleverly and by practical experiments, demonstrated that the patient, who is known as Jack, is merely a clever imposter, deceiving Mr. Hewes as much as his audiences. Mr. Dunn suffered his eyes to be covered precisely as the boy was accustomed to be treated. The utmost care was taken to exclude vision, and Mr. Dunn was yet able to achieve all that was accomplished by the boy, in the way of describing objects, &c. Mr. Hewes, convinced of his mistake, has turned over all the money he obtained from the different exhibitions of Jack, to the Literary Institutions of Manchester.*

M. C. S. *asks us whether an accoucheur, who has been engaged in advance for a midwifery case, can legally enforce his usual charge if another's services be actually substituted, when "the event comes off," supposing that the change arises merely from the whim of the engaging party. We believe not; but if the accoucheur be put to any positive loss by the breach of the engagement, we think he can recover to the amount of the damage.*

Justitia (Shrewsbury.)—*A Glasgow physician may not dispense medicine in England, except as a druggist. Either the Apothecaries' license, or a diploma of the London College of Physicians, or a medical degree from Cambridge or Oxford, is essential in England to protect a party who acts as an apothecary. We shall be happy to receive the suggested paper.*

Will Mr. W. R. Babington, late of Dublin, favour Mr. Carfrae with his address?

Mr. Parry.—*The prudence of an opinion depends so much on circumstances, which are not before us, that we must abstain from giving a decision. The great age makes cutting dangerous, but the wisdom of the second course would depend much on the size of the passage.*

Dr. Carter.—*The case must speak for itself. It is plain enough, not to need an interpreter. If the "system" be established, and prove a benefit, the world will probably not be left in ignorance of its benefactor.*

Dublin.—*The essay on the "Diagnosis of Empyema," will very shortly be noticed. Our correspondent is assured, that it is too important on its own account to be overlooked by us.*

Mr. J. M'Donough *has sent us two letters on our article on the prosecution of general practitioners of Ireland by the Irish Apothecaries' Company. Both letters exhibit the* perfervidum ingenium Hibernicorum, *and as Mr. M'D is an apothecary, his fervour by no means redounds to our self-gratulation. If our correspondent will oblige us by carefully reading our article over again, and deliberately penning his opinions, in that well-digested, forcible order of which he is evidently so capable, we promise him to receive his defence with pleasure, and publish it with promptitude. Nay, we engage ourselves to him that no severity to us shall invalidate his claim. We have received the regulations of the Apothecaries' Hall, which are tolerably satisfactory.*

Mr. Leigh.—*The notice referred to was addressed to another subscriber, enquiring about citrate of iron. We have received no reply to the query on "Bellerby's Pulmonic Tincture."*

Errata.—*In the case of "Inversion of the Uterus," (p. 102, first col.) for* "Mr. Barber," *read* "Mr. Barker."

W. C. *will find the information in our "Students' Number" for October last.*

"An Assistant."—*Hydriodate of potash, 9 grains; distilled water, 9 drachms; proof spirit, 3 drachms form the tincture. Forty drops are a dose.*

A Subscriber.—*The appointment is in the gift of the East India Directors. The payment of an Assistant-Surgeon in the army is about £30 per month. A letter to Mr. Dickenson, Deputy Secretary, East India House, would procure all the required information.*

Mr Carey *has our thanks for his obliging service.*

M.D.—*In the case of* Lipscombe *v.* Holmes, *it was decided that a Surgeon, passing himself off as a Physician, will receive the credit of being so, and must trust to the honour of his patients for payment, and this whether he be a Physician or not. Some recent decisions have introduced a doubt on this point—but the opinion given in this case by Lord Ellenborough would, we think, if argued, be recognized as the law.*

A Sufferer, *complaining of ill-treatment by a Coroner, must authenticate his letter.*

The letters of, Privatus—A Member—T. G.—Q. Q.—Investigator—*are declined. The subject has really fallen below notice.*

Declined, for want of space—Mr. King—Philo-Justitia—Mr. W. H.—Argus—A Sufferer by Briareus—A Constant Reader.

M. S.—*Our Lectures of Schönlein are the same as those about which "so pompous a cry" has been made. The only difference is, that we weekly precede our contemporary, while he weekly follows us.*

Dr. Carpenter's *second letter on mesmerism is unavoidably postponed till next week.*

K. H.—*We thank our correspondent for his kind wishes. We agree with him that such "signs of distress, so ostentatiously advertised," argue a short life for "the invalid." The expenses of the outcry must increase the weakness it is intended to remedy. The spasmodic effort is sadly perilous. But we must decline the letter.*

We are sorry we must postpone Mr. Greatwood's *letter till next week.*

The communication of "S." will be "agreeable."

Many friends *are thanked for their cheering efforts to serve us, and for the warm expressions of support they have very kindly sent us. We explain in part the progress of our Journal (and which is every day accelerating) to the* active *exertions which its readers make to advance its interests. Our friends are warm ones: they do not content themselves with silent good wishes, but reciprocate some of the enthusiasm which we devote to their service.*

We have the great gratification of announcing that NEXT WEEK we shall commence the publication of a Series of ORIGINAL PAPERS by an EMINENT PHYSIOLOGICAL CHEMIST, on The TRUTHS and FALSEHOODS of the Theories of LIEBIG, with entirely NEW VIEWS and RESEARCHES IN SOME OF THE MOST IMPORTANT DEPARTMENTS OF ORGANIC CHEMISTRY AND PHYSIOLOGY.

These Papers will have a utility for Students and Practitioners, unique in works on Organic Chemistry. The modern discoveries in this new branch of science will be, not only lucidly explained, but all their applications to Medical Practice fully unfolded.

THE MEDICAL TIMES.

SATURDAY, MAY 11, 1844.

Thus bad begins, and worse remains behind.

To an obstinate man, a false step is a serious matter. While the only sensible thing is to face about, and be "as you were," your pig-headed character must perforce go on as he commenced, never appearing to learn that the more he advances, the further wrong he travels. Nay, as if believing, that there is some peculiar felicity in his blunders, his remedy for one is sure to be another. A blind empiric in equivocal morality, *similia similibus curantur*, is his motto, and once in the concatenation of blunders, he blunders on, as some men lie, to the end of the chapter.

Our readers have each in their eye (not of course in their mirror) a party to whom all this applies with excellent precision. This over clever wife—that too promising son—this crusty old relative—that peevish patient—this overbearing guardian—that college or hall examiner, *cum multis aliis*, whom not to irritate some of their friends, we will not more distinctly name, are all, in their opinion, noosed in our editorial *lasso*. What interesting classes each! How tempting to the scalpel! But hopeless to amuse, and sure not to profit, we pass them unharmed. Our conscience forbids to prove that they are right, and how else, alas! amend an obstinacy which pines unhappy and charmless if it cease to think itself wrong?

The party occurring to *our* mental vision, while thinking of an illustration of wrong-headedness, is one whose title to the distinction, while it has a better claim to a public scrutiny, must yet for a while remain in some doubt. The Bill for regulating the medical profession is to be brought in on the 30th of this month, and it will not be till then that we shall see whether Sir James Graham is to doctor us on the homœopathic or allopathic plan; whether having done mischief in his first essay, he consistently resolves or not to prescribe fresh mischief for our relief. His friends say—we hope he is wiser than his friends think—that he will stand by his Surgical Charter. We may venture to assure him, his Charter will not return him the service. It cannot, and will not stand. We do not know a member of the College who fully approves it, and the vast majority wholly

condemn it. It contains so many constitutional, inherent defects, that it cannot be worked, and if it could, there are no men to be found who would undertake the shameful responsibility. There is hardly a member of the present council, even agreeing, as nearly all do, in political sentiments with the ministry, who have not abandoned it as utterly unmanageable and seaworthy. It is the Lord Ellenborough of the surgical company, with far fewer voices in its favor.

Sir James Graham has suffered more defeats lately in reference to parliamentary projects, than befits, in so powerful a ministry, the maintenance of his character for statesmanlike wisdom. We warn him, —it is now about the last time,—that the climax awaits him, unless in his Medical Bill he abandon his unfortunate Charter, and dares a bold policy of large improvement. The Universities and Corporations are almost certain to be *privately* or publicly opposed to him. They must oppose all change, for change cannot be to their pecuniary good. They are already arrived at the maximum of private advantage, with the minimum of public services, and alteration can individually scarcely do them a service. If to their opposition be added that of the profession—if to Sir Robert Inglis, and Colonel Sibthorpe, be added the aid of Her Majesty's Opposition, and Young England, it is easy to predict the fate of another of the Home Secretary's measures. Nothing can save the Bill, but the sympathy of the profession, and that must be bought. If they cannot carry a good bill, they can place an extinguisher on a bad one. Supposing that Sir James has not as great a fondness for defeats as for blunders, and would rather not retire from political life, badged as "the unlucky secretary," he will do wisely to grant us our terms.

All wrong is right, tried by a suitable standard, and so, if the Council of the College of Surgeons are allowed by morality, as well as by Act of Parliament, to postpone the profession to their private interest, no charge, of a very foolish or improper obstinacy, can be made against *them* because they shall persist in maintaining the *status quo*. It would doubtlessly be more generous, by *our* code of right or wrong, if they advocated changes corresponding to the changed circumstances of their corporation, if instead of adhering, with bigot tenacity, to the narrow-minded and darkaged principles of Government, which it pleased their barber-predecessors to establish—and which for them thought *barbarous*, were not so unsuited—if instead of this, we say, they adopted a system which would open a noble career of rivalry to British surgical genius, and make all the capabilities of their Institution minister, in the most effective possible form, to the progress of science;—but we fear we may not sanguinely expect any such glorious results, springing from such noble self-denial. We do not gather grapes off thistles, and we cannot demand heroism of soul and the moving inspirations of genius from a majority (we fear a *majority*) composed of quiet gentlemanly men of humble capacities, whose ideas never rise above the bread-and-butter utilities of college politics, and to whom a noble or original thought would be an event almost as startling—would we could say, as pleasing—as a knighthood or a baronetcy, and rarer than the visitation of even their annual dinner. We leave them with the hope, that the good seed we have so industriously sown in their territory, may yield its fruit in diminished selfishness, and that notwithstanding that wrong is made so profitable to them, they will adopt the good opinions of a few among their number, and teach the profession, that they really can be right, when right really is not their interest. Such teaching as this would, among other claims, have that of novelty, and would be vastly satisfactory.

A REPORT UPON SOME LATE STATEMENTS IN THERAPEUTICS.

By W. HUGHES WILLSHIRE, M.D., M.B.S., Physician to the Royal Infirmary for Children, and to the Surrey Dispensary, &c.

(For the "Medical Times.")

Continued from page 90.

Impetigo.—When occurring in infants during the first dentition, Ericksen, Plenck, Granville, Billard, Bielt, and others, doubt the propriety of interfering, and driving in the eruption suddenly. According to Erichsen, in the acute stage in older persons, all specific remedies are perfectly useless. In the more chronic stages, Erichsen has found a lotion of the sulphuret of potash, with sulphurous waters taken internally, the best mode of treatment. Cazenave and Schedal, although advising a lotion of sulphuret of potash, carbonate of potash or soda, and water, state that the preparations of sulphur have been too generally recommended, and that their indiscriminate employment, especially in the earlier stages, is often decidedly injurious. In some instances, Erichsen uses an ointment of the nitrate of mercury, or else of the peroxide; and if the itching is very tronblesome, a lotion of the oxide of zinc, with a little prussic acid, is advisable.

Rayer approves of sulphurous lotions, and ointments of the nitrate of mercury; and Dr. Thomson has seen the best results from the use of the latter. A combination of the acetate of lead and prussic acid, or the application of blisters to the part, have also been recommended. The internal remedies of late spoken well of, are: arsenic, sulphur, nitric acid, and the bichloride of mercury.

Lichen.—According to Duvergie, tepid baths are useful at the beginning; alcaline or sulphurous ones are too irritating. Vapour or Russian baths, or those containing dento-chloride of mercury, are the most efficacious. Alone, however, they are insufficient, and internal remedies must be added, and the best is the tincture of cantharides. A child seven years of age may take eight minims every evening.

Prurigo.—In P. senilis, Mr. Wilson has used iodine locally with good effect. M. Bielt relies upon the ioduret of sulphur (gr. xx-xxx + ℥j); and creosote, sulphur, and the oxide of zinc, are spoken well of by others. The author has found the nitrate of silver to be the best application in P. pudend. muliebris.

Lepra and Psoriasis.—The following things have of late been recommended by Bielt:—Warm sulphurous, or salt water baths; towards the decline an ointment of the ioduret of sulphur; by Gibert an ointment of soot and potash; and this Mr. Wilson has also recommended; by Lemarq, an ointment of naphthaline; by Plumbe, a compound of calomel, nitrate of mercury, and the acetate of lead. Internally, Bielt recommends purgatives, tincture of cantharides, and the preparations of arsenic. Cazenave and Schedal speak well of the cantharides in particular forms of these maladies. Dr. Thomson prefers the iodide of arsenic to Fowler's solution; and more recently, Donovan has introduced a combination of arsenic, iodine, and mercury. The author has very lately employed the binoxide of manganese, with temporary relief. Bielt states that he has not found the decoction of dulcamara of much use; tar and pitch have invariably failed with him; and sarsaparilla, mezereon, and white hellebore are very uncertain,

Rupia.—In the form *R. escharotica*, Dr. Stokes has advised an ointment of the *scrophularia nodosa* along with the internal administration of yeast. This affection, which occurs in debilitated, ill-fed, dirty children, the author has repeatedly treated beneficially by the chlorate of potash and quinine. A lotion of the sulphate of zinc may at the same time be employed.

Molluscum.—Gibert states the several species comprehended under this title, to be generally incurable.

Duvergie has treated the *sycosis menti* and *acne rosacea*, of Willan, by the sulphate of iron. It is used in solution, either by bathing the part affected, or by applying linen dipped in it, or by sprinkling the ulcerated parts of the *sycosis* with a mixture of charcoal and sulphate of iron. The following remarks were made by an anonymous writer, in Johnson's *Review*,—"With respect to the sulphate of iron, as an external application, we cannot believe that it possesses any curative virtues above those of the sulphate of zinc, or of the sulphate of copper, that are in daily use. The white vitriol is our favourite, and the best way of applying it is by dipping rags of soft linen in a tepid solution of the salt, and covering these with a piece of oil-skin." In some cases, a little hydrocyanic acid may be well added to the solution. The liquor potassæ, given in doses of from 15 to 20 drops, three times a-day, is an admirable remedy in many cases of inveterate skin disease. According to our observations, it is far more efficacious, and perhaps, too, less injurious than the potash in combination with iodine. It may be given in milk, beer, decoction of sarsaparilla, &c.

In a case of *elephantiasis Barbadensis* cured by Cazenave, the following plan was adopted:—The patient took a strong decoction of guiacum and mezereon, used vapour baths, rubbed the leg with ung. hyd. potassæ, and had it bandaged from the toes upwards; absolute rest in bed was also enjoined. It has been remarked that the practice adopted was extremely judicious. The guaiacum and mezereon often exert a very marked influence on the cutaneous circulation, stimulating the exhalants, and invigorating the capillary vessels; hence they are often excellent remedies in many cases of chronic skin disease, rheumatism, &c. The natives of the Sandwich islands suffer from a species of leprosy, which they call *craw-craw;* to cure it, they have recourse to the *eava-root*, a very powerful narcotic and alterative.

Lupus.—Lisfranc recommends the liquid acid proto-nitrate of mercury to be applied when the local vascular action has been subdued or moderated. The part is touched lightly with the caustic; the object is not to disorganise it wholly, but rather to change its action in some mysterious way designated, by M. Lisfranc a modification of the vitality of the tissues. It is said that the great fault of this remedy is, the long persistence of severe pain after its application.

Mr. James treats *noli me tangere* with the most complete success by a compound of the chloride of zinc (1 part), and sulphate of lime (3 parts). This is moistened and applied on lint over a small portion of the diseased surface; after about 5 days it falls off, exposing a healthy-looking sore, which readily heals on the use of a simple dressing.

In *cancer of the uterus* according to Lever, arsenic has, unquestionably, often considerable power in lessening severe pains, if not in controlling the morbid action. He reports, also, favourably of iodine, at least before ulceration has taken place.

In *cancer of the nose*, three-fourths of which organ had been removed by Lisfranc, on account of the ravages of the disease, and it having reappeared,

the patient is said to have been cured by the use of the iodide of potassium internally, and simple ointment externally.

Mr. Tuson has employed, with temporary relief to the patient, the chlorides of zinc and lead. Of the former he remarks that it cannot be doubted that its external use is beneficial in healing open cancer—a solution of ʒj. to a pint may be employed; —other preparations of chlorine are also sometimes of use: chloride of lime, chloride of lead, ter-chloride of carbon, per-chloride of copper, &c., and a case has been described of a lady completely healing a large open cancer by the application of the chloride of sodium. The chloride of lead has been very extensively used in many cases of disease of the breast and uterus, in the form both of lotion and ointment, with much success; it appears to act upon the nerves, paralysing them and thus producing ease. A drachm of the chloride of lead to a pint of water may be used as a lotion, and a draught containing ten grains of the chloride of potassium may be taken three times a day.

According to Brodie, there is a *disease of the tongue* which is like a malignant one, in many respects; it is often mistaken for cancer, though it is of a different nature. In some instances, the disease may be relieved by a course of sarsaparilla, with small doses of the bichloride of mercury: but the remedy best adapted for these cases is a solution of arsenic. Give the patient five minims three times a day, in a draught, gradually increasing the dose to ten minims. In some instances, however, it will take a long time to get the tongue quite well, and then you may give the former remedy at one time, the arsenic at another. You cannot give either of these remedies for a very long time continuously; but it is astonishing what bad tongues will get well under these modes of treatment.

In *corroding ulcer of the uterus*, as distinguished from carcinoma, Dr. Lever is in the habit of applying the nitrate of silver, either in substance, or in solution. Tepid milk and water, containing syrup of poppies, or liquor opii, may also be injected.

On the *treatment of syphilis*, Sir Alexander Crichton is convinced that Fricke's plan of treatment—cleanliness, low diet, and laxative medicine—will not succeed in private practice, because patients will not submit to the restrictions imposed. Whilst Cruvelhier, Ricord, and Chassaguy regard ptyalism as the most grave accident accompanying the use of mercury in syphilis, Dr. Muynell affirms, that a person cannot be pronounced as cured unless he has been subjected to ptyalism. According to Brodie, the best way of using mercury, when the disease is severe, is by inunction. It has its inconveniences; but cases will occur in which you may patch up the disease by giving mercury internally, but it will return again and again, and then you will cure it at last by a good course of mercurial inunction. Of syphilitic children, Sir Benjamin states that very few recover to whom this drug has been given internally; but if the mercurial ointment be spread on a flannel roller, and the latter applied round the knee, not only no untoward effects will ensue, but the child will be cured by it. With respect to the effect of mercury upon the system generally, you cannot depend upon its effects in syphilis, unless the gums be made rather sore, and there be some degree of ptyalism.

Mr. Markwick reports a case of *sloughing venereal ulcer* cured by the application of powdered rhubarb.

Strangulated Hernia..—Lyell records a successful case. Within three hours, the patient had three grains of opium and four-and-a-half of hydrochlorate of morphia; and the rule which the above writer would recommend is to employ the morphia in half-grain hourly or half-hourly doses, till the patient is fairly narcotised.

Walker mentions the case of a patient with *strangulated scrotal hernia*, which became reduced after two grains of opium were taken, every fifteen minutes, for forty-five minutes.

Tapcot mentions that an enema made with ℈xv. of tobacco, administered to a man 56 years of age, labouring under strangulated hernia, produced symptoms of narcotism in a quarter of an hour, the poor fellow dying ten minutes afterwards.

When inflammatory symptoms follow reduction, Lisfranc considers the internal application of mercurial ointment to be highly efficacious; according to the formula of M. Serres d'Uzes, two pounds of the ointment are used in the course of 48 hours, spread on the lateral and anterior parts of the abdomen, laid on layer by layer every two hours, until the whole dose is expended. M. Lisfranc has thus used sixteen pounds in eight days.

In *bed sores* nitrate of silver is recommended by Jackson. The form which he uses is in the proportion of ten grains to the ounce, applied by means of a camel-hair brush over every part exhibiting the slightest appearance of inflammation, two or three times a day, until the skin has become blackened; afterwards only occasionally.

A correspondent of the French Academy recommends *nævi materni* to be inoculated by a lancet charged with croton oil; each of the punctures becomes the seat of a boil.

Maschaliatica.—Such is the new title of an old method of using remedies; it consists merely in depositing them in the axilla, and leaving them there to be gradually absorbed. Syphilitic affections have been thus treated with the blue ointment, agues with a *pomade* of quinine, and scabies with sulphur ointment. Forget tells us he has treated many cases of these diseases successfully in the above manner. He proposes to try thus:—opium, nitrate of morphia, digitalis, strychnia, iodide of potash; as the cutaneous absorption, in the axilla, is more active than in almost any other part of the body.

On Fever.—In Dr. Bartlett's work on typhoid and typhus fever, the therapeutic methods adopted by some of the more eminent practitioners of the United States and France are fully set forth; Dr. Jackson and Nathan Smith, in the former; Chomel, Louis, Bouillaud and De Larroque, in the latter. According to Smith and Chomel, mild cases cure themselves most surely without medication; all that is required, being the administration of diluent drinks, a small quantity of farinaceous food, and the avoidance of all causes of irritation. Bleeding is recommended by all the authors quoted, in the more inflammatory forms, except by Jackson, whose chief reliance is on the tartrate of antimony, given, first as an emetic, and afterwards in smaller, but gradually increased doses, according to the plan of Odier, of Geneva. Bouillaud applies his plan of bleeding to typhoid fever, in common with all acute diseases; and Bartlett states that, although Bouillaud has failed to establish the superiority of free and repeated bleedings in fever, yet he has shown it to be a less dangerous practice than has been supposed; or as his Reviewer says, in very plain English, he has killed fewer than might have been expected. De Larroque trusts principally to purging, a proceeding which receives pretty strong approbation from Louis. Tonics and cordials are recommended in certain cases by Chomel and Louis. The former prefers bark, the latter quina. Louis recommends mucilaginous enemata in the diarrhea, and, if obstinate, a few drops of laudanum may be added to the injection. Dr. Graves, Stokes, Louis, and Chomel, treat perforation of the intestine with total abstinence and large doses of opium. The doses of Louis are smaller than the Dublin doses. The Reviewer of Dr. Bartlett, in Forbes's Quarterly, says his experience tells him that, in mild and simple cases, medicines, especially powerful ones, are injurious; and that the patient "gets along better" without medicines, excepting what may be required to empty the bowels, at first associated, perhaps, when the attack is a smart one, with general bleeding. The diet mentioned by Nathan Smith, absolute repose in bed, and a free supply of pure air, washing, and general cleanliness, being rigidly observed. As a general rule it is better to withhold medicine, beyond the single purge mentioned, till the occasions for its employment occur. These occasions are chiefly *diarrhœa, hæmorrhage*, and *perforation*; for the diarrhœ, besides Louis' plan, small doses of opium combined with chalk mixture and astringents may be given. In hæmorrhage, the acetate of lead, with opium; and in perforation, Graves' and Stokes' plan may be adopted. When the head becomes affected, other means are called for; if the delirium be of an excited or inflammatory form, leeches to the temples, cold epithems to the shaved scalp are proper; if accompanied with jactitations, contraction of pupils, &c., opium in small doses; Graves here gives belladonna. The tonics and cordials recommended by Chomel and Louis are not of so great benefit in the fever of this country. In *abdominal typhus*, Seidlitz powders, at the commencement, warm baths and the body to be well rubbed, with castor oil every day, insisting on a very abstemious diet, and only allowing the patient pure water for drink.

M. Briquet has succeeded, it is said, in curing, by the sulphate of quina, patients labouring under typhus fever—antiphlogistic remedies were first employed. Trials of the virtues of this remedy have been made at the Hôpital Cochin, by M. Blache, who was led to form a conclusion favourable to its employment. M. Husson subjected his patients to the same remedy, and the results have been published by M. Laurent. The dose of this medicine was usually ten *centigrammes* every hour; sometimes the dose was larger, and administered less frequently, and in several instances the patients took more than ʒij in twenty-four hours, for many days together. In no instance were the symptoms cut short by the quinine; while, in several cases, the increased headache and thirst, and the greater dryness of the tongue which followed its use, were not only of importance in themselves, but rendered the cases more complicated, since it was not easy to tell how far these symptoms were produced by the medicine, or how far they betokened an aggravation of the malady.

Dr. Skerret strongly advises the treatment of fever by the sesqui-carbonate of ammonia, not as a stimulant, but as a tranquilizer of the nervous system, owing to some lesion or disturbance of which this affection is assumed to have its origin. The formula is ʒj to ℥viij of water, two tablespoonfuls being given every two hours for five or six doses, then every third hour.

Sir Alexander Crichton says Nature's plan of curing typhus is the same as that by which the paroxysms of an intermittent are terminated; she reduces the quantity of circulating fluid, until she brings about an equilibrium between them, and the enfeebled general powers, but this is not to be effected by bleeding.

Dr. Thomson remarks that wine and alcoholic fluids are seldom or never necessary in the early stages of fever; even in the later stages the propriety of their administration must altogether depend on circumstances and the nature of the prevailing epidemic. A rapid, soft, intermittent pulse, the tongue tremulous when protruded, low muttering, delirium, tremors, subsultus tendinum, petechial eruptions, and the patient sliding to the foot of the bed, indicate their employment: as far as regards quantity, from six to eight ounces of wine, or a pint of weak punch, may be allowed in twenty-four hours, at proper intervals.

Intermittent Fever.—Dr. Guastamacchia recommends eight grains of the sulphate of quina, to be dissolved in ℥ss of rectified spirit, and rubbed, in two doses, within an interval of a quarter of an hour, along the spinal column at the beginning of the cold fit. It is said to have often prevented a single recurrence of it.

O'Shaughnessy states that narcotina is devoid of all narcotic properties, and is capable of averting the paroxysms of intermittent and remittent fevers.

Dr. Yates affirms having found a combination of five minims of the liquor arsenicalis with two grains of the sulphate of quina, taken every four or six hours, during the interval, cut short the paroxysm, when quinine or liq. arsenicalis *alone* had failed.

In the *remittent fever* of children, Rilliet and Barthez advise the quinine, when the disease assumes an ataxic or adynamic form.

In *Senile-Hectic*, Canstatt recommends the following:— Phosphorus, gr. iv.
Sulphuric naphtha, ʒj. M.
Ten drops to be taken every two hours in a little water.

Variola.—M. Serres appears to have made it probable that it is beneficial to exclude the light in

treating this affection, as the pitting will be thus prevented. Rilliet, Barthez, and Stewardson recommend plasters of mercurial ointment, to prevent the development of the pustules. The latter tried the plan extensively, and satisfied himself that it produces a decided effect if the plaister be applied before the third day of the eruption, and allowed to remain on to the 6th. The doubt, however, is whether the pitting will be *always* prevented in this manner. In two instances, other kinds of plasters were employed, but they produced no effect; he thinks, therefore, that the ointment must act by some specific power, not merely by excluding the air and light. The effect of the plaister, according to Mr. Wilson, is to produce immediate resolution of the eruption, or to arrest it at the papular or vesicular stage; it never becomes purulent, and the skin, between the pustules, is never inflamed or swollen.

MM. Velpeau and Bretonneau propose cauterisation with the solid nitrate of silver; and Midivaine, an ointment composed of two drachms of sulphur to the ounce of lard, at an early stage of the eruption.

M. Rayer has found that the old practice of opening the pustules and squeezing out the pus, and then bathing the surface with a tepid wash is very beneficial; and Mr. Wilson considers that it accelerates very materially the healing of the ulcerations, and the formation of deep and disfiguring cicatrices.

To be continued.

PENCILLINGS OF EMINENT MEDICAL MEN.

PROFESSOR ORFILA.

The name of Orfila, it has been said, is "smooth as a pebble, musical as a lady's lute," and smooth it should be, for it is often turned from the learned's tongue — and musical in nature's kindness it should be, for un-sounded is it to no ear in the farthest part of the civilized globe. The best known of living French scientific men—Doctor of Medicine and Surgery, Professor of Chemistry, and Dean of the most distinguished Medical Faculty in the world, Member of the Academy of Medicine, Commander of the Legion of Honour, Peer elect of France—this personage in 1844 so illustrious alike in rank and deeds, was, in 1804, a poor pilot boy, in a miserable Spanish coaster! Abrupt transition! Violent antitbesis! And how rose he, a Spaniard in a foreign country? Because the scientific men of that country think that "France is the country of every talent that will serve her." And how rose he, a man without wealth and without interest? Because France knows of no honour in science which she vouchsafes to mere interest, or denies to real merit. The world's glories *there* are prizes—like those of the old Olympic games — open to all, given to the best. In Paris, be a scientific man, and you shall have all you deserve. Whatever the mischances fortune may ever and anon interpose, you shall trace none to a faulty law. Happy France! Unhappy all countries which, in these ennobling particulars, share not her wise policy!

The great toxicologist, whose career we are about rapidly to trace, was born at Mahon, Minorca, in 1787, in that month so fertile in humanity, April, and, having good Catholic parents, got in baptism all the additional chances of a pious life which might be expected from the three breviary affixes of Mathieu, Joseph, Bonaventure. His father dealt in merchandize, and he himself, when reaching robust youth, occupied himself in managing a pilot-boat, until some happy inspiration gave him the wish to be a doctor. At eighteen, accordingly, he betook himself to Valencia, a first session's man, got honourable notice by a sensible commercial committee, in Barcelona, who proffered him the expenses of a Parisian education, if he would pledge himself to return to communicate his acquisitions to his countrymen. With a handsome provision—for such it was to him—of 1,500 francs per annum, he found himself in Paris, in his twentieth year. A twelvemonth brought the war between France and Spain, which cut off his connection with Barcelona and its stipend; but an uncle, at Marseilles, stepping in with a supply to him of 120 francs a month till he should get his degree, he was enabled to pursue his studies with a success which left him Doctor in his twenty-third year,—the dignity and bearer both having no means of support, save what resources from within, exercised on a fair stage without favour, could promise. The future peer of France owned, in *possession*, a few books, a poor wardrobe, and six francs—in expectations, who, that knows the buoyant mind, full of vigour as of powers, shall say how much?

He was a good chemist, and he knew it,—on that battle-field, would he wage his war with adverse influences: so beating up for a few students, he commenced to lecture: enlisted daily fresh disciples: and, before long, got together a respectable auditory, among the most attentive and most profited portions of which were, the elder Beclard, Jules Cloquet, and Milne Edwards, men destined to share with him huge slices out of the celebrity this age awards to its more favoured and favouring children.

Little things have much to do in producing great effects. The sentiment is none of the newest or most profound, and is indeed almost hacknied enough for Henry Bennett, or his master, to give it us next week as something strikingly original. If not new, however, it is nearly as good—true; just as true, as if the aforesaid gentlemen shall never have uttered it,—and, therefore, we may mention, as no way apart from the genuineness, however remote from the dignity of history, that Orfila has really a splendid voice; and his mind, of "immortal mould," has not disdained giving its principal medium of earthly communication the highest cultivation. The great philosopher and founder of toxicology can rise with the angelic Favanti, shake with the bewitching Persiani, quiver with the divine Catalani float in an atmosphere of thrilling melody with the gorgeous Grisi, and all this with a precision and effect which favour not a little the general opinion that the sun of that solemn nebulous system—the Parisian Faculty, would be a star of surpassing magnitude and brilliancy in the operatic firmament. "Quelle dommage," we heard a Parisian Countess once prettily exclaim: "quelle dommage que Monsieur Le Doyen, se donne à cette chose de toxicologie! Quel bel artiste aurait il fait!" We bethought ourselves of Nero's dying exclamation: "What a splendid fiddler is the world about to lose!"

The sorry scribbler (had he heard Orfila) would never have written his *accursed* "vox et præterea nihil." (Excuse our warmth, reader, but we have—at least ladies tell us so — a beautiful voice.) Orfila's voice has been enough to him, I am happy to say, to make one indignantly ask what else would the wretch have? 'Tis *every thing*, and certainly has been Orfila's good angel through life. His enemies admit that even if he had not found the "*voie* de la fortune," he would certainly have found "la fortune dans sa voix."

Now, naturally, as a sagacious Spaniard, thinking that so good a weapon might be used for something else besides lecturing, he never failed to carry it with him into good society; and there, on pressing entreaty of course, would take the liberty of using it—and by force of song, or speech, so operated (I dare say among others) on Mademoiselle Leseur, the daughter of the celebrated sculptor, that she consented to take her father's Spanish friend for better for worse—a perilous undertaking ordinarily, but which offered in this case exceptional results, since it really turned out all for "the better." How shocking that such "happy events" should sometimes turn out all for "the worse." With emancipated Sambo, we think *that* should be made valid ground for a divorce. If marriages are, as every body says, happy events, and happy events cease, as every body knows, to be happy events—*ergo*, they cease to be marriages. This is an enthymeme, no man can dispute. I am happy to assure my readers that I have impressed into it all the arguments for divorces in all the writers, inclusive of the non-divorced Milton.

We will not waste our reader's time with telling him, with another biographer, that, after our toxicologist's marriage, "he was now better off in the world than be had formerly been." Cela va sans dire—but there is a circumstance that ought to be communicated, viz., that Orfila, knowing that there were *good* voices in Paris besides his own, wisely though at once of extricating his wife from the dangers of Parisian matronhood, and, therefore, aptly remembering his engagements to the Barcelona merchants, offered to become their obedient servant if they insisted on his engagements to them. They did not; but Madrid, stepping into Barcelona's shoes, elected him Professor of Chemistry, to supply the place of Proust. Circumstances here however were somewhat different, and Orfila wishing to head a good Spanish school, if any, insisted on a reorganization of the system of chemical education, which, not being conceded by the beloved Ferdinand, the appointment was declined. Madame Orfila stuck to Paris, and Monsieur began to publish with Madame Bailliere.

French appointments, as was, perhaps, foreseen, supplied the loss of that at Madrid. In 1816, he became Quarterly Physician to Louis XVIII. with a salary of 1,500 francs a year. In 1818, he was naturalized. A little later, he became Professor of Legal Medicine, in the Paris Faculty: in 1823, he took the high Chair of Chemistry; and, in 1831, he became Dean of the Medical Faculty. The Medical Faculty, being a foreign thing much talked about, is of course little understood, and such of my readers as have not pushed their education, nor vowed to Hippocrates to learn nothing more (the Hippocratic oath of our days), will excuse my telling them that this formidable and honourable body consists of twenty-six State Professors of Medicine, chosen by *concours*, but subject to the approval of the Minister of Public Instruction. They are all in receipt of a comfortable Government salary, of from two to ten thousand francs, and, luckless, receive few or no fees in the public discharge of their duty. Their President, elected every five years, is called the Dean. He is the medium of communication with the Government, convokes the Faculty, and has power to order the discontinuance of any course of lectures he thinks advisable. Our worthy friend, about whom we are now chatting, has been three times elected Dean.

When we give a list of Orfila's publications we offer a very good reason for saying little of any other public achievements. They explain very satisfactorily the manner in which his time has been spent. The man who writes all these, could make little other matter for history:—1. *Traite de Médecine Légale.* 1831. 4 vols. in 8vo. 4th Edition.—2. *Secours à donner aux personnes Empoisonnées ou Asphyxiées.* 1830, in 12mo. 4th Edition.—3. *Elemens de Chimie Médicale.* 1836. 3 vols. in 8vo. 6th Edition.—4. *Traité des Exhumations Juridiques.* 1830. 2 vols. in 8vo.—5. *Toxicologie générale.* 2 vols. in 8vo. 3rd Edition.—6. *Mémoire sur l'empoisonnement par l'Acide Arsenieux.* 1839, in 8vo.—7. *Mémoire sur l'absorption des Sels de Plomb, de Bismuth, d'Etain, d'Argent, d'Or, et de Mercure.* Journal de Chimie Médicale. 1842.—8. *Mémoire sur la Morphine,*—9. *Mémoire sur l'Acide Hydrocyanique.*—10. *Mémoire sur le Sublimé Corrosif.*—11. *Mémoire sur les Taches de Sang.*—12. *Mémoire sur les Asphyxiées par submersion.*—13. *Mémoire sur les Asphyxiées par suspension.*—14. *Mémoire sur l'Infanticide.*—15. *Mémoire sur l'empoisonnement par des Mélanges.*—16. *Questions relatives à l'Alun Calciné.*—17. *De l'Action des Sulfures d'Arsenic, de Plomb, de Cuivre, et de Mercure sur l'économie.*—18. *Mémoire sur le Sang considéré sur le rapport Medico-légale.*

It need hardly be said—for it is abundantly shewn by this lengthened list—that Orfila is entitled to be called the father of toxicology. He may be said to have created a science. No case of suspected poison, in the criminal jurisprudence of the country, is decided without his opinion, and his researches have carried home guilt to persons whose ill deeds had had the cover of years, and who believed themselves far beyond the reach of legal detection. Numerous cases might be given, if our pages allowed—that of Laffarge occupying not the least important place. A man, named Barruel, assists Orfila in his investigations, and is

believed to be the best practical analyst of Europe. His services enhance rather than depreciate, his master's claim to fame. The choice proves Orfila's chemical sagacity.

As Dean of the Faculty, Orfila has done the French medical profession immense services. He has been the means of securing the present satisfactory system of Examination. Before his time, the Doctor's degree was won by five examinations of a quarter of an hour each, and a thesis on a subject selected by the candidate. Orfila has arranged that a man must be both Bachelor of Arts and Bachelor of Sciences, before he can offer himself as candidate: the examinations, five in number, last each for three-quarters of an hour. For the one on Anatomy, are required anatomical preparations, and demonstrations on the dead subject are made essential—and so generally, we are now asked for Medico-Legal reports, Pharmaceutical formulæ written at the instant, delivery of full judgment on actual Hospital cases, both of Surgery and Medicine, and, finally, the candidate must prove a thesis on a subject drawn by lot, and establish his acquaintance generally with the whole range of Medicine.

He has also been the means of introducing vast ameliorations in the accessories to Medical Education in Paris. The Hôpital des Cliniques—the Botanical Garden in theLuxembourg—the magnificent Dissecting-room of the Ecole Pratique—the Musée Dupuytren—are great medical works, which may be said to owe their existence to Orfila. His administrative talent is of the highest order: his industry untiring; and winning the confidence of the French Government, he has been able to accomplish more in facilitating medical studies, than any other man of his age. He is said to have been entrusted by Government with more than £40,000, to assist him in his splendid labours.

This fact makes needless the remark that he is a great favourite of the present dynasty. The liking, we suspect, is less of a political than a personal kind, Orfila's science seemsto us to comprise his politics. With Napoleon in power, he excited no suspicions as a republican or royalist The Bourbons came: and the elder branch saw no malignancy of adverse politics which made him unfit for their small favour. When they were cashiered by the populace after three days notice, their successor was ready to oblige our chemist, and our chemist was ready to be obliged. Louis Phillipe has absolutely poured honours on Orfila. When the delicate situation of the Duchess De Berri was to be ascertained, Orfila was selected to furnish the report. Nothing could better testify the confidence of the present Court in the *attaché* of its predecessors. The toxicologist has been said to have done his mission rudely, and to have cared more for the certitude of the fact, than the delicacy of the means of assuring it; and all the fair denizens of St. Germains who—for more motives than loyalty, and for other causes besides a love of *legitimacy*—knew how to sympathize with a *dame galante* in the awkward and imprisoned predicament of the Duchess, these, we say, unceremoniously sent their once well-beloved chemist to a city as well known in France as in England, "Coventry." We need not say that Orfila endeavours to pacify the offended goddesses with assurances that he made no personal examination; that he took his report from the attendant physician, &c.; but the honoured of Louis Phillipe gets, I am assured, a very incredulous auditory.

The students who are almost universally republicans, love not our chemist's pliancy of political faith. *They* have opinions on the form of government, if they know nothing about it,and they do not see why Orfila should not be just as enterprising. He has been more than once mobbed by them—more than once had his house surrounded by them, and though he has boldly faced their rage with manly remonstrance, has never fared the better for his courage. Like a good man he never made these troublesome *emeutes* the subject of government investigation, and the consequence is that not a few students have to thank him for having their names left on registers, whence their erasure would have destroyed the prospects of a life.

Orfila is a beautiful lecturer. His words flow copiously, well selected, expressive, elegant. His action is not undignified, and his *manner* generally most attractive, reaching that excellence of declamatory labours so rarely seen in England, viz., adding rather than detracting from the effect of the mere general effort. His speech harmonious, rounded, and musical, is heard for its own sake, as much as for the good things it carries with it. The only fault to be found with his lectures arises from the small scale in which he conducts his experiments, considering that they are performed in a room large enough to hold 3,000 auditors—and always full. Perhaps this hint, expressing many an English students' feeling, may suggest in so reasonable a quarter, a much required alteration.

In person Orfila is about the middle height; of good and regular proportions. He is always dressed with the care that befits a gentleman, never with that which indicates the fop or the idler. His face he constantly presents well shaven, no portion of it being left to the encroachment of the capillary aborigines. It is round, for a Spaniard clear, though dark in complexion; the eyes are black, bright, and piercing, the mouth capable of a pretty smile, but more expressive of fixed purpose than mere amiability; the brow round, massive, and fairly elevated, and the upper part of the head being utterly denuded of hair, a handsome segment of a circle is described, which speaks much (if phrenology be right) for the fair development of the moral faculties, especially the Spanish characteristic of Veneration. In younger days he had if not a remarkably handsome countenance, one quite as effective in the warfare of good looks. The ladies would describe it as expressive, thoughtful, and interesting, and though somewhat *passé* he is yet a good looking, Greek-nosed, cunning-eyed, gentlemanly old fellow. Altogether he has our liking, and we shall be happy to chronicle many another election to the Faculty-Deanery. He will do honour to the peerage, which we believe Louis Phillipe has promised him.

TRANSACTIONS OF LEARNED SOCIETIES.

WESTMINSTER MEDICAL SOCIETY, April 27--Mr. Fisher, President, in the Chair.—*Supernumerary nipples; urinary abscess; treatment of stricture, and fistula in perinæo.*

Dr. Chowne introduced a patient to the notice of the society, the woman having four nipples. The supernumerary nipple on the right breast was well formed, and of a tolerably large size, even when compared with the natural one; the additional one on the left breast was exceedingly small, being scarcely larger than an ordinary mole. The woman had been recently confined, and was now suckling. Milk could be obtained from the small nipple on the left breast by pressure. Dr. Chowne thought it was not improbable that there was a second mamma in the right breast, but he was of opinion that the existence of a supernumerary gland on the left side was exceedingly problematical. He saw the patient for the first time in 1842, and he had then made her the subject of a clinical lecture. The day before yesterday another case of extra-nipple had been brought under his notice by Mr. Moore, of Agar-street, who attended the woman in her confinement. The patient was a woman, thirty-one years of age, the mother of several children. The supernumerary nipple was only discovered by her, when she was four or five months gone in her first pregnancy. The normal nipples were perfect, and naturally placed; the additional one was about the size of the percussion caps of fowling pieces, or rather larger. In early life the two nipples were close together, but they gradually separated as she became older, and now they are about two inches apart from each other. The supernumerary nipple is lower, and nearer the sternum. As pregnancy advanced, a dark areola formed around it, and as time wore on, it presented a still closer resemblance to the natural ones, and a serous or lactescent fluid exuded from it. After each confinement the mamma where the extra-nipple is seated, enlarges, and the patient is of opinion that there is also an extra gland, as a fissure between the two nipples can be readily felt, and what nurses call 'the draught,' is also experienced in both. She has three daughters and four sons, none of whom present this peculiarity. Dr. Chowne expressed himself as of opinion that the proof of there being an extra gland was insufficient, and he mentioned the case therefore as one of supernumerary nipple only. He had seen another case of supernumerary nipple in the person of the mother of this patient. The mother had the additional one on the left breast, the daughter on the right. None of the other branches of the family were so affected. These cases are both rare and curious. The fact of their not being discovered until after pregnancy had occurred is very general; the nipple lies dormant, until it is excited by the sympathy which exists between the mamma and the uterus. A woman had a substance in each arm-pit, the nature of which was not known, but which, when pregnancy took place, was found to be a regular mammary gland, secreting milk. A case is also recorded of a mammary gland being seated on the thigh, which was not discovered until it was excited by the sympathetic action of the uterus, when it shewed its nature by performing its function of secreting milk. In former times these extra glands and nipples when seated in the armpits, were supposed to indicate witches, who by their means suckled imps. Dr. R. Lee has recorded a case of double mammary glands, the supernumerary ones being situated on the upper part of the chest. There is not any practical result to be drawn from these cases, nor is there any means of removing them; but they have been the cause of much uneasiness and anxiety. A lady in Switzerland, who had four nipples, prior to her marriage, consulted her physician as to the propriety of her contracting marriage, she fearing that she would have three or four children at a birth. Not satisfied with his assurance to the contrary, she sent a case to the University, nor was it until after her medical attendant's opinion was thus confirmed that she ventured to wed. Here offspring were, as is usual, only one at a birth.

Mr. Chance then read a case of enormous abscess of the scrotum. He was requested on the 25th of January last, to see a man of the name of Goates, 33 years of age, whom he found in bed, presenting severe typhoid symptoms, and with a countenance expressive of great pain and depression. On examination there was found an immensely swollen state of the penis and scrotum, which, according to the man's account, commenced ten days previously, as a lump the size of a pea on the under part of the penis, just within the scrotum; this gradually increased in size, attaining a circumference of twenty-three inches in the ten days. The abscess projected upwards on each side of the penis into the groin, and inferiorly it presented a central depression, giving it the feeling and appearance of consisting of two portions uniting in one hard mass in the middle. No indication of fluctuation could be distinguished. The penis was immensely swollen, as also the prepuce, which could not be retracted, so as to afford even a glimpse of the glans. Part of the integument of the penis was vesicated and mortified. Mr. Chance laid the abscess open by a free and deep incision anteriorly, the knife requiring to be used more than once, on account of the great thickness of its parietes. The sensation conveyed to the finger in making the incision was that of cutting through a scirrhous tumour, accompanied by a feeling of slight crepitus. From fourteen to sixteen ounces of fœtid pus mixed with urine were discharged by the incision, not freely however, as much of it was collected about the upper part of the root of the penis and in the groins. The walls of the abscess were exceedingly thick,especially in front. Another incision was practised through that part of the skin which had vesicated. These operations free the man from the greater part of his pain and uneasiness. He was ordered fomentations, and a linseed meal poultice afterwards. His previous history was that of a stricture following severe gonorrhœa, the symptoms of stricture being always increased by catching cold or by intoxication. To the former of these causes he referred his present attack, which commenced three weeks

previously to his being seen by Mr. Chance. The usual symptoms were then produced, which he treated himself by fomentations, with relief, but after a long walk he suffered from uneasiness and pain in the penis and scrotum, not increased on pressure, which was soon followed by the formation of a small hard swelling, just within the scrotum. Three days afterwards he discovered another small swelling on the right side of the urethra, anterior to the scrotum, connected by a pedicle with the swelling in the scrotum, from which it was an inch apart; and the disease then made rapid progress, aided by the do-nothing practice of a druggist whom he consulted, until he placed himself under the care of Mr. Chance, by whom he was admitted into the Metropolitan Free Hospital. The incisions that were made, and the free exit afforded for the pus and urine gave exceeding relief; the typhoid symptoms ceased, the countenance lost its expression of anxiety, and he became comparatively free from pain. Pus was freely discharged, and the urine passed partly by the urethra and partly by the wound. The discharge gradually diminished, the sloughs of the skin and cellular membrane separated, and the wound presented a healthy appearance. The man's general health was attended to, and his strength maintained by tonics, medicinal and dietetic. After a time, when the swelling was sufficiently reduced to permit the glans penis to be uncovered, Mr. Chance attempted to pass a catheter, but could not succeed with even No. 1, until after he had made a way for it by using the caustic potash, which he employed twice, at intervals of a week between each application. In the early part of March, Mr. Chance succeeded in passing a No. 2 catheter, and drawing off about a pint of urine. The instrument was left in for two hours. The scrotum would have been of its natural size, but for a slight thickening of the septum. There was a fistulous opening in the centre, and on the side a deep depression marking the spot whence the slough was withdrawn. The man was afterwards made an out-patient, and attended for some time, until, on the 30th, a No. 8 catheter could be passed, when he ceased his attendance, the fistulous opening having closed a week previously. Mr. Chance remarked, with respect to this case, that there were two or three observations which he wished to make. Was it a case of abscess originating in one of the lacunæ of the urethra, in the ducts of Cowper's glands, or in ulceration of the urethra behind the stricture, a drop or two of the urine first escaping. He thought that the last named was the case. He never saw or heard of a case of abscess of a lacuna being so extensive, and if Cowper's ducts had been the seat of the abscess, it would have been deeper in the perinæum. In the treatment of fistula in perinæo, he objected to leaving the catheter in the bladder, which he thought always was attended with injurious consequences. The disease may be cured by passing an instrument every second or third day.

Mr. Acton inquired how the caustic potash was used, prior to the introduction of the catheter?

Mr. Chance replied, that he had used it in many instances, and never had occasion to regret doing so. He passed a bougie first, to ascertain the exact situation of the stricture, then carefully fixed a very small piece of caustic potash into the end of another bougie of the same calibre, oiled it, and passed it down rapidly to the stricture, pressing and retaining it there for a minute or a minute and a half. In fact, he used it in the ordinary way.

Mr Fisher agreed with Mr. Chance, in believing that the disease originated in an ulceration, which formed posterior to the stricture. He had seen several cases of a similar kind arising from that cause. He recollected a remarkable case, which was followed by sloughing, and about two inches of the urethra were lost, and the patient still passes his water by an aperture in the perinæum. He has also seen carbuncle of the scrotum cause destruction of part of the urethra; but in that case the disease was unconnected with stricture.

Mr. Acton had seen several cases of the kind in hospital practice; it is one of the consequences of neglected stricture, and although rare in private practice, it is not so in the wards of a hospital. Mr. Chance had enquired whether the abscess might have originated in one of the lacunæ, in Cowper's duets, or from a stricture. All authors agree that such severe cases are produced from a stricture. In severe cases of gonorrhœa, a lacuna sometimes inflames near the orifice of the urethra, forms a small abscess, which opens externally, discharges itself, and soon closes. Inflammation of Cowper's glands is a more serious affair, and is not an unfrequent occurrence, but it never causes the formation of such an enormous abscess. He had no doubt it had been caused by a neglected stricture, behind which a sac had been formed by the expulsive efforts of the bladder, ulceration had taken place, an opening had formed, the urine extravasated, and the abscess followed. With regard to the objection to the permanent use of the catheter in cases of fistula in perinæo, Ricord was of opinion that the irritable condition of the urethra was much lessened by leaving the instrument in. The constant re-introduction of the catheter keeps up the irritation, nor is it a very easy task to pass it again, on account of the irritation it excites. He (Mr. Acton) objected to the use of caustic potash, which, he said, was very much in vogue some years since. In passing the armed bougie, the borders of the urethra would be touched by it, and again on withdrawing it, the borders being touched twice, whilst the caustic would come in contact with the stricture only once. He preferred using the nitrate of silver in a canula, passed through the stricture. Caustic potash is so apt to liquefy, that it is a matter of uncertainty on what part it will act. He wished to know if there was not a considerable cicatrix formed in the stricture, requiring the use of instruments for some time afterwards?

Dr. Hunt was desirous of knowing the ultimate result of the use of caustic in the treatment of stricture. He spoke the experience of an eminent surgeon, that the greater proportion of Sir Everard Home's patients were suffering from intractable stricture, caused by the use of caustic thirty or forty years ago.

Mr. Chance quoted the opinion of Sir Astley Cooper, as recorded in his "surgical lectures," on abscess of the lacunæ, opposite to the scrotum, which he describes as a very fearful and dangerous disease, requiring rapid and severe treatment to save life. Mr. Acton had alluded to such severe cases as being very common; but the case he had related was not one of extravasation of urine. With regard to the use of caustic potash, he had never had occasion to repent employing it. He understood that the application of the nitrate of silver was of no use, unless a slough was formed, which was afterwards to be forced out by the urine. He did not employ the caustic potash to produce such an effect; he used only a very small piece, not sufficient to cause any mischief. With regard to keeping the catheter in the urethra, he differed from Mr. Acton, and considered that when the instrument had been left in and withdrawn, its re-introduction was very difficult. Sir B. C. Brodie, in his recent lectures on surgery, (vide *Medical Times*) says, that passing the instrument every second or third day will cure the disease without operation. He (Mr. Chance) objected to its permanent use, on account of the irritation and spasm caused by its remaining in the urethra.

Mr. Snow remarked that Dr. Watson, in his lectures, mentions the case of a person who died of stricture of the œsophagus, which formed some time after drinking some potash-ley.

Mr. Fisher said, with regard to the leaving of the catheter in the bladder, that the year before last he had a patient at Brighton, for whom he passed an elastic catheter, which he removed about once a fortnight for three or four months, and no ill consequences followed. He thought that a great deal depended on the state of the bladder. When either that organ or the prostate gland is in a state of irritation, it is desirable that the catheter should not be left in, if it can be avoided. The case at Brighton was one of stricture, causing infiltration of urine. He had opened it extensively, and then passed a small catheter, which, on each occasion that it was withdrawn, once a fortnight, was changed for a larger one.

Mr. Clarke thought that Dr. Hunt's remark applied, rather to the abuse, than the use of caustic potash. Mr. Wade had been in the habit of using it for years, in a cautious manner, and very successfully. Sir Everard Home was in the habit of using the nitrate of silver quite as freely as he employed the caustic potash. It was Mr. Whateley who introduced the caustic potash, and he (Mr. Clarke) thought Mr. Whateley's views were not fully understood by the profession. Mr. Wade's work on stricture contains numerous cases attesting the value of this plan of treatment.

Mr. Snow considered the dipping the caustic potash in oil, previously to using it, would retard its liquefaction, and thus enable the operator to pass it down to the stricture, upon which it might expend itself.

Mr. Streeter detailed the particulars of a case of abscess of a lacuna, with infiltration of the urine, which he treated successfully by passing a catheter every time the patient required to make water, so as to prevent the urine from getting into the abscess, and keeping up irritation. This was done three times a day for six days, at which time, considering himself well, his patient made water without the instrument, and experienced a slight relapse, which was speedily removed by the same treatment. Mr. Streeter, after this, succeeded in dilating a stricture, situated anteriorly to the part where the urethra had given way, and his patient ultimately recovered. He returned into the country in a few weeks' time, taking with him a white wax bougie, and had not had an unpleasant symptom since. He (Mr. Streeter) thought the state of the urethra in old strictures required further investigation, and before caustic and instruments were used, we should be perfectly satisfied as to the possibility of restoring the canal to its normal condition, about which he had great doubts. If he had a stricture himself, he would rather have the urethra opened behind it, than have it pierced by an instrument, or have caustic used.

Mr. Marson enquired of Mr. Fisher if there was any deposit on the catheter in the case he had narrated from Brighton. He should have expected that the instrument would have formed the nucleus for a stone.

Mr. Fisher said the deposit was very trifling, and certainly not sufficient to produce any marked effect. He had in his possession a piece of brass wire, which had been in the bladder of an upholsterer at Chelsea, for five weeks, the man having introduced it on the supposition that he had a stricture. It was only somewhat discoloured and roughened.

Mr. Acton observed, with respect to the use of caustic in the treatment of strictures, that all surgeons were agreed not to use them if the cure could be effected by other means. It was only to be had recourse to in those cases, which occasionally occurred, where it could not be done without.

*** This was the last meeting of the present Session.

Medical Society of London, April 29.—Dr. Theophilus Thompson in the Chair.—*Mesmerism—Sloughing of the Vagina—Specific Action of the Ergot of Rye.*

The discussion on mesmerism was resumed from the previous night, Mr. Dendy re-introducing the subject, by alluding to the very summary manner in which the previous discussion was disposed of in a contemporary by the editor, by whom it was stated that the question had been settled in 1837, by some experiments by some persons in some house in Bedford Square. Mr. Dendy was of opinion that the question was still *sub judice*, and very far from having been settled by the experiments alluded to.

Dr. T. Thompson gave the early history of the O'Keys, prior to their becoming patients at University College Hospital, under the care of Dr. Elliotson, from which it appeared that they were nervous hysterical girls, easily excitable, and subject to catalepsy to a certain extent. By his advice they were separated, the elder being sent

into the hospital, in the hope that medication would be of more service when they were apart, as it was supposed that their disordered condition was sustained by imitation. This hope was, however, frustrated, as the younger sister visited the elder in the hospital, and one day Dr. Thompson was summoned to see her in great haste. He found her in a cataleptic condition, on rousing her from which, she told him that he (Dr. Thompson) laboured under *bronchitis*, and on his assuring her she was in the wrong, she contradicted herself, and said, '*no, you have morbus cordis*', an opinion which was equally incorreet. She afterwards proceeded to prescribe for himself, and enquired of the doctor if he intended to order the *abradatur capillitium*. Had these singular remarks been made during a supposed mesmeric trance, the ease would have been considered as an admirable proof of *clairvoyance*, but this attack of catalepsy occurred before the mesmeric phenomena were elicited from either sister by Dr. Elliotson, and Dr. Thompson could only explain the peculiarities presented by his patient, by the fact that she was in the habit of reading the papers at the bed-heads in the hospital wards, and that during her cataleptic condition, the strange words she had read, eame crowding back on her brain in a confused jumble. Dr. T. Thompson, in conclusion alluded to the preaching epidemic which prevailed in Sweden during the past year, and to the various singular epidemics described by Hecker, as having occurred in some of the continental nunneries.

The supposed communications of Swedenborg with the world of spirits were afterwards adverted to by Dr. Waller, who related several extraordinary anecdotes having reference thereto, which he had gathered from the work of Heinrich Stilling.

Dr. Rees and Dr. Leonard Stewart having expressed their opinions on the subject of mesmerism,

Dr. Waller related a case for the opinion of the society. It was a case which had exeited great interest in his mind; had been attended with great suffering, and even now was productive of considerable inconvenience. His patient was a young female, who had been confined about five weeks previously to his seeing her, and the early history of the case was consequently imperfect. Her labour was very severe, and was ultimately terminated by instruments. A good deal of injury had been inflicted on the soft parts by pressure, which had ended in sloughing of the vagina. He could detect two cicatrices on examination. From that period up to the time when she was seen by Dr. Waller, she was unable to pass any fæces without an active purgative, nor was she able to evacuate the bladder; in fact, there existed paralysis of the bladder and rectum. Some injury had also been inflicted on the mucous membrane of the bladder, for, after the water had been drawn off by the catheter, about a tablespoonful of pus came away. Her chief sufferings were experienced when the bladder contained much urine, and when she was passing urine or fæces; at other times she was comparatively easy. She also experienced severe pain in the leg and foot, as high up as the knee, on attempting to put the foot to the ground. This sensation was not felt if she remained in bed, where she could move the limb freely, but if she sought to bear upon the limb, then the uneasiness, up to the knee, recurred, and she was obliged to sit down. Her general health was bad; she was in a weakly irritable condition, and there was loss of appetite and of flesh. The treatment consisted in drawing off the urine regularly night and morning, attention to the bowels and general health, and the application of a blister to the sacrum. A bitter mixture was at first prescribed, which was changed for steel, and strychnia was afterwards given. For four successive mornings, as the affection of the bladder was considered to be in a chronic state, that viscus was injected with an astringent, after drawing off the urine; the discharge of pus then nearly ceased, a slight cloudiness being only observed, the secretion however affording a slight deposit of pus after a time. There is a considerable purulent discharge from the vagina. Eleven weeks have now elapsed since the confinement took place, and she yet remains unable to pass either urine or fæces without great difficulty. It is necessary to administer a laxative every second day, in order to keep the bowels clear. In conclusion Dr. Waller observed that he related the case in order to learn whether anything more could be done for the patient, or whether he must trust to time for relief.

Mr. Headland remarked that Dr. Waller had not mentioned the situation of the cicatrices he had stated to exist in the vagina?

Dr. Waller, in reply to that and other questions, observed that one was at the commencement, the other near the os uteri. There is at present great purulent discharge from the vagina, but none from the bladder. The ergot of rye was not used during the progress of the labour, which commenced one day, and was terminated the next by the use of instruments. He did not think there had been any laceration, but that sloughing had taken place from the pressure that existed. He wished to add that the patient's general health had improved considerably; she ate with an appetite, and slept well.

Mr. Headland remarked that he could not refer the injuries in this case to the use of instruments, as the cicatrices were situated too high up to admit of that explanation. The only question then was, was it produced by the permanent pressure of the fœtal head, or by its temporary pressure, assisted by the specific action of the ergot of rye. As he feared but little could be done for this unfortunate woman, he was of opinion that the society would do well to take into consideration the *modus operandi* of secale cornutum. He thought it important in this case to ascertain whether any of the mischief was caused by the improper exhibition of the ergot of rye, and he begged to ask of Dr. Waller if the idea had struck him, that the injury might have been thus produced?

Dr. Waller answered that he had certainly not formed such an opinion. The case appeared to him to be the result of pressure or bruising, terminating in sloughing.

Dr. Wiltshire asked Mr. Headland whether, in alluding to the action of the ergot of rye, he meant the mechanical or the specific action, as the cause of ulceration or sloughing?

Mr. Headland said, its specific action on the living solids. He had no doubt that ergot could produce both ulceration and sphacelus, and he thought it possible that in some of the cases in which that drug is administered to women during their labours, it might produce a similar effect. The ulceration it causes has specific characters; it is a low, phagedenic ulceration, a deep excavation, discoloured and blue, and not at all disposed to bleed. This observation is not new, but he had been placed in a position to see several cases, some of which had occurred in a public institution, to which he would not further allude. There is the account of a family in Suffolk published in the Philosophical Transactions, several members of which lost their feet by the sphacelus of ergotism.

Dr. Waller would wish to ask Mr. Headland if he had ever seen a case of ulceration, caused by the exhibition of one or two doses of the ergot of rye, which is all that is required during labour. He had been in the habit of prescribing it—has given it in some hundreds of cases,—and never saw it produce any ulceration of the vagina, nor had had any reason to fear its action. In the cases published in the Philosophical Transactions, the ergot had been used as an article of food.

Dr. Willshire stated that the peculiar effect, or ergotism, produced by the secale on the living solids, occurred only when it was taken in small quantities, and for a considerable time.

Mr. Headland had not seen any cases in which ergot, administered during labour, had caused specific ulceration of the vagina, but he believed that its exhibition had, in many cases, caused the death of the child.

Mr. Dendy considered the discussion on the properties of the secale was irrelevant to the case which had been brought before the society by Dr. Waller, a similar one to which had recently fallen under his notice, with the exception that the injury had produced incontinence, instead of retention of urine. A lady, who was confined in the country six months since, came to town to consult Sir James Clarke, by whom she was sent to a celebrated accoucheur at the West End, who examined her, and gave it as his opinion that an operation might benefit her. His engagements preventing his paying her the requisite attention, Mr. Dendy was called in. On examining the vagina and urethra, by the finger, a catheter having been previously passed, he discovered an ulcer, the size of half-a-crown near the meatus urinarius, the most extensive ulcer he ever saw in that situation. The patient, notwithstanding, was able to walk about, she wearing bandages and carrying a sponge in the vagina to obviate the annoying consequences as much as possible. This injury was caused by pressure only. She was taken in labour suddenly; the waters broke, and she experienced a sensation as if the child was passing into the world. The accoucheur was sent for, but unfortunately he could not attend for an hour and a half. When he arrived, he ascertained that the arm and shoulder were presenting at the os externum. He had reason to believe that opium was not administered, and a considerable time was allowed to elapse before version was effected. The labour was permitted to go on quietly for several hours, pressure being exerted all the time by the presenting part on the meatus. The case was at length terminated, after labour had continued for forty-eight hours. Immediately afterwards an œdematous condition of the meatus took place, and the urine could not be passed. Some laceration however must have occurred, in addition to the pressure, for the urine passed by the abnormal opening within twelve hours after the birth of the child. The treatment that he recommended to this unfortunate lady, was only palliative. He related the case to shew that, because ulceration and sloughing occurred, we are not necessarily to conclude that the ergot of rye had been administered.

Dr. Chowne observed that ulceration and sloughing might no doubt be produced by long-continued pressure during child-birth. The paralysis of the bladder and rectum in Dr. Waller's case he considered to have been caused by pressure exerted on the nerves supplying those parts, and was inclined to expect that after a time, they would come round, and the patient improve in those respects. With regard to the secale cornutum, he had strong objections to its use in more than one half of the cases in which it is given. The instances in which it is required are extremely rare. It is admissible,—he did not use a stronger word,—when the patient is languid and indolent, and without nervous energy, the parts being fully prepared for the birth of the child, if the pains were forthcoming. When there is difficulty or resistance to be overcome, it should not be exhibited; in such cases we should be guided by the excellent rules laid down by Dr. Denman, before the secale cornutum was used in this country. With regard to its specific effect he (Dr. Chowne) had reason to believe that it had produced injurious consequences. When, after its administration, irritation or sloughing arises from other causes, he believed that the cases did worse than they would have done otherwise; that the parts ran more quickly into sloughing and gangrene; and brought about the destruction of the patient. At the same time he observed that the cases in which he had noticed this, were those where there had been meddlesome midwifery by midwives, and when there had been also over doses of the ergot exhibited. More than two or three doses should never be given during the progress of labour; there is something peculiar about its action, so that if the second or third dose does not produce the desired effects, subsequent ones will also fail.

May 6.—*Action of Ergot of Rye in Parturition, &c.*

Dr. T. Thompson enquired the experience of the members of the society with respect to the agency of the secale cornutum, when administered during labour, in producing the death of the child?

Mr. Linnecar remarked that many years ago he was in the habit of using the ergot of rye very freely, the injurious consequences it produced on the child not being so well understood then as they are now. The result of his observations was to the effect that when given early, before the os uteri had opened, and the child had descended into the pelvis, mischief followed. He had several cases in his recollection, which occurred in his own practice, and in that of others, in which the death of the child was produced by clonic spasm of the

uterus, arresting the circulation in the funis. The uterine pains caused by the action of the secale are continuous, while those which occur during natural labour are intermittent.

Mr. Hooper admitted that the pains caused by the action of secale cornutum were continuous, but he could not allow that the child was destroyed by it, as Mr. Linnecar appeared to think. He had used it for fifteen years, and had never found any injurious consequences from so doing. It should not be administered unless the os uteri is open, the child has descended into the pelvis, and there is no other obstacle to the completion of labour than the absence or the flagging of pains. He had given it in thousands of cases, and never knew an instance of the child having been destroyed by it. When given in proper cases it will save hours of suffering, although it renders the pains more severe for the time; and women, to whom it has been once administered, are generally desirous to have it again in their succeeding labours. He (Mr. Hooper) had never seen a case of hæmorrhage where ergot has been used, but its employment is advantageous in those cases where hæmorrhage is anticipated. The ergot, unfortunately, is uncertain in its effects, which may be very powerful in one woman, and scarcely evident in another. This Mr. Hooper thought might be owing to the ergot being deteriorated in medicinal value; when fresh, and used in the form of infusion, it has rarely disappointed his expectations. He was desirous of learning from the Society, whether it possessed any influence on the unimpregnated uterus, or on the impregnated uterus, prior to the occurrence of labour. He himself entertained strong doubts on the subject.

Dr. Chowne believed that fewer precautions were adopted years ago, with respect to the use of the ergot of rye, than is at present the case, arising from the great temptation which its influence on the uterus in accelerating its expulsive action induced. He then described the circumstances in which its administration may be advantageously had recourse to, mentioned the effects it produces, and afterwards alluded to its injurious consequences, among which he mentioned rupture of the uterus, and death of the child. The very last case of ruptured uterus which came under his notice, was attributable, in his opinion, to the action of the secale, which had been exhibited by a midwife, a woman who had on other occasions shewn great care and discretion. Another case of the same accident had, to his knowledge, occurred from a similar cause, in the hands of the assistant to a medical practitioner. With respect to the question that had been put by Mr. Hooper, viz. whether the secale cornutum exerts any influence on the unimpregnated uterus, or on the impregnated uterus prior to the occurrence of parturition, Dr. Chowne remarked that it seemed to be a peculiar character or quality of the secale —as if it knew its own work—that it exerted very little influence on the uterus in its unimpregnated state. He had heard very good effects attributed to it, in regard to its powers of arresting hæmorrhage; in cases of menorrhagia, for example, and, indeed, it had been recommended lately in the treatment of a great many maladies, but he (Dr. Chowne) had not seen it of use in any case, except in accelerating labour-pains. A young woman, who was supposed to labour under amenorrhea, the physician in attendance not suspecting the existence of pregnancy, took half drachm doses of the powdered ergot three times a day for a long while, without it producing any appreciable effect, and the medication was continued until the enlargement of the abdomen shewed the real nature of the case. It has also been exhibited ineffectually to induce premature labour, and in cases where false labour-pains have occurred. The particular condition of the uterus, when prepared to part with its contents, seems to be the necessary predisposing condition of that organ for its action to take place. Dr. Chowne was aware that cases proving the reverse of this have occurred, but this is the general rule. It is a very valuable medicine, but, like all valuable medicines, is liable to abuse. The precautions which it is necessary to adopt respecting its use are, however, gradually becoming known. It is a curious fact that, if half a drachm of secale coarsely powdered be infused in warm water, and taken, it will act in ten or fifteen minutes after it has been received into the stomach, although a considerable portion of the drug cannot as yet have excited any action on the constitution. With respect to its use in the treatment of menorrhagia, its action on the uterus during labour is exerted in causing contraction, an influence that cannot be produced on the menorrhagic unimpregnated uterus, which does not admit of contraction taking place. He (Dr. Chowne) thought he had met with more cases of retention (not adhesion) of the placenta, when secale cornutum had been exhibited, than when its use use had not been had recourse to. It resulted from irregular or hour-glass contraction of the uterus, produced, as he believed, from the violent action of the ergot causing contraction of the muscular coat of the organ to take place in one part not synchronously with a similar condition of the other parts of the parietes, by which means a pouch is formed, in which the placenta is retained. In concluding, Dr. Chowne adverted to a very interesting case of paralysis or inaction of the bladder, published in one of the journals, in which the secale had been advantageously exhibited, and remarked that its action in that case was analogous to its action in promoting labour pains.

Mr. Headland observed that the views propounded by Dr. Chowne of the modus operandi of secale cornutum embodying all, or nearly all that could be said upon the subject, he would hardly have ventured to make any remarks referring thereto, had it not been for the very decided manner in which a man of Mr. Hooper's experience had spoken in favour of the drug, whilst his own experience (Mr. Headland's) led him to doubt the propriety of employing it. He thought that there was considerable doubt as to the death of the child, which occurs so frequently under the influence of the ergot, being produced by the cause assigned by Mr. Linnecar—namely, the continuous action of the womb on the child. He had watched such cases very attentively, and had ascertained that the action produced by ergot was not continuous, but a revival of the natural intermittent action of the organ; nevertheless the death of the child has occurred under such circumstances. He had noticed this frequently, so much so as to lead him to doubt the propriety of using the drug at all, and certainly of the propriety of using it as frequently as it appears to be employed. He was not aware of the real mode of action of the secale in destroying the fœtal life; but if it is a fact, that diseased grain can cause a peculiar kind of ulceration; it is possible that it may, when given in a large dose, destroy the child by some chemical action, independent of its mechanical influence. Dr. Chowne's remark on the retention of the placenta is one of exceeding importance, and such as could have resulted solely from bedside observation. It had occurred to him not unfrequently to have noticed a similar phenomenon. He had recently seen a case in the practice of a medical friend, in which case the retention was solely referable to the action of the secale. Another friend, who also saw the patient, had had some time previously the opportunity of testing the comparative merits of the secale, and of brandy and water, and he found that with the latter, the labours were as soon terminated, and as safely, as with the former. He consequently had since always exhibited brandy and water. Some years ago, Dr. Negri, a physician now practising at Salamanca, a corresponding member of the society, related several cases of leucorrhea and menorrhagia, in which the secale proved of service. He (Mr. Headland) tried it in similar cases, but without deriving any benefit from its use. He believed, with Dr. Chowne, that, in order that the specific action of the ergot of rye should be exerted, it is necessary that the uterus should be in a particular condition of distension, and also in a particular condition of excitement. In his opinion the tincture is the best form for its administration.

Mr. Hooper enquired the proportion of the children destroyed by secale cornutum, and whether they were all perfect in their parts?

Mr. Headland replied, that the answer to Mr. Hooper's question would be one of some difficulty. He could refer at once to three or four cases, but his instances were more particular than numerous, and yet sufficiently so to satisfy his mind. He then narrated the case of a lady who had twice borne dead children after the exhibition of the ergot, and who had a living child at a succeeding accouchement, on which occasion the drug in question was not employed.

Mr. Hooper had never been able to trace the occurrence of still-birth to the exhibition of the ergot of rye. He had had cases of still-born children certainly, but the death was referable either to mechanical causes, disease of the uterus, too long delay in the labour prior to the use of the drug, or else it had occurred several days before birth took place. With regard to the retention of the placenta, he believed that might be easily prevented. If, after the secale has been given, and the child is born, the contraction of the uterus is anticipated, by taking hold of the cord, and keeping it distended, while pressure is kept up externally over the uterus, it will soon come away. He (Mr. Hooper) had rarely had a case where the placenta was not taken away within a minute and a half, and he believed that by the adoption of such a plan, that injurious consequences would not follow.

Mr. Linnecar had seen evil consequences arise from the exhibition of ergot, not only to the child, but to the mother also. It produced a great tendency to inflammation, and a diminution of the lochia; the brain also suffers from congestion, and epilepsy is sometimes caused, from the violent expulsive action of the uterus. He differed in opinion with Mr. Headland respecting the continuousness of the uterine action from the ergot; he had particularly noticed this. During the natural pain the head is pressed down, but recedes when the pain ceases, but this is not the case when ergot is administered; the head never recedes, and the child is born during one long pain. The action of the womb is continuous. He had also seen injurious consequences with regard to the placenta; it is true that it is in some cases at once rejected directly the child is born, but this is not always the case, and if not, the womb appears as if it were shut up by the action of the drug. With respect to the action of the ergot on the uterus, when labour has not commenced, he had been in attendance on a lady who was between the sixth and seventh month of her pregnancy, and who was every now and then deluged with water, tinged with blood. As the tinge gradually became deeper in colour, and the hæmorrhage threatened serious consequences, fifteen grains of the secale were ordered for her to take every four hours. Three or four doses were sufficient, but the exhibition of the secale was requisite on two or three occasions. Its use was abandoned directly the hæmorrhage ceased, it not exerting any control over the discharge of water, which occurred afterwards, but the fluid which came away was only slightly tinged with blood. The pregnancy continued until between the seventh and eighth month, when labour took place, and the fœtus was born alive. The discharge of the water and blood which occurred referred to a morbid condition of the cord, which was only five inches long, and cartilaginous in structure. It broke with an audible snap when the child was born.

Dr. Chowne observed that Mr. Hooper's remark respecting the early removal of the placenta was perfectly correct, and founded on practical experience, but it could only be carried into effect by a skilful practitioner. If ten or fifteen minutes were allowed to elapse, the orifice of the womb would become closed and rigidly contracted. He wished to add to his former remarks on the action of the ergot, that when the uterus had commenced the process of abortion, it will be aided by the secale cornutum; it is not necessary that the period of nine months of pregnancy must have elapsed, ere the specific action of the ergot can be manifested. With respect to the case mentioned by Mr. Linnecar, he had known an instance where all the amniotic fluid drained away three weeks before the labour terminated, the os uteri being all the while

open as large as a crown piece. He every now and then ascertained that the child was living.

Mr. Headland observed that he thought Mr. Hooper's remark respecting the removal of the placenta so early after delivery applied only to those cases in which the ergot had been administered.

Mr. Hooper had certainly meant to restrict it to such cases, but still it would apply generally to all his cases. He believed that great mischief was done by leaving the placenta too long in the uterus. He had kept a record of about three thousand cases, and, with very few exceptions, the placenta had come away in from a minute to a minute and a half. He believed that under such circumstances the uterus contracted better, and there was less liability to hæmorrhage.

Mr. Headland had a very great horror of removing the placenta so soon. A great number of cases existed in which the placenta could not be withdrawn from the vagina within that time, and he must say that Mr. Hooper's experience was entirely opposed to his own. He thought it was bad practice rashly to interfere with the uterus, soon after the birth of the child. Many cases certainly occur where the same pain will expel both the child and the placenta, and in which the latter may be safely withdrawn, but it would be wrong to let it go forth, that in more than two thousand cases the placenta would come away in a minute and a half, or else that force might be used for its removal. The safety of the mother depends on the manner in which the uterus contracts after the expulsion of the child, and in many cases the uterus requires an interval of repose, to recover itself before it effects the separation of the placenta. Mr. Headland was of opinion that inversion of the uterus, or hæmorrhage from partial dislodgement of the placenta might be produced, if the plan of proceeding mentioned by Mr. Hooper were generally resorted to, not, indeed, in the hands of a skilful practitioner, but in those of young men who would be happy to avail themselves of the sanction of Mr. Hooper's opinion for the proceeding, and he alluded to several cases recorded in the work of the elder Dr. Rambotham, in support of his views.

Mr. Hooper disclaimed altogether the use of force in the removal of the placenta.

HOSPITAL REPORTS.

WESTMINSTER HOSPITAL.

Psoas Abscess.—John Snewing, ætat. 17, admitted May 28th, under Sir A. Carlisle, into John's Ward. He is a short, pale, strumous-looking youth. He has a swelling at the upper and anterior part of the left thigh, extending as far up as Poupart's ligament, and round the whole of the front part of the thigh, involving a space of five or six inches in circumference, by four and a half in length. This has existed for two months, during which time it has been gradually increasing in size. The integuments are not discoloured, nor is there any pointing; fluctuation is rendered evident by applying the fingers of one hand, and tapping with those of the other. The appearance of the tumour was unmarked with pain in the part, but was preceded and accompanied by occasional pains in the back, darting down towards the thigh. By applying the hand to the dependant part of the tumour, and making the boy cough, a sensation, as if fluid were driven against the hand, is perceptible, but none of the contents of the tumour can be repassed into the abdomen. The boy presented, in addition to the existence of the abscess, considerable curvature of the spine, directly backwards, not lateral, in which eleven vertebræ are engaged, namely, the eight inferior dorsal, and the three upper lumbar. His power of progression is very much diminished, and he soon becomes tired. His health is suffering; appetite bad; tongue flabby and pale; pulse small and feeble, 70; chest unaffected—bowels generally open. A sister of his died in St. George's Hospital of hip disease. He was ordered rest, full diet, porter, and a poultice to the swelling.

In a day or two afterwards he was ordered a gentian mixture, which was soon changed for one containing quinine.

15. Mr. White made a valvular opening in the most depending part, and drew off forty-eight ounces of a thin, yellowish matter, having a subacid smell, and containing white flocculi. As he felt faint while this was going on, some wine was given him. Ordered to keep quiet, and in bed.

Up to the 25th, he continued doing well; very slight inflammation came on, and no fever, and by that day the tumour had again filled as large as before. He had then a severe accession of fever; the pulse was small and very hurried, 120; appetite bad, and there was considerable external inflammation, and an unhealthy discharge from the opening, which had never entirely closed, attended with nocturnal sweats. A poultice was applied, and he was ordered the mist. ferri comp., which, however, he could not keep on his stomach, and recourse was again had to the quinine, twelve grains in the eight ounce mixture.

He continued much in the same way, having severe exacerbations of the fever at night, with hectic flush, perspirations, a hot skin, rapid and small pulse, 140; a constant discharge and in great quantity, of a greenish colour, and faint, sickly odour; loss of appetite, occasional cough, expectoration of a tenacious mucus to a considerable extent, and frequently nausea and sickness, arrested, however, by the effervescing mixture. By the second of July, the fever was lessened, the discharge diminished, and his health altogether improved, with the exception that he was troubled with a nasty, hacking cough. On the 14th, there was very little discharge, comparatively speaking, and the worst symptoms had nearly all disappeared. He continued in the hospital until the commencement of September, the discharge continuing to diminish, and becoming more healthy in its character, the hectic fever and perspirations having disappeared, and his strength returning. He was then dismissed to try what change of air would do for him.

Scrophulous Disease of the Fingers.—Henry Abbott. ætat. 22, admitted April 20, under Mr. Lynn. A pale, scrophulous-looking young man, a tailor by trade. The joints and intermediate soft parts of the second and third phalanges of the forefinger of the right hand are very much, but irregularly, enlarged, and the skin inflamed and thin, and ulcerated in two or three points, having large flabby granulations protruding, bedewed with healthy pus. A probe passed through the ulcerated openings, enters easily, and grates on the denuded and diseased bone. The shaft of the first phalanx of the forefinger of the left hand, and the metacarpo-phalangeal joint of the same finger, are equally diseased. The joints would admit of some degree of flexion and extension, without pain, but he cannot do it himself. He has very little pain, even at night. The disease has existed six months, and he cannot assign any cause for its appearance. Mr. Lynn, under whose care he is placed, considers it possible to save the fingers, by a more generous diet, warmth, keeping the bowels open, and dressing the fingers with C. M. P.* He was accordingly placed on full diet; and ordered a pint of porter daily; the fingers to be dressed with C. M. P. and then covered with a pair of flannel gloves.

By the 1st of May, there was some slight improvement manifest; the swelling did not appear so great, and he thought he had more power over them. This, however, soon went off, and they gradually got worse; there was a great accession of pain and irritation, so that he could scarcely bear to have them touched; the tumefaction became greater, the ulceration extended, and a greater portion of the fingers became complicated. Mr. Lynn seemed inclined to give up all hope of saving the fingers, but previously to amputation, determined to ascertain by an exploratory incision, whether or not the bone was really diseased, which he doubted. He accordingly made a cut through the diseased integument of the left finger the whole length of the swelling, but could not detect any disease of the bone. He allowed it to bleed, which it did freely, then tented it with lint, and sent the man to bed. This was done, on the fifteenth of May. He continued without any material change, or if any, for the worse; the incision had nearly healed by the 29th of June, and two or three days afterwards, Mr. Lynn, with the consent of the patient, removed the left finger at the metacarpo-phalangeal joint. One artery required the ligature. The bone was found to be exceedingly diseased, presenting an appearance very much like a honeycomb. Early in the succeeding August, the other finger was amputated, the bone being equally diseased. The stump of this hand did very well; the ligature separated in a fortnight, and the part soon cicatrized. The left hand, however, was not healed by the 3d of September, when he left the hospital.

* C. M. P.
R. Cerati calamin. lb.j.
—— resinæ, lb.j.
Hydr. nitric. oxydi ʒij.
M. Fiat unguentum.

REVIEWS.

A Practical Treatise on Diseases of the Uterus. By John C. W. Lever, M.D.—Longman and Co. 1844.

Dr. Lever is Accoucheur and Lecturer on Midwifery at Guy's Hospital, and in the work before us we have the substance of an Essay presented to the Medical Society, and honoured by its Fothergillian gold medal for 1843. The book abounds in the merits we should thus have been prepared to expect, and if the arbitrators had any difficulty in selecting it for preference, they must have had some worthy men for Dr. Lever's competitors.

Our space will not allow us to enter on an analysis of the book, and a mere advertisement of its contents would ill repay transcription. We say all that is necessary, perhaps, in declaring that, firstly, it is confessedly confined to the *organic* diseases of the uterus; secondly, that though based on large and excellent experience, nothing proposed on them is very striking or original; and that we should yet look in vain for any work on the subject, which, for the amount of its knowledge, expressed with good taste and applied with judgment, we would recommend with less fear than Dr. Lever's.

The Nervous System of the Human Body, as explained in a series of papers read before the Royal Society of London, with an Appendix of Cases and Consultations on Nervous Diseases. By Sir Charles Bell, K.G.B. F.R.S.L., Edin &c. Renshaw, 1844.

A republication of Sir Charles Bell's celebrated work on the nervous system, at such a price as places it within the reach of, we hope, the poorest member of the profession, is a boon that we appreciate on the part of our medical brethren. The value of the book is so well recognised as to render all praise from us a thorough work of supererogation. It has become and will remain a standard work on the physiology and pathology of the nervous system, an imperishable monument of the author's genius. The present edition is produced at a price which can never be remunerative to the publisher. Half a guinea for an octavo book, of nearly 550 pages, illustrated by sixteen lithographs, is a price so monstrously below the ordinary charges, as to shew that the extensive sale contemplated and deserved, can alone enable the publisher to repay himself for common expenses.

It is below the price at which the Sydenham Society *would*, or perhaps *could*, have furnished it to their members, supposing the copyright had been made a present to them. There is now no excuse for so valuable a work not adorning the shelves of every medical library in the kingdom.

GOSSIP OF THE WEEK.

Royal College of Surgeons.—Gentlemen admitted Members on Friday, May 3rd, 1844.—D. W. Eaton, J. Skelding, . Reeves, C. Black, R. Gosset, J. H. Haddock, J. Whinnie, J. S. Bailey, S B. C. Barrett, T. S. Howell, H. M'Great.

Admitted Monday, May 6th, 1844.—S. G. Downing, G. Mitchelson, F. L. Clementson, W. N. Brake, J. Hakes, . Iles, F. Fitch, J. Clifton, J R Theobalds, S. R. Pittard, Lewis, J. P. Walker, T. Scott.

Apothecaries' Hall.—Gentlemen admitted Members on 1d May, 1844.—Thomas Prosser, John Sladen Knight, lfred Barleigh, Robert Fletcher, John Kilner, David avies, Thomas Barfoot Gildersleeves, George Clubb, Henry ohnson, George Masterman Henning, Thomas Michael arrott, Robert Duncan, Charles Robert Morgan.

In answer to a question of Mr. Hawes on Monday last, ord Ashley expressed his regret that so much delay had aken place, before the report of the Poor Law Medical elief Committee could be presented, but the Committee ad to travel over such an enormous mass of important atter, that time was required to digest the evidence they ad got together on the subject. The Report would, in a hort time be presented, when it would repay Members for heir long expectations.

On the same evening Sir J. Graham in reply to Mr. F. Maule, as to when he intended to introduce his Bill of Medical Reform, was understood to say he thought he had nough to do just now with other Bills now before the House, ut he was in a position to state that the Bill was in a forward tate of preparation, and he intended to move for leave to ring it in upon the 30th of May.

A small meeting of the British Medical Association took lace on Tuesday, the 7th instant, at the London Tavern. The chair was, of course, occupied by Dr. Webster, of Dulwich. Nothing transpired worthy of notice, except hat the gentlemen present seemed agreed that protection rom illicit practice, was so essential to the profession, that ny Bill not recognising it, would be unsatisfactory to the rofession Mr. Pilcher delivered the annual oration, which worthy of the two years gestation, which the Associations' uspended animation had allowed it, was a very clever erformance.

The *Times* of Thursday gives from a Smyrna Journal a ase of Natural Somnambulism, in which a Greek student xhibits the phenomena ascribed to some rarer developments of mesmerism: exaltation of mental powers—insensibility of the surface to stimulants, and clairvoyance. Playing at cards he is declared to be always successful; and n one occasion he foretold the coming of three parties, who hortly after appeared.

The following are the appointments and promotions:—A. Allen, of the Queen, who exchanges with T. Keown, of he Formidable; A. Robertson, of the Queen, with H. Edmonds, of the Alecto; J. J. Martin, of the Queen, with D. T. Miller, and C. N. Wilkinson, of the Queen, with W. W. Babington.—Hospital Staff:—Assistant Surgeon N. O'Connor, M.D., from the 59th foot, to be Assistant Surgeon to the Forces: Vice W. Godfrey Wyatt, appointed o the 23rd foot, May 3rd.

French Medical Practice.—The leading feature appears to be, that there is too much science, and too little art. Undoubtedly the former is the best and surest foundation for the latter; but it may be carried to an extreme, and life may be sacrificed in order to determine some scientific point. This is a charge which has been often brought against French physicians, and one which appears to be but too well founded. Human life with us is too precious to be sacrificed at the shrine of wanton curiosity. But we must not forget to award to our Gallic neighbours that distinction which they can pre eminently claim, of having brought the diagnosis to great perfection. There are few English practitioners who can investigate a case with the rapidity, and form a correct opinion of the malady before them with the certainty, of a French Physician. Yet, of what use is this superiority in diagnosis, if they cannot sustain their character in the treatment.—"Provincial Medical and Surgical Journal."

The Committee of the Syrian Medical Aid Association, active as ever, we are happy to observe, in their benevolent aims—design the foundation of a Medical School in Damascus, under the superintendence of our able Correspondent, Dr. J. B. Thompson. We understand that donations of anatomical plates, and other medical works, would be of inappreciable service to their design: and we have great pleasure in recommending to the attention of our readers an appeal so well worthy of their philanthropy and their notice.

PERISCOPE OF THE WEEK.

Frothy saliva.—(This and the thirteen following articles constitute the principal contents of the two last numbers of the *Lancet*.)—This variety of saliva, according to Dr. Wright, presents little or no fluidity, and consists entirely of foam. After a few hours' rest, the frothiness subsides, and the secretion, besides being rather more dense, and containing a little more albumen than natural, presents nothing either chemically or physically remarkable. It is invariably pathognomonic of general nervous excitement, and is a very prominent symptom in hydrophobia, both in the stages of calmness and of convulsions. The irritability, which often precedes an attack of mania or phrenitis, is usually attended with frequent spitting of frothy saliva; or when the secretion is less abundant, and passes unconsciously to the pharynx, the patient is perpetually hawking and straining to dislodge it. It is often the forerunner of an epileptic fit, and is generally present in irritable hypochondriasis. It is very rarely acid or neutral, and is not unfrequently more alcaline than usual. Dr. Wright has never found local remedies of the least avail in checking or controlling the secretion of frothy saliva; indeed, he thinks local applications unadvisable, except as palliatives; when the salivary glands are swollen or painful, the chief attention should be directed to the disease, of which the altered salival function is a symptom.

Urinary saliva.—Of this rare variety of saliva, Dr. Wright has met with one or two examples, and other instances are recorded by different writers. In a case of spontaneous salivation, mentioned by Dr. Prout, in which the saliva had an urinous taste, the renal secretion being much diminished, the fluid secreted contained a free alcali, to the presence of which Dr. Prout attributed its peculiar taste. This, however, Dr. Wright regards as an erroneous opinion, because uncombined soda is a constant ingredient in healthy saliva. He has no doubt whatever that the action of the salivary glands was distinctly vicarious of that of the kidneys, and that the saliva, on further analysis, would have furnished clear evidence of the presence of urea. He himself narrates two cases of this vicarious action, in one of which the original disease was granular degeneration of the kidneys, in the other ascites, arising from sub-acute inflammation of the peritoneum. In both instances, urea was detected in the saliva; in the latter, during a spontaneous ptyalism that occurred after tapping. The saliva was of a pale chocolate colour, slightly ammoniacal in odour, strongly alcaline in reaction, and, according to the patient, excessively disagreeable in taste. After the occurrence of the ptyalism, no urine was secreted for three days, though subsequently the salivation diminished, and the urinary secretion was partially restored. A pint and a half of this saliva contained ten grains of urea; the other constituents were, fatty matter, albumen, albuminate of soda, and the sulphocyanates, muriates, carbonates, and phosphates, of potash, soda, and lime. The proportions were not determined Urinary saliva being pathognomonic, either of disorder or disease of the kidneys, and an example of purely vicarious action, demands to be considered in especial connection with the ailment upon which it depends; the remedial object being, in the one case, to restore the kidneys to their proper functions; in the other, to promote the vicarious discharge, for the relief of the system, and the prolongation of life.

Gelatinous saliva.—Gelatinous saliva has an appearance somewhat resembling gum water. It is imperfectly transparent, and rather dingy looking, viscid and tremulous when cold, but rendered more fluid and clear by heat. It does not easily froth when agitated; it readily decomposes, and becomes mouldy and sour. Its specific gravity is higher than natural; Dr. Wright has found it to be 1.009.9 and 1.0101. It has a mawkish taste and greasy odour; even when heated, it evolves no odour of ptyaline. The latter substance and sulphocyanogen are in less proportion than usual. This variety of saliva, which is also exceedingly rare, is neutral or faintly acid; it absorbs oxygen sparingly, and possesses little or no digestive property. Dr. Wright is inclined to regard gelatinous saliva as pathognomonic of a very debilitated and depraved state of the system. It indicates the employment of tonics and mineral acids, but the cases in which it occurs may be regarded with suspicion.

Milky saliva.—Milky saliva is an opaque white fluid, sometimes uniform in appearance, but often curdy. The coagula are increased on the addition of acetic acid. All the constituents of healthy saliva are generally present in this variety of the secretion, in intermixture with genuine milk. Its specific gravity is higher than natural. The fluid is either faintly alcaline or neutral; it is easy of decomposition, and is rendered sour by the process. It readily absorbs oxygen, but has very feeble digestive properties. It is sometimes sparingly secreted, but is most commonly discharged profusely. It occurs only as a metastasis from the mammary to the salivary glands. It may appear gradually, and in small quantity at the commencement of ablactation, or it may be developed suddenly, as a critical ptyalism, in milk fever. The latter more commonly happens, and is almost invariably the forerunner of recovery. The secretion of milky saliva is not preceded by any particular symptoms which denote its accession, except, in some cases, tumefaction and heat of the salivary glands, succeeded in a few hours by a sensation of cold in the mouth, and aching of the jaws. When the quantity of milky saliva secreted does not exceed the proportion of natural saliva, it may continue with occasional intermissions, for weeks in succession; but when it occurs as a critical ptyalism, it seldom intermits, and usually terminates its course in three or four days. It depends upon the severity of the constitutional symptoms which attend the secretion of milky saliva, whether it should be promoted or checked. If the constitutional symptoms run high, the sudden arrest of the secretion may be dangerous. It is then advisable to employ a mild gargle, and give diuretics and aperients. Under other circumstances, an astringent gargle may be at once had recourse to.

Indian hemp.—Mr. Ley states that Dr. O'Shaughnessy has transmitted a quantity of the extract of this plant by overland mail to England, one grain of which he finds to be a potent soporific. The tincture prepared by dissolving the resin in spirit is an objectionable formula, on account of the separation of the resinous principle on the addition of water. It is probable that the resin exists in the plant at all times, as it certainly exists in the seed: but it is curious that the peculiar resinous exudation is characteristic of the female plant after impregnation. That is probably the period when the resin is most abundant, and is the period chosen for cutting and drying the gunjah.

Malignant disease.—A case is recorded from the practice of Mr. Scott, at the London Hospital, of malignant disease of the thigh-bone, following local injury, occurring in a cachectic lad, 19 years of age. A swelling formed immediately above the internal condyle, increased in size considerably, and became the seat of acute aching pain at intervals. Hæmoptysis, and dulness on percussion over the inner part of the upper lobe of the right lung, accompanied with bronchophony, also complicated the case. After a residence of five or six weeks in the hospital, the local symptoms becoming more intense, and the hæmoptysis recurring at intervals, amputation was performed at the earnest request of the sufferer. On opening into the tumour longitudinally, it was found to consist of a mass of medullary matter, of sub-flavous colour (yellowish, we presume), enclosed in interstices formed by the interlacement of tissue, soft, and easily broken down, mixed up with dark, semi-coagulated blood, of the colour of lees of port wine. Interspersed among the morbid deposit were numerous cells with membranous parietes, irregular in form and size, more frequent towards the surface, and filled with sanguineous fluid. The upper surface of the articular extremity of the femur was excavated, and filled by medullary deposit similar in physical and microscopic characters to that imbedded in the soft parts. An inch and a half in length of the thigh-bone had disappeared, its place being supplied by the malignant deposit. Irritative fever set in after amputation, a tumour formed on the stump, and the lad died three weeks after the operation. The examination of the body shewed both lungs the seat of malignant disease, the right pleura being ulcerated from the pressure of the tumours; and a vertical section of the remaining part of the femur demonstrated the absence of cancellous structure and its appropriate medullary lining, the canal being filled up to a level with the great trochanter with dark, soft, hæmatoid deposit. The mesenteric glands were softened and enlarged.

*** This case was not a fit one for operation; if it had been so, the only operation admissible would have been amputation at the hip-joint.

HEMIPLEGIA.—A case of hemiplegia is reported from St. George's Hospital, occurring in the person of a short, stout man, thirty years of age, after great and continued fatigue and repulsion of free perspiration by a bleak wind. Tonics and a generous diet appeared to be of the greatest service to him.

A LIBERAL OFFER.—The guardians of the Malton union have advertised for a medical officer for the Norton medical district, at the very handsome salary of £20 a-year, with the following extras: *full eighteen pence* for each successful case of vaccination: *ten shillings* for each midwifery case, and the fees for surgical operations fixed by the medical order of the Poor-Law Commissioners. The district to be under the supervision of the lucky wight who may chance to be selected by the Dogberries of Malton, includes only the townships of Norton, Scrigglethorpe, Settrington, North Grimston, Langton, Wharram-le-Street, Duggleley, Kirby, Grimthalyth, and Thirkeley, ten in number, being consequently at the rate of *two pounds a-year for each township*. We trust that Mr. Wakley has sent a free copy of this number of his *Lancet* to every Member of Parliament. The liberality of the Malton guardians is truly worthy of that honour: it deserves to be blazoned forth to the wide world. The light of such deeds should not be concealed under a bushel.

CONTUSED WOUND OF THE EYE.—A case of contused wound of the cornea, with prolapsus of the iris, is reported from the practice of Mr. Morgan, at Guy's Hospital. In consequence of the injury, blood was effused into the anterior chamber, which was afterwards gradually absorbed. Inflammation set in afterwards, and was combatted by cupping, &c. The patient ultimately recovered, and was discharged in the possession of vision sufficient for all ordinary purposes. There was still visible on the anterior capsule of the lens a streak of fibrine, the only remaining relic of the effused blood. The case is principally remarkable for the practice that was pursued. The day after admission, the report states that the edges of the corneal wound were uniting, the prolapsus of iris diminished: blood effused into the anterior chamber, giving a reddish-brown appearance, and obscuring that portion of the iris which remains *in situ*. There was but little vascularity of the tunics. The patient who, for an hour, had suffered from red, globular spectra, afterwards complained of bright yellow muscæ, and could but just discern daylight. She was free from pain, either in or around the orbit. To combat this state, in which clearly there was no inflammation, cupping on the temples, and the internal exhibition of mercury, were directed. To the former we cannot object: the injury must necessarily be followed by inflammation, but the indiscriminate employment of mercury is certainly objectionable. It cannot be of any service, and must be injurious to the system. We have seen several cases quite as severe as the one under notice, recover, without having recourse to mercury, except as a purgative.

OVARIAN DROPSY.—Mr. Brown states, that by the use of mercurials, diuretics, tonics, and *tight bandaging*, followed by tapping, he has succeeded in curing four cases of ovarian dropsy. His patients were all young, unmarried females.

CHRONIC PLEURISY, WITH EFFUSION.—Dr. Chambers, of Colchester, has published several cases to shew the insidious nature of this disease, and the possibility of curing it by inducing mercurialization, thus avoiding the necessity for paracentesis. He is desirous to draw the attention of the profession to a physical sign, which he says he has found to be invariably co-existent with pleuritic effusion. The nearest representation he can give of it is that conveyed by the expression "gentle gurgling,' but this is not an adequate description; it appears as if it proceeded from the rolling or displacement of a fluid, and Dr. Chambers thus explains its occurrence:—"During inspiration a portion of fluid becomes pressed up between the lungs and the parietes of the chest, which falls back again on expiration." We cannot think the doctor's explanation at all satisfactory.

LARYNGITIS.—A case of laryngitis occurring in a child a year and a half old is narrated by Dr. Thomson, which is principally of interest as shewing the erroneous conclusions which are occasionally come to from the details of a single case. The patient did well without an operation, the treatment consisting principally of the exhibition of salines, diaphoretics, and emetics, and the conclusion which is arrived at by Dr. Thomson is, that the result goes to exhibit the impropriety of operating when there is doubt of its favourable termination. One other feature in the publication may be worthy a passing remark. The editor of the *Lancet* declares his object in giving the prescriptions in English is, that mistakes may be avoided; yet, in this very instance, we have, if we are not in error, the hydrochlorate of ammonia printed for the hydrochlorate of morphia. The coffee-house readers of our contemporary would be rather puzzled with a prescription in latin.

FATAL HÆMORRHAGE FROM THE OVUM.—Dr. Meadows, of Portsea, narrates a case of fatal hæmorrhage from the ovum, occurring in a woman twenty-eight years of age, the mother of two children. On examination of the abdomen after death, there was found effusion of blood throughout all the lower parts, extending throughout the whole of the inside of the pelvis cavity, reaching to, and surrounding the left kidney near its peritoneal coat, and completely imbedding the uterus. In the right fallopian tube was an extra-uterine fœtus, about seven weeks advanced, distended to an inch and a half (with its investing membranes) in diameter: this was surrounded by coagula of blood. The hæmorrhage had occurred from the proper vessels of the ovum; it amounted to more than six pints in quantity. The uterus, on being opened and examined, exhibited a marked and well-formed lining, the decidua above a sixth of an inch thick, and which was plainly the external covering of the ovum, though deficient of its proper contents, the ovum not having descended.

ORIGIN OF CONDYLOMATA.—Mr. Acton observes, in answering the question, are condylomata syphilitic, that nearly all modern surgeons, who have had extensive opportunities of seeing venereal disease, are so agreed, that while they frequently found warts and vegetations accompanying discharges, condylomata followed syphilis so frequently, and were attended so often by other well marked secondary symptoms, that they were obliged to consider them (even when they are present as the sole symptoms), as a consequence of a previous affection. Admitting, however, that condylomata generally are syphilitic, may they not be occasionally produced by other causes? The possibility of this cannot be denied; experience, however, has as yet failed in supporting the doctrine; facts and observation are opposed to this hypothetical opinion, children are seen suffering under all varieties of affections of the skin, yet condylomata are very uncommon, occurring only in those instances where syphilis is, or has been well-marked. If dirt or irritating discharges from the genital organs could alone produce condylomata, how happens it that they are so rarely met together, although the neglect of parents gives plenty of opportunities, could inattention to cleanliness produce such effects.

INFLUENCE OF IODINE VAPOUR ON THE DIFFERENT FECULÆ.—In order to ascertain the behaviour of the different kinds of feculæ with the vapour of iodine, M. Gobley exposed them to its action, and, after twenty-four hours' contact, he obtained the following degrees of colouration:—starch, a violet colour; potatoe fecula, dove colour; genuine arrow-root, the colour of *café au lait clair*; arrow-root, with one fourth of starch, a grey lilac; factitious arrow-root, dove colour; genuine tapioca in its entire state, all the grains of a yellowish colour; genuine powdered tapioca, a chamoy colour; genuine powdered tapioca mixed with one-fourth of starch, a violet colour; factitious tapioca in its entire state, some grains of greyish violet, others yellowish; powdered factitious tapioca, chamoy colour; powdered factitious tapioca, mixed with one-fourth of starch, a violet colour; white sago in its entire state, some grains, a grey violet, the others, yellowish; powdered white sago, a chamoy colour; powdered white sago, mixed with one-fourth of starch, a violet colour; dextrine, no change of colour. By this table, it may be seen that starch and the potatoe fecula assume, under the influence of the vapour of iodine, very different kinds of colouration; that arrow-root, when it is pure, assumes the colour of *café au lait clair*; when mixed with a fourth part of starch it becomes of a grey lilac (the potatoe fecula would not serve for this purpose, as, on account of the greater diameter of its granules, the fraud would be readily discovered), and that factitious arrow-root becomes of the dove colour, that is to say, the same colour as the potatoe with which it is prepared. Tapioca and sago, in the entire state, both genuine and factitious, sensibly assume the same yellowish tint, and the powder of tapioca and sago, both the genuine and factitious, which many pharmaceians purchase in the market, on account of the difficulty of preparing them, all assume a chamoy colour. Thus, by means of iodine vapour, starch can be distinguished from potatoe fecula, genuine arrow-root from that which is factitious or adulterated with starch; we may also ascertain whether the powder of the genuine and factitious tapioca has been replaced by the fecula of wheat or potatoe, or mixed with them; but it will be impossible to ascertain whether the powder of the genuine tapioca and sago has been replaced by the powder of the factitious articles, as they all assume a chamoy colour. M. Gobbley enquires why the potatoe fecula, starch, and arrow-root assume, under the influence of the vapour of iodine, a more or less deep tint, whilst genuine and factitious sago and tapioca, in the entire state, or when powdered, become of a yellowish colour only, and he answers the question by the fact that the latter have undergone the action of fire, which, as is known, changes fecula into gum or dextrine. This latter, as has been said, is not coloured by the vapour of iodine; if then the genuine and factitious tapioca and sago assume a yellowish tint, it must be, because the feculent matter has not been changed into dextrine. The colouration of the feculæ is due to the property that these bodies possess of absorbing the vapours of iodine and of water. Experience shows that feculæ are only coloured by iodine, because they are humid; in fact, if, before exposing them to the action of iodine, they are dried at 212°, they will not become changed in colour, by a contact of 24 hours, providing they are so placed as not to regain their moisture. Although under these circumstances the feculæ remain colourless, they have nevertheless absorbed iodine, for, if they are brought into contact with water, they become coloured in the same manner as they would have done, if they had been used in their ordinary condition.

FACTITIOUS AND GENUINE FECULÆ.—M. Gobley, in the *Journal Chimie Medicale*, says that factitious arrow-root presents the granulated appearance of the genuine article. Genuine sago in its entire state, is easily distinguished from the factitious article. Genuine sago, such as it is met with at present in commerce, is in the form of small irregular grains, very hard under the teeth, sometimes white, sometimes of a rose-colour. Genuine rose-coloured sago is very rare, almost all that is met with in the market being merely white sago, coloured with carmine. It is easy to discover this, either by treating the rose sago with ammonia, as Planche advises, or with alcohol. The ammonia or alcohol will dissolve the colouring matter, and assume a rose tint. Factitious sago is almost as hard as the genuine, but the grains are larger and more uniform; they are also much whiter than those of the true white sago. Thus these two sagos are easily distinguished from each other. Genuine tapioca in its entire state is easily recognised from the factitious. The first is in the form of irregular lumps, opaque, or of a dull white colour, very hard, always composed of small grains agglomerated together; whilst factitious tapioca is in almost regular fragments, less white in colour, softer under the teeth, but more brilliant than those of true tapioca; they are homogeneous in structure, and have not the granular appearance of the genuine tapioca. It is, therefore, very easy to distinguish between these two substances at sight, when they have been once carefully examined.

A COURSE OF CLINICAL LECTURES ON SOME IMPORTANT POINTS OF SURGERY,

Delivered at St. George's Hospital, by Sir Benjamin C. Brodie, Bart.

Lecture VI.

Carcinoma of the Lip.—You saw the other day two operations for carcinoma of the lip. In one of those, there was a tumour occupying at least two-thirds of the under lip; in the other it extended from the left angle of the mouth, and occupied about a quarter of the lip. This last began about fourteen years ago, from the irritation of a pipe, the patient at the time being in the constant habit of smoking. I shall to day make some observations on this disease, and also on some other affections liable to be confounded with it. I believed these to be carcinomatous: first, from there being hard tumrous ulcers, extending deep into the lip; secondly, from their having existed for several years; and I am confirmed in this opinion from the appearances they presented after removal. Carcinoma generally occurs in the under lip, and mostly in the male sex. It is rare in women, but very common in men. I mentioned that one of the patients was addicted to smoking, and that he believed the disease to be from constantly resting the pipe on that part of the lip; I believe myself the cause of the disease is to be attributed to the pipe. The same thing was observed long ago by Mr. Hird. This disease is not curable by medicine; the only recourse then is either to apply caustic, or else extirpate by the knife; this latter sometimes succeeds perfectly, at other times only for a limited period, and some times, again, is speedily followed by a return. Although this therefore is anything but a certain cure, nevertheless in the majority of cases the operation should be performed. Sometimes, I may remind you, these tumours occupy the greater part of the cheek, and the larger they are, the more liable are they to return. Whenever the glands in the upper part of the neck are affected, the operation is not to be performed, but these may be contaminated without your finding it out; I have seen many cases where this has occurred, and when this happens, you generally have a return of the disease in a few months. But where these glands do not appear to be affected, the operation should always be performed, as no danger attends it; the only mischief I ever saw follow it has been an attack of erysipelas. You saw that I performed these operations differently. In the one a triangular piece was taken out, and the parts brought together, and pinned, whilst in the other I removed a semicircular piece. I shall not enter into minute details of these different modes of operating; but you will recollect that in one it occupied only one-fourth of the lip, and that this case therefore was well suited for the triangular operation, because the cut edges are easily brought together. And another great advantage is that the cure is effected immediately, for the ligatures may be taken away on the third day, and all may be removed by the fifth day, after which no sore remains. Why did I not perform the same operation in both cases? because in the second, it occupied three-fourths of the length of the lip. When it only occupies a small portion of the lip, the triangular operation succeeds very well; but in this case it would have made a very contracted lip, because you must have cut down to the chin, and then have drawn the parts together. I do not say you may not remove half, for I have removed three-fourths of the lip, and then in a month it has healed, but it has been very small. In these cases the skin is drawn from the cheek to form the new lip. I believe with Richerand that where the disease extends over a large portion of the lip, the semicircular operation is preferable. At first there is a good deal of slobbering, but as the cicatrix heals this gradually discontinues. By this operation only a small piece comparatively speaking is removed; but if the triangular operation were performed in such a case as this, a very large piece must be taken away; in fact you must cut down to the chin to enable you to apply your ligatures properly. However, you must recollect that in the semicircular operation the cure is much more tedious. The cases then in which you are to operate are, when the glands of the neck are not affected, and when there is no evidence of other disease. But in no case can you be certain of effecting a cure; for sometimes when everything has appeared favourable, you will have the patient coming to you perhaps a twelvemonth after the operation with a recurrence of the disease; still you have given him a chance; he has had a respite from his sufferings, and has enjoyed a year's good health.

I shall now call your attention to some of those diseases with which carcinoma is likely to be confounded. Tubercles occur upon the face, especially amongst people advanced in life,—fleshy tubercles remaining stationary perhaps for years, and then beginning to suppurate. If you cut into these, they have not the appearance of the scirrhous tumours, but present a fungous appearance. These sometimes ulcerate; and then they gradually extend, and you feel something like a tumour at the bottom of the ulcer, and you cannot get the part to heal. In other cases you have a little secretion from some part of the face, which dries and forms a scab; this when peeled off looks like thickened cuticle, but the scab is soon regenerated, and the ulcer extends over the whole of the face. These differ materially in nature from malignant disease; but still I have known them extend to a great degree and to destroy life, and indeed when they become of any considerable extent, they present very much the appearance of malignant disease. They differ from fungus hæmatodes in not affecting the neighbouring glands; and if either by the knife or by caustic you extirpate the apparent disease, there is nothing lurking as in scirrhus. In whatever way you remove these, the patient is quite safe, whether you employ the scalpel or caustic. These tubercles occur both on the face and lip, but are easily distinguished by the hardness being confined to the surface, and not at all affecting the glands, so that you must be careful not to confound them with carcinoma. Recollect then, they are confined to the surface, and may be removed either by the scalpel or with caustic. For this latter method I have employed the caustic potash, and also nitric acid, but you must take care to keep this from the nose. But of all caustic applications, I think the best is a mixture of equal parts of the chloride of zinc and flour, or plaister of Paris, made into a paste and applied over the surface; this will give great pain, but no application is so efficient; and if the first dressing does not prove sufficient, a second must be had recourse to. The disease most likely to be confounded with this is a primary venereal sore. This you will think very remarkable, nevertheless such is the fact. I have seen many cases of this kind proved to be venereal by their yielding to mercury, and being followed by secondary symptoms. Chancre of the lip is a small ulcer, which, when established, feels hard at its base, something like a piece of pasteboard between the fingers; the ulcer is excessively painful, and if it is allowed to go on, a bubo forms in the neck, and you get a syphilitic sore there, or perhaps an eruption on the skin. The reason you are liable to confound these diseases is from the chancre becoming hard at its base; and I have known several well-informed surgeons run into this error from not having seen this latter class of cases. A patient came to me some time ago, who had been for a long period under the care of a very clever surgeon, who had appointed the next day for the removal of the lip; but I requested that he might be put upon a course of mercury first, and he got well. There is another disease which occurs inside the lip, and is apt to perplex persons who have not seen it before; but once seen you cannot confound it. Under the mucous membrane inside the lip, a small tumour is observed, assuming a globular form, which proves it to contain fluid (as very few tumours are perfectly spherical without containing fluid); it goes on increasing in size, and then of course becomes inconvenient. If you attempt to dissect it out you will in all probability cut into it, and a glary fluid escapes, which you find to have been contained in a very thin cyst. It is in fact formed by one of the labial glands. The most probable explanation of these formations is, that the orifice of the gland becomes blocked up, and the saliva is enclosed in the acini which secrete it. You may relieve these by puncturing them with a lancet, and the patient thinks he is well; but in a few days it forms again, increases in size, and is as bad, or perhaps worse than before. I have run setons through them, and this cures them for a time, but you cannot depend on it as a certain cure; the only method then is to destroy the gland altogether, for as there are a great many of them, you can do no harm. If you attempt to dissect them out, you will find the operation very troublesome, and generally there is a great deal of bleeding from the vascularity of the part. The best way, then, is the following:—Stretch the lip over the finger, and with a lancet make a very small opening into it;—take care not to lose sight of this opening as you will have great difficulty in finding it again; squeeze out the matter; then, with a piece of caustic potash, previously shaped like a pencil, introduced through the opening you have made, rub the inside of the cyst; this will make it slough, and there is an end of it. In these cases, if you attempt to extirpate it without destroying the gland it will plague you for a long time, and you will not succeed at last. I have been led to speak of these diseases from their occurring in connexion with the lip, and if you did not understand their nature you might often be led to think that you had found a case of malignant disease.

I shall take this opportunity of speaking to you of another disease which corresponds to the one I have just mentioned. It occurs under the tongue, and it is principally amongst the out patients that you will meet with it. It is called "ranula." If you lift up the tongue you will find a tumour as large as a horse-bean, and this soon becomes larger; examine it with your fingers, and you will find it contains fluid; these tumours produce very considerable inconvenience. Well, you puncture it with your lancet; out comes half an ounce of fluid, and your patient immediately tells you he is well, and can move his tongue again as freely as ever; he is well perhaps for a week, but by and bye the tumour returns, and he comes to you again; but why does it return? because the opening has closed, and the fluid collects again of course. What is this tumour? It appears to be in the duct of the submaxillary gland. The orifice is stopped up, but the gland goes on secreting; the secretion is lodged in the duct which gradually dilates so as to form a bag, just as when an impediment occurs to the flow of urine down the ureter, it will dilate to the size of the small intestine. I have seen the urethra dilate in the same way, making a large membranous pouch in the perinæum. You cannot apply the same remedy here as in the labial glands, because extirpating this tumour would be worse than doing nothing at all. From the number of small glands in the lip you can extirpate one with impunity, but not so with the submaxillary gland. What you have to do here is to make a permanent opening in the duct; this I have done by making a small incision, then introducing the forceps and cutting out a circular piece. At other times I have run a seton through and left it there. I have also had a metallic or wire ring made and kept it open in this way: at other times I have destroyed a portion with the caustic potash. But there is not one of these methods which has not disappointed me; I have even removed half the bag; it has taken a long time to close and I thought I had effected a cure; but in three or four months it has closed and the tumour has returned. I have run a seton through, composed of several silk threads; then I have fastened them to the cheek with sticking plaster, and the saliva has run out by them; I have made the patient wear this several days, but on its removal the part closes. The best way seems to be letting the seton ulcerate out, and then there is a chance of its remaining fistulous. There is this advantage in employing a metallic wire for your seton, viz.: that it does not irritate so much as silk, and it is said there is more chance of the opening remaining pervious. After all, I think the best way is to allow a seton to remain in a few days, then remove it, and teach the patient to introduce a probe daily; this he will soon learn to do if he is an intelligent person; this will act precisely as in cases of stricture of the urethra, where

the patient is taught to pass a bougie. It is a remarkable circumstance, that I never saw the duct of the parotid gland so affected, and I suppose this to arise from its great width. I have seen fistulous openings and the saliva escaping externally; but this is widely different from the affection of the sub-maxillary gland, of which we have been speaking.

Now that we are upon this subject, I shall make some remarks on *abscesses of the parotid gland.* These sometimes, after a very short time, heal readily; but at other times they will not, in consequence of the continued escape of the saliva externally. At a meal this occurs in great quantity, and, of course, produces very great inconvenience. Some have said that half a teacupfull may flow out on these occasions, but this is evidently an exaggeration. The cure of this affection is performed without trouble. The abscess will go on healing till it leaves a very small opening: this you are to touch every day with nitrate of silver, and as it contracts, the saliva will find its way by another passage; but every now and then this is insufficient. In these cases introduce a probe by the external opening to the gland; then pass it carefully on till you feel it inside the cheek, where you will have nothing but mucous membrane between it and your finger; having done this, you are to puncture the mucous membrane and pass the end of the probe into the mouth (an eyed probe should be employed); you will then have one end inside and the other outside the cheek. Then arm the eye of the probe with silk and draw it through, remove the probe and allow the silk to remain in. Then, at the external end of the silk, make a large knot and bring it to the mouth of the wound; this will prevent the saliva flowing externally, whilst the threads direct it into the mouth. Keep this in, till the inner opening is well established, which generally requires about a fortnight or three weeks; then remove it and touch the external opening daily till it closes. I don't know whether the internal opening always remains pervious; but certainly the saliva finds its way through some internal canal.

COURSE OF LECTURES ON THE THEORY AND PRACTICE OF MEDICINE.

Delivered by C. J. B. WILLIAMS, M.D., F.R.S., Professor of the Practice of Medicine, and of Clinical Medicine, at University College.

Effusion into the Sac of the Pericardium.—Liquid effusion into the sac of the pericardium sometimes takes place to a very great extent, so as to swell up the pericardium with two or three quarts of fluid; consequently occupying a considerable portion of the left side of the chest, mounting up towards the axilla, and even extending to the right of the sternum. There is a great amount of dulness on percussion induced, which extends along the whole of the anterior and lateral parts of the left side of the chest; we may yet distinguish a degree of resonance on percussion towards the axilla, as well as along the posterior surface of the chest, although this resonance is impaired. Such is not heard in cases of liquid effusion into the pleura. In that case there is no pulmonary resonance in the lower part of the chest, and no sound of the respiratory murmur. You here see what a great amount of effusion may take place, and how the adjoining organs may be disturbed by it. This amount of liquid effusion naturally produces a great degree of dyspnœa and oppression, and it is in such cases that the symptoms described as characteristic of pericarditis generally occur. There is extreme anxiety of the countenance, with great oppression of the chest, and irregularity in the state of the pulse: a disposition to faintness, and orthopnœa to such a degree as to make it impossible to lie down. This is an extreme case, and does not often occur. Pericarditis is not so immediately fatal a disease, as it is generally represented to be. Some cases prove fatal on the first attack; the great majority do not. It is very apt to lay the foundation of subsequent organic disease: although the patient gets well at the time, some mischief takes place afterwards. The cure of pericarditis will be very much determined by the nature of the matter effused. If the effusion, whether liquid or solid, be to a moderate extent, and the inflammation be actively treated, it will soon cease, and with it the friction-sound and the dulness on percussion. When it is extensive in quantity, and adhesions take place, the matter is not so readily dispersed under the influence of remedies. But the effect of the adhesions will vary, according to their nature and the manner in which they are formed. If the adhesions formed are of a loose or slight character, and the effusion be moderate, they do not materially interfere with the plastic powers, or with the heart's motions: but if the quantity of liquid be excessive, it retards the plastic powers, and it may leave behind it some degraded membranous formations of a cacoplastic character, which tend to shackle the heart's action. The adhesive is more to be apprehended than the liquid effusion in this disease; organization of matter takes place around the heart, which is in a weak and compressed state, and thus the action of this organ is greatly impeded. This is one of the circumstances that tend to tie down and shackle the heart in the performance of its functions. In these cases, we observe that the impulse is indistinct, and the action of the heart is feeble and often irregular, long after all the symptoms of inflammation are removed, and when the constitution appears to have recovered and returned to a pretty healthy condition. The structure of the heart often becomes altered; it is sometimes hypertrophied, while, in others, the symptoms of defective action are exhibited. In the one case, you have the heart over-nourished and increased in size; the heart becomes stronger in its stroke, and the quantity of the blood is increased; on the other hand, the opposite condition may take place: sometimes it does not recover its tone and action; and under these circumstances it is found frequently not only not increased in size, but actually diminished, and the structure paler. This is a bad result, and is often fatal. Sometimes the adhesions are only partial. The deposition may be re-absorbed, or it may be effused in patches in some parts, while the other parts are comparatively free. Adhesions are found on a small portion of the heart, sometimes at the base, sometimes at the apex, and sometimes at the side. The effect of these adhesions will vary according to their position and their nature. I have found adhesions at the base of the heart, when there have been no serious symptoms of heart disease; but I have never found adhesions at the apex of the heart, without their being accompanied by some alarming symptoms It has been a matter of discussion, whether these patches on the heart were dependent on pericarditis, or whether they did not indicate some abnormal condition resulting from a change in the nutrition of the parts. I have observed these patches to co-exist with certain lesions, in which there were small bands connecting the heart with the pericardium: shewing, therefore, that the patch was identical with the quality and nature of the material which formed the adhesion, and that it was dependent upon the disease. I have also seen the adhesions in a partially broken-down state, the attachments being continued by little prolongations. The signs of adherent pericardium will vary very much. It does not always interfere with the action of the heart; but generally where there is this condition, there is an irregular action of the heart accompanying it. It is difficult to distinguish the irregular action of the heart produced in this way, from that resulting from real organic disease of this organ; inasmuch as the same thing may arise from valvular disease or hypertrophy. There are, however, a few things in the diagnosis that sometimes are of avail; and the most certain of these is the manner in which the adhesions interfere with the expansion of the lung. When the heart is firmly adherent over a large surface, the inflammation has generally existed long; and, in such case, it commonly happens that not only the heart is adherent to the pericardium, but the latter is also united to the walls of the chest; one effect of which is to transmit the impulse more fully to the chest. The existence of adhesions prevents the expansion of the lung to its full extent, so that the lung cannot overlap the heart, and full inspiration produces but little or no increase in the resonance on percussion.

Another sign, pointed out by the late Dr. Hope, is this:—the effect of these adhesions sometimes is to brace up the heart, and to cause it to adhere closely to the walls, as I have just described, and the heart in consequence becomes enlarged and hypertrophied. The adhesions prevent the heart going low down, and hence the enlargement takes place upwards and towards the spot where the heart is non-adherent. There is another circumstance which has been noticed by Louis; that is the alteration in the shape of the chest resulting from adherence of the pericardium. This is not exclusively confined to this disease. Enlargement of the heart will do it, more particularly in young subjects; but it is more decidedly produced in cases where the pericardium is adherent, than in others, and for the reason I have just explained; the heart being shackled, and not being able to enlarge downwards so much as usual, its dilatation takes place upwards and outwards, and forms a sort of bulging projection in the side. This occurs much more remarkably in young than in old persons, because the walls of the chest, in young subjects, are more easily moved and pushed aside than in old age. The liquid effused into the pericardium is most generally serum; but sometimes instead of clear serum, there are shreds of lymph in it. Where a sero-purulent effusion is thrown out, the chances are very great that the disease will prove fatal.

Inflammation of the Internal Lining of the Heart.—*Endo-carditis*—inflammation of the membrane lining the heart and covering the valves, sometimes accompanies pericarditis, as you might expect from the connexion of these membranes one with another. Endo-carditis may exist independently of pericarditis, and is a common disease in conjunction with rheumatism. It sometimes arises from rheumatism, and sometimes it is produced by other causes,—injuries, and the various other circumstances which tend to the production of pericarditis. The presence of endo-carditis is less obvious than pericarditis, because the products of the inflammation—lymph and serum—are swept away with the current of the blood as soon as they are formed. The deposits of lymph, when formed, take place most commonly in the granular shape: these granules coalesce, and a sort of vegetation takes place, projecting on the surface of the membrane; this vegetation consists probably of fibrin, arrested from the circulation of the blood. Sometimes, there have been found little abrasions or ulcerations on the endo-cardium, not unfrequently on the lining membrane of the auricle, near the auricular orifice, and, in a few instances, near the orifice of the aorta, and sometimes in the arteries. Endo-carditis, though it may be diffused throughout the lining membrane and cavities of the heart, exists to the greatest extent at the left side of the heart,—at the orifice of the aorta, or the mitral valve. The general symptoms of endo-carditis are more obscure than those of pericarditis. They will vary according to the relation this disease bears to the accompanying rheumatism. Where it is extensive, there may be increased action of the heart, sometimes irregular action: there is also a palpitation, and a disposition to faintness or oppression, and agitation; pain and soreness in the region of the heart, over the sternum, or at the epigastrium. It is a disease which may occur by itself, independently of other affections; it prevails most commonly near the orifices of the heart, and the effect of this is to produce irritability in the action of this organ. The first effect of inflammation in the structures covering muscles, is to increase the irritability of the muscles; and this explains the irritability at the arterial orifices. Endo-carditis is accompanied with a peculiar murmur during the passage of the blood through the orifice, which constitutes a valuable sign in combination with fever, and pain in the region of the heart. These signs are, however, transient: the murmur exists for some time, and is then removed. Where it exists for a long time, it becomes modified. The murmur is usually blowing at first, and then it changes to a filing or rasping sound; and it is probable that, in these cases, a deposit of lymph has taken place. Sometimes, in endo-carditis, the murmur is referable to the mitral valve, and is heard best below the left breast, and but indis-

tinctly at the top of the sternum and in the situation of the large vessels. Sometimes the deposit takes place on the chordæ tendineæ, and they become agglutinated together, and lose their tension, and thus the valve becomes loose. The chief physical signs of endo-carditis are those of incipient valvular disease; and the reason why we can generally distinguish this from valvular disease of a chronic character, is by finding the murmur to be suddenly developed where it did not exist before. Besides this sign, the pulsations of the heart are usually quickened, and the impulse rendered stronger. Sometimes, where the murmur is produced, I have known the first sound to be rendered double. In connection with these symptoms, there may be some of the signs which I mentioned as occurring together with excited action of the heart, and disturbance of the circulation; as, cerebral symptoms, delirium, a feeling of giddiness, and confusion of the head. Ultimately there is defective action; the heart becomes exhausted, as a consequence of its previous excitement; it is weakened, as in the case of pericarditis, but more so in endo-carditis. It may happen that extensive valvular disease is produced, which interferes with the proper propulsion of the blood through the heart. This is where the structural disease is very great. This will form an impediment to the circulation of the blood through the heart; sometimes the valves are partly contracted and blocked up.

Inflammation of the Muscular Structure of the Heart.—Carditis is a very rare disease, as distinguished from pericarditis and endo-carditis. There are cases described by Dr. Latham of pus infiltrated into the muscular texture; but the muscular texture itself is scarcely susceptible of inflammation, inasmuch as it contains no cellular texture; and it is difficult to say how far this disease has been distinguished from pericarditis, and endo-carditis.

Treatment of Inflammation of the Heart.—The *treatment* of these inflamuatory affections of the heart is necessarily antiphlogistic. If the disease be extensive, the febrile symptoms marked, and the pain and local symptoms likewise predominant; if there be great uneasiness and dyspnœa, and the friction sound be present; then blood-letting, so far as the patient will bear it, should be employed; but unless it is used very early—perhaps within thirty or forty hours—there is no hope of destroying the inflammation by this means alone; nor is it very desirable to bleed the patient to an extreme degree of faintness, as blood-letting will not remove the products of inflammation, nor restore the membrane to its proper character; it cannot remove the effusions into the membranes, nor the contraction of the orifices of the arteries from the deposition of lymph. These will remain; and if the weakness continues inordinate, blood-letting will produce a prostration, and the patient will die of syncope. In many cases of this kind, patients have been bled to a large amount, under the idea of cutting short the inflammation. The removal of the products of inflammation is to be looked for by the use of mercury. It should be used in large doses, so as to produce an effect on the system as soon as possible. Local blood-letting should be employed where there is heat of skin, and when febrile symptoms manifest themselves. It is exceedingly useful in pericarditis and endo-carditis, when these occur separately, or in connection with rheumatism. Calomel and opium, in doses of one grain of the latter to ten or twelve grains of the former, twice a day, are useful, and should be followed up, as the pulse becomes weaker, and the vascular action reduced, by a succession of blisters, to produce a removal of the liquid effusion. The patient should be carefully kept in bed, and very quiet, until the symptoms of pain and feebleness are removed, and until he can sit up without any distressing feelings. The object is not to increase the disordered action by exertion, which is very apt to bring about mischief. Blisters may often be used from time to time, so long as there is any dulness in the region of the heart, and signs of valvular disease. For the combination of rheumatic affections, colchicum and iodide of potassium are useful; and it is necessary, for some time after an attack of pericarditis or endo-carditis, to use sedatives to quiet the action of the heart: such as digitalis, hydrocyanic acid, or opium, and sometimes quinine. In cases where there is a weak state of the pulse, cascarilla, or calumba, with nitric acid, are very useful. This subject I must conclude in the next lecture.

LECTURES ON THE ANATOMY AND PHYSIOLOGY OF THE EYE,

FORMING PART OF THE COURSE OF LECTURES ON ANATOMY AND PHYSIOLOGY, DELIVERED AT CHARING-CROSS HOSPITAL.

By T. WHARTON JONES, F.R.S.

[By an unaccountable blunder the rough notes, instead of the extended copy, were sent to our printer; hence the lecture appears meagre and unsatisfactory, and there are inaccuracies so important, that we deem it our duty to reprint the whole, extended and revised. The points discussed are so minute that a very slight error, even in punctuation, leads to general confusion. We have not thought it necessary to reprint some of the diagrams.—Ed.]

Lecture VII.—February 28, 1844.

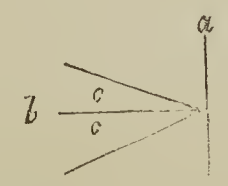
We have now arrived at that part of our course which includes the physical physiology of the eye, more strictly so called.

But before going into this subject, we must notice the *agent* which, in the act of vision produces the sensation in the retina—that is *light*.

What are termed the laws of light are the following.

1. From every luminous point, rays of light proceed in straight lines in all directions.

2. When rays of light encounter certain surfaces, they are reflected from them; if the rays fall on the surface perpendicularly, they are reflected back in the same perpendicular line; but if the rays fall obliquely, then they are reflected at certain angles,—viz., at angles with a line perpendicular to the reflecting surface, equal to the angles which the incident rays formed with the same perpendicular.



a.—Surface
b.—Perpendicular
c c.—Angles of incidence and refraction.

3. Rays of light, in passing perpendicularly from one transparent medium into another, though of different density, continue in the same straight line; but in passing obliquely from one transparent medium into another of different density, the rays of light no longer proceed in the same straight line, but are bent or refracted.

4. The rays of light from the sun are analysable into several different rays which excite in the retina the sensation of different colours. These rays are possessed of different degrees of refrangibility, and on this depends our capability of analysing the sun's rays into them by means of a prism. Of the seven prismatic colours, the most refrangible is violet, and that property diminishes in the following order:—

Violet,
Indigo,
Blue,
Green,
Yellow,
Orange,
Red,

These four laws of light are each of them respectively the foundation of a different division of the science of optics. The first law is the foundation of *optics proper*, or the theory of *direct light*. The second law is the foundation of *catoptrics*, or the theory of reflected light. The third law, the foundation of *dioptrics*, or the theory of refracted light. The fourth law is the foundation of *chromatics*, or the theory of colours. The third law is the most interesting to us, with reference to the present subject of our enquiries, but the others are also of importance, and by no means to be passed over without observation. In the fourth law we are more particularly interested when we come to consider the question of the achromatism of the eye.

Before proceeding farther, it will be necessary to explain the terms which I shall have to use in discussing those points in optics which concern us.

Medium.—A medium is any transparent body through which light passes, such as air, water, and glass. Even empty space may be considered to be a medium.

Ray.—A ray is the smallest portion of light which can emanate from a luminous body. It is commonly represented as a mathematical line, although in reality it is an infinitesimal pyramid.

Pencil.—A pencil is a slender portion of rays, a small bundle of rays, while a beam is merely an aggregation of these portions, a larger bundle.

Diverging rays scatter or separate from each other, as they depart from the luminous point.

Converging rays approach closer to each other until they meet in a point.

All rays are originally divergent, but they are made to converge by the interposition of some substance having a reflective or refractive power.

Focus, or focal points.—The point from which rays diverge, or to which they are made to converge, is called their focus or focal point.

Parellel rays are those which continue a direct course alongside of each other. There are no such rays, however, strictly speaking, but for all essential purposes we may so consider rays from very distant points.

Principal focus.—The principal focus is the point towards which parallel lines are made to converge by reflection or refraction.

The *focal* distance, or length, is the distance between the focus and the reflecting or refracting body.

Reflected rays are thrown back from the surface upon which they fall.

Refracted rays are not thrown back, but pass on through the new medium they have encountered, changed in their direction.

Angles.—The *angle of incidence* is that which a ray forms with a perpendicular to the surface upon which it falls. The *angle of reflection*, that which it forms with the same perpendicular to the surface from which it is reflected. The *angle of refraction*, again, is that which the refracted ray forms with the perpendicular to the refracting surface at the point of incidence; whilst the angle which the incident ray, if produced, would form with the reflected, or refracted rays, is called the *angle of deviation.*

Having thus explained to you the terms I shall have occasion to use, I beg leave, before entering upon our subject of dioptrics—formation of images by refraction—to call your attention to a few remarks on the rectilineal progression of light, and the formation of images by radiation.

We must recur to the first law of light, and call to mind that light proceeds in all directions, from every point of the luminous body; so that, if a luminous body were suspended in this room, every part of the walls, the roof, the floor would receive rays, and reflecting them to our eyes, would appear illuminated. But it is to be observed, that in consequence of their divergence, a given number of rays of light, though they illuminate a larger portion of the surface of a remote body than of a near body, do so with less intensity;—hence we say that the intensity of direct light decreases as the distance increases, and this in the ratio of the square of the distance. (See diagram in preceding number.)

Thus, at double the distance, the rays of light are spread over four times the surface, but, of course, the illumination produced is four times less. From this you perceive how it is that, by a candle on the table, the farther end of this room would be less illuminated than this end.

I now come to the formation of images by radiation. If a lighted candle be held in front of this perforated card, and a sheet of paper behind the card, an inverted image of the candle is formed on

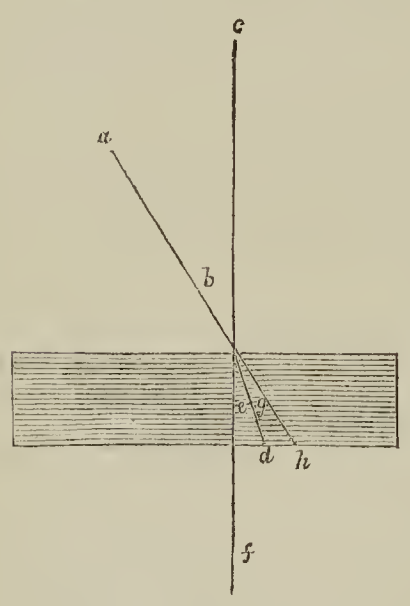
the sheet of paper; but not a well defined image —it is an image such as might be supposed to be drawn by a broad, instead of a fine, pointed pencil.

The way in which the image is formed is this: the rays from the upper part of the flame, *e. g.* are all stopped by the card, with the exception of the pencil which passes through the perforation. This pencil, pursuing a straight course, comes to fall on the lower part of the screen; whilst the pencil from the lower part of the flame, which is allowed to pass through the perforation, strikes on the upper part of the screen. Thus it is that the image is inverted; and why it is indistinct is this, —the rays of light composing the pencils diverge in proportion as these pencils recede from the flame. In consequence of this it is, if the screen be moved away from the card, the image becomes larger and more indistinct.

The principle of the experiment I have now shewn and explained to you is the same as that of the camera obscura—the camera obscura without a convex lens. The eye is an apparatus on the same principle, but perfected by dioptrical contrivances. The iris, the pupil, and the retina, are respectively the analogues of the card, the perforation in it, and the sheet of paper used as a screen.

I now come to dioptrics.

Rays of light in passing from a rarer into a denser medium, are bent towards the perpendicular, if they fall obliquely; but if they fall in the direction of the perpendicular there is no refraction.



The opposite of this takes place in every respect where the rays pass from a denser into a rarer medium.

The incident ray, the refracted ray, and the perpendicular, are in the same plane. The angle *a b c* is the angle of incidence; the angle *d e f* is that of refraction; and the angle *d g h* that of deviation.

A very simple, and to the uninformed, surprising experiment, depends upon this principle of refraction. A sixpence, for example, is to be placed at the bottom of an empty teacup, standing on a table: and the experimenter moves back from the table, until he loses sight of the coin. If then there be clear water poured into the cup, the coin will be again rendered visible. This is owing to the rays of light reflected by the sixpence being so bent, or refracted from the perpendicular on passing from the denser medium, water, into the rarer medium, air, that they reach the eye; whereas, before the water was poured into the teacup, the same rays from the sixpence proceeded in a straight line, in a direction above the level of the eye.

And this leads me to remark that different substances have very different refractive powers. Thus a solution of salt is a more powerful refractor than pure water, oil of turpentine still more powerful than salt water, and oil of aniseed still more powerful than oil of turpentine, though, generally speaking, the denser a body is the greater is its refractive power.

The two last substances I have mentioned are, however, as you are aware, lighter than water, and yet they have greater refractive power. In explanation of this I have to state to you, that combustible bodies have greater refractive power than incombustible substances of equal, or, as in the case before us, greater density.

The law that transparent inflammable bodies have strong refracting powers, first led Sir Isaac Newton to the opinion that the *diamond* was an inflammable substance, which subsequent experiment has proved to be the case. But it must be remarked that, besides the refractive power of a substance, its form exercises great influence, particularly on the relations of the refracted rays.

By varying the obliquity of the surfaces of the refractive body, the degree and direction of the refraction of the rays may be within certain limits varied.

On this principle, rays of light may be brought to a focus, by means of a refractive body, the surface of which presents parts with different degrees of obliquity.

The surface of a refracting body, with the different degrees of obliquity, of which I have just now made a diagram on the board, you perceive approaches the form of a curve. A curved surface in fact may be viewed as presenting an infinite number of planes at different degrees of obliquity, each plane running in the most gradual manner into the other. In consequence of this refrangent media with curved surfaces bring rays of light into foci more accurately than a refrangent medium of the form I have drawn on the board. A curved surface then may be viewed as presenting an infinite number of planes.

When a ray of light falls on any part of a curved surface of a refrangent medium, the tangent of the point of incidence is the refracting surface and the perpendicular to the tangent, that towards, or from which the ray is bent, according as the refrangent medium may be denser or rarer.

On the refraction of light by refrangent media, with curved surfaces, depends the reunion of divergent or parallel rays into foci, and the formation of images.

A refrangent body with one convex surface will bring parallel rays to a focus, and this appears to be done by the curved bases of the transparent cones of the eyes of insects to which I referred on a former occasion. By this means more rays of light arrive at the retina than would otherwise have been the case.

But if, instead of employing one medium, of uniform density, new curved surfaces of other media be interposed, the convergence of the rays of light may be hastened. If the new medium be of greater density, the curve of its surface must be, like the first, convex towards the incident rays. If on the contrary the new medium be rarer, the curve of its surface must be in the opposite direction.

This latter condition you will observe we have in combining a refrangent medium of glass, for example, with two convex surfaces, along with air, —the employment in short of a double convex lens. I have said that by varying the obliquity of the surfaces of a refrangent body, the degree, and direction of the refraction of the rays may within certain limits be varied. If the refrangent body have two surfaces inclined to each other—if it be a prism: —a ray of light on entering one surface obliquely refracted, but on emerging by the other surface again into the air through which it had come to the refrangent body I have here represented, the ray will not be restored to its original course as it would have been had the surfaces of the body been parallel, but will be made to deviate still more from its original course. As on entering the prism the ray was turned from the vertex, so on emerging, it is turned still more from the vertex. You readily understand all this, and I mention it merely to show how a double convex lens may be viewed as resolvable into two prisms, with their bases towards each other.

Now, as in the rays of light passing through a prism, denser than the surrounding medium, the total deviation of the ray is from the vertex, so in a double convex lens, which may be viewed as two, a combination of two prisms, with their vertices turned away from each other, the total deviation of the rays is from its circumference towards its axis.

THE TRUTHS AND FALSEHOODS OF THE THEORIES OF LIEBIG,

WITH NEW VIEWS ON SOME IMPORTANT PARTS OF ORGANIC CHEMISTRY AND PHYSIOLOGY.

(Prepared expressly for the "Medical Times.")

Bacon justly observes that everything to be well understood must not be studied as it stands by itself alone, but as it is related to all nature, and it is to this kind of extended investigation that I would venture to direct attention in the present series of papers. It is wonderful, I may add that it is almost humiliating, to think how much of our physical enquiries on man have been limited to the mere consideration of his fleshly structure, apart often wholly from its functions, almost always from the functions' cause, and origin. Forgetful that in philosophy as in religion "the flesh killeth, and the spirit giveth life," chemists and physiologists have almost entirely overlooked the greatest phenomenon of that congeries of phenomena which manifest life, I mean motion, and have passed, without notice, the scientific cause and characteristics of that mysterious principle by which the great system of human vitality is developed and maintained. How do we explain this extraordinary oversight? When observing a steamship, we consider far more its movement than structure: the origin or nature of the one stands out more prominently in the mind than the worth or ingenuity of the other. When we study the earth we never fail to have with the enquiry into its structure, geologically, an idea on the power by which it is moved as a planet. Now geology is to the earth what anatomy is to the body; and it seems not more reasonable to ask that the laws of motion which govern the one should be as little in the dark as the laws of gravitation have been left by Newton in reference to the other. But it would appear that as in the earth the sensible phenomena first arrested attention, so with regard to ourselves, skin, muscle, blood, bone, nerve, &c., have been first studied, while that equally important division of our nature which corresponds to gravity, the cause of that by which the whole business of life is carried on—I mean animal motion—has been almost entirely overlooked. As an illustrative instance I might mention that Haller, Whytt, and after them an industrious compiler, Marshall Hall, have treated largely on the vis nervosa and the vis insita without attempting to trace the *source* of either. Now I need scarcely say in this day of advancing science that as it is important for the engineer to know the nature of the power by which his ship or carriage is propelled, so is something analagous necessary for the human engineer—the medical practitioner—who can hardly be expected to manage the machine committed to his charge other than empirically, if left in ignorance of the nature and origin of the force that maintains it in motion.

In my present contribution to the *Medical Times* I shall restrict my enquiry to the cause and character of the motion by which the vital functions are carried on, to establishing the theory of respiration on a new foundation, while explicating a cardinal failure in the observations that have been emitted by Liebig on this important subject.

When a wheel, a ball, or other body, is moved by an electrifying machine, we have, first, a substance in motion, and secondly, an actuating force. The electricity developed by the electrifying machine is due, as all chemists now admit, partly to friction, which disunites the combined electric fluids of the glass, and rubber, but principally to the oxidation of the amalgam. Again, in machines put in motion by galvanic electricity, the motion is due to *oxidisement*, or popularly speaking, to rusting.

It has been observed by all who have studied galvanism that no sensible effects are produced by a combination of conductors which do not act chemically on each other: that the action of the pile is always accompanied by the oxidation of the zinc, and that the *energy of the pile in general is proportionable to the activity with which its plates are corroded.* Observations of this nature induced Wollaston to conclude that the galvanic process begins with the oxidation of the zinc; that oxidation,

or in other terms, chemical action, was the primary cause of the development of the electricity. It is not, we also know, the oxidisement of zinc or of metals only, which produce electricity, for we know that the most fertile source of electricity, is chemical action generally. This was strongly denied by Davy in his Bakerian lectures for 1826; but the experiments of Becquerel, De la Rive, and Pouillet, afford decisive proof that chemical union and decomposition are both attended with electrical excitement. The experimenter last referred to proved it in particular in regard to the oxidisement of charcoal. It is also well known that the oxidisement of hydrogen in the production of water is a source of electricity. Thus then in non-organized bodies is electricity educed; thus is a grand power evoked to them; and thus is their motion, by this subtle agent, commenced and maintained. Now, while I would be clearly understood as hastily insisting on no identity of the two agencies, I must yet take note, of a circumstance especially worthy of remark, that man is provided by nature with all the materials from which something analogous to electric force may be generated and maintained. His bodily structure is a machine of most ingenious mechanism, and food and air are the means by which a chemical action is constantly maintained, and the body endowed with locomotive powers.

In considering the origin of the electric force which actuates common mechanical electro-motive engines, we find that *oxygen* is one of the factors of that force. Now let it be remembered that the human body is supplied abundantly with that material: it constitutes about a fifth part of the air we breathe. The other factors of the electric force in the cases of machine and galvanic electricity are the amalgam and zinc respectively. Here then the analogy appears to cease, for man, we need hardly say, is not supplied with zinc for the essential corroding or oxydising process. But what does organic chemistry teach us? That we are supplied with what answers the same end. All are in the habit of ingesting hydro-carburets, such as butter, wine, &c., which are furnished in large quantities by our ordinary mode of living. Now what is done by the human system with these and with that large proportion of our food, which, according alike to Dumas and Liebig are never assimilated, and can never compose the texture of our body? It is clearly proved by Liebig, in his work on *Animal Chemistry*, that "amongst the elements of respiration in our food are:—

Fat,	Grape Sugar,	Wine,
Starch,	Sugar of Milk,	Beer,
Gum,	Pectine,	Spirits."
Cane Sugar,	Bassorine,	

Now, different explanations are given of the part which these substances play in the animal economy. Liebig conceives that the list of respirable food which he gives, is intended to produce animal heat. Thus, he tells us, in the beginning of the same work, that, "In the foregoing pages it has been assumed that it is especially carbon and hydrogen which, by combining with oxygen, serve to produce animal heat." And, again, somewhat earlier, he positively affirms that the mutual action between the elements of the food, and the oxygen conveyed by the circulation of the blood to every part of the body, is THE SOURCE OF ANIMAL HEAT. And Dr. Pereira, referring to the same opinion, states, I have seen, in his recently published treatise on *Food and Diet*,—"They (these kinds of respirable food) are, nevertheless, essential to health; and Liebig asserts that their function is to support the process of respiration by yielding carbon and hydrogen, *the oxidation of which is attended with the development of heat.*" Pereira, who, with the modesty of an Englishman, appears to abnegate a better judgment to take up that of the Giessen chemist, fully adopts the same opinion, for, speaking of the action of alcohol, he says, "What, then, becomes of it? By itself, it cannot form tissues, since it is deficient in some of their essential ingredients, viz., nitrogen, sulphur, and phosphorus; and there is no reason to suppose that it contributes, even in part, to the renovation of the tissues. Liebig's suggestion, that it is *burnt* in the lungs, and thereby converted into carbonic acid and water, appears to me a very plausible one; and further," continues this author, "by its oxidation in the lungs, it must evolve caloric, and thus, when used in moderation, it serves to support the temperature of the body. Alcohol, therefore, is a fuel in the animal economy, by the combustion of which caloric is evolved. Common experience favours this view. Coachmen, and others, take it in cold weather to keep themselves warm, and it is familiarly used to prevent what is commonly called 'catching cold.'" Another authority, certainly of not less weight or originality than Liebig, I mean Dumas, supported, at least very lately, though I will not say up to the present time, a similar view. "Have we not in fact," he says, "found by a multitude of results, that an animal in a chemical point of view, constitutes a true apparatus of combustion, by which carbonaceous matters, burnt incessantly, are returned to the atmosphere in the shape of carbonic acid, in which hydrogen, burnt incessantly, is returned as water;" and this author makes the following remarks:—"It is a matter of demonstration, in a word, that the poetic likening of an animal to a locomotive steam-engine, rests upon more serious grounds than has been generally supposed. In one, as well as the other, there are combustion, heat, and motion, three phenomena connected, and in relation."

The citation of these authorities establishes at least clearly one thing, that besides the food for nourishing, or *composing* the body, there is a much greater proportion of food for a different purpose. The important query arises what becomes of this? for what purpose has nature ordered its ingestion? I submit that it is to generate not heat but power; to beget a force for using the machine built up by the other "tissue-making" food. It is to the human body what the amalgam is to the electrifying machine, or the zinc plate to the galvanic battery: it begets the nervous energy, like the amalgam of the electrifying machine, it generates in conjunction with friction the actuating moving force. I submit in favour of this opinion the following facts and considerations:—

1st. We have the phenomena of motion; let it be accounted for. It can be accounted for only on one hypothesis: the oxydation of the hydrocarburets in the food which we know to take place, and which *must*, as we have seen, be similar in its results to the action of oxygen on the zinc plates of the galvanic battery, offers a perfectly reasonable solution of the difficult problem.

2ndly. After the formation of the body, the next great requirement is motion, and we have nothing corresponding to the production of that motion, except respiratory food.

3rdly. The motion, or vital activity, in all classes of animals, is proportional to their breathing—that is, to their expenditure of respiratory food; because every respiration implies the waste of a corresponding quantity of charcoal (carbon) and hydrogen. In other words, in proportion to the consumption of that food, which I say generates nervous energy, is the nervous energy perceptible in actual life.

4thly. *Respiratory food becomes more and more motor, as it becomes more and more oxydisable.* Thus, *alcohol in constitutions not previously injured by its use, gives rise to more energy in the same time, than the sugar from which it was derived;* and alcohol may be viewed, as sugar, *from which oxygen and carbon have been abstracted*, leaving an excess of hydrogen, A MORE OXYDISABLE BASE, BEHIND, which, therefore, the more powerfully absorbs oxygen. On this theory the oxygen is necessary for the generation of nervous energy; and here we see, that in proportion to the quantity of oxygen absorbed and consumed, is the development of vital power.

5thly. If from alcohol, water be abstracted, rendering the alcohol more oxydisable than before, it assumes the form of ether, one of the most energetic stimulants we possess.

6thly. Ammonia, which may be considered *consolidated hydrogen*, is a source of vital activity in man, exactly like what we should be led to expect that vital activity had its source in the oxydisement of hydrogen, *i.e.* respiratory food. This is an important fact.

7th. If a horse be urged rapidly, to supply the *force* expended in motion, he *breathes* more and more; it is true he also gets hot: but the increased heat is so far from being the final cause or result intended of increased action, that it is only a superfluity which nature gets rid of by pouring on water in the shape of profuse perspiration. It is true, in ordinary exertion, where both motion and heat are attendant on respiration, it is difficult to say which is the special result intended. But, in extraordinary exertion, the increment of heat cannot be supposed to be the object of the increment of breathing, since this heat is an evil that is to be corrected by a third operation, namely, perspiration. Nature would have arranged ill indeed, if, wanting force, breathing but exhausted it—if, superabounding in heat, breathing but increased it. The animal breathes the harder from an automatic feeling that in breathing power is generated.

8thly. Liebig's rejection of this cause of animal force, leads him to adopt one which is untenable, if not absurd—viz., that force is secured in an animal by the oxydizement of the disintegrated tissues of the body; i.e., by the oxydation of particles of muscular structure, or the detritus, as it were, of their action, in effectuating the "motion of relation." According to Liebig, when you drink brandy and eat cheese, the brandy is oxygenated to produce heat—the cheese, at first, makes part of the muscle, then the muscle is disintegrated, and the oxydisement of the detritus so produced, produces a chemical force which actuates the body.

Now, with regard to the origin of force, in the first place, it is wholly unproved that the disintegration in question takes place; although the same hypothetical phenomenon is treated of largely by Dr. Prout, under the name of secondary destructive assimilation. And, in the second place, even if it were, it would make animal force altogether dependant on the consumption of nitrogenized food, or that which enters exclusively into the formation of the textures alluded to. This is not in reality the case—as any body may prove by experiment: and to shew clearly the untenable nature of the opinion, let us suppose that, after a piece of cheese, an egg, or a beefsteak, had performed one of the offices imputed to it by Liebig—that of making a muscle—there was a secondary use for it; viz., to be oxydised, in order, as he says, to become a source of force. Why was it not oxygenized when it first appeared in the *blood*, since it was then equally exposed to the action of oxygen as after its re-absorption? How does it happen that the *oxydisement of the brandy produces no force, but heat only*, while the oxydisement of the disintegrated muscle *(the very existence of which is hypothetical) produces force* only, like the oxydisement of the zinc plate, *and no heat?* Liebig should have shewn us why the oxydisement of a respiratory food was attended by *heat* EXCLUSIVELY,—while the oxydisement of food containing azote was attended by the evolution of force exclusively. According to him, a man, weak from loss of blood, or sudden fever, ought to get food and medicine of a nitrogenised kind, because that is the constituent of muscle. He ought further to exert himself, that muscular action should break this muscle down, and disintegrate it, in order that the detritus might be afforded, the oxydisement of which, in Liebig's view, is the exclusive source of strength. But this would be a supposition as singular, and almost as grotesque, as that where Liebig represents a lion running in restless action, in order to break down his muscles, to furnish the source of that motion of which he is antecedently in the exercise! Though common sense, as commonly understood, is not the best umpire in questions of science, yet her repugnance to the idea of a machine, whether vital or otherwise, breaking itself down for the purpose of yielding materials for its own propulsion, is sufficient to make us pause before its reception, especially when we remember the animal machine as having two grand requirements—a material to compose, and a power to move; and that the *nitrogenised* food may be considered as corresponding to the former, the non-nitrogenised or respiratory food and air, as corresponding to the latter.

Let us give one instance of the medical practice that would be founded upon Liebig's physiology. If the end of wine, spirit, &c., be to produce heat, then public institutions might feel justified in forbearing the expense of these articles for their fevered and debilitated inmates. Their directors would reasonably argue that since the use of wine is simply to produce heat, and since heat is always procurable by the aid of common coal, it would be wise to replace, by that cheap article, the consumption of the more expensive vinous fuel. But the converse of this opinion of Liebig, and his followers, is the truth. Wine, spirit, &c., is administered for the purpose, not of producing HEAT, as by them stated of its effects, but STRENGTH, and the power of LOCOMOTION; *this it does produce.* The trembling limb requires PRIMARILY the production of strength, or energy, and for this reason must have food, from which fermentation has withdrawn an excess of oxygen, and which thereby increases the affinity of such food, while in the stomach, for the air, in breathing which, is found the only true source of strength and motor power.

Independently of this, however, common experience proves undeniably the falsity of Liebig's position. In support of this, we would point attention to the universal language of all countries, which have connected the idea of vitality with ardent spirits. In France the spirit of the country is called the "water of life," (*eau de vie*) and in Ireland I have heard that the invitation to drink is invariably accompanied by an assurance that it will "put the life in them." It is not heat that is sought for by those drinking this oxydisable medium, but increased disposition to activity. Any person not accustomed to the immoderate use of wine, who observes the effect which a small quantity produces on himself, will satisfactorily answer this question; and in doing so, will substantiate the points I have somewhat hurriedly and perhaps loosely sought to establish, that *wine producing* a nervous energy akin or analogous to that called electrical, so begets *mechanical force, or nervous and muscular activity in the human machine.*

I have in this first paper traced some of the steps by which it can be shewn that breathing is the operation of a vital apparatus which wonderfully resembles the electrical apparatus, in the nature of its action, the kind of materials consumed, and the character of the product. I have briefly explained the *modus operandi* of alcohol and ammonia, namely, that they are in the blood what zinc is in the acid solution. I have shewn that respiratory food is not primarily for the production of heat, but for the production of that strength or energy which has been ordinarily attributed to the action of the brain; and thus laid the foundation for explaining many of the most perplexing phenomena occurring in every day life. Thus if bodily energy be shewn to depend upon oxydisement of food for the resulting galvanoid force, and if the greater the oxydisement the greater the energy, it will behove me to demonstrate what the proper management of food and air may effect towards obtaining the maximum amount of strength available to each individual, and to point out to all the necessity of a proper attention to what will thus become an essential part in the prudent man's code of self-preservation.

CLINICAL LECTURES ON MEDICINE;

Delivered at the GREAT CHARITY HOSPITAL, Berlin, by Dr. SCHONLEIN, first Physician to the King of Prussia, founder of the Natural System of Medicine in Germany, and Professor of Pathology and Therapeutics in the University of Berlin.

Prepared from the German expressly for "The Medical Times."

LECTURE XI.

Peritonitis terminating in Effusion—Febris Hectica Nervosa—Uneasiness of the Patient from Dietetic Errors—Continuous Green Vomiting—Exhaustion—Death—Sectio.

May 21*st*, 1842.—Louisa Bremer, servant girl, 21 years of age. The girl was brought to this hospital on the 17th inst: she had, a short time previously, been lying in another division of the institution, (suffering from acute rheumatism of the abdominal muscles) from which she was discharged. She again became ill, after having been absent from the institution for three days, and that attended by much more violent symptoms: acute, tearing pains in the abdomen, nausea and vomiting accompanied this new affection. There was great distension and tenderness of the abdomen, especially of the left side, with continued, frothy vomiting, costiveness, and violent fever — symptoms which unquestionably proved an inflammation of the peritoneum. No material change has been produced in the patient, although subjected to abundant general and topical abstractions of blood, the application of a blister on the abdomen, the use of warm baths, the administration of laurel water in an emulsion, the employment of ice, and an evacuating clyster. The abdomen is still distended to a great degree, especially around the navel: here forming a kind of prominence, which is very painful to the touch, and in which distinct fluctuation may be felt. There is no question but that the inflammation has already gone on to effusion, and the exudation of plastic matter between the intestinal folds. The prominence at this locality, the resistance which is experienced on applying the hand, the dull, faint sound on percussion, and, finally, the feeling of fluctuation, are symptoms which speak in favour of the above assertion. I find no trace, here, of the crepitation which has been said to be felt on pressure over that part of the abdomen where plastic matter has deposited itself, similar to what is experienced on touching an emphysematous cellular tissue; this is, as I have already told you several times, no positive symptom of the presence of the exudation. The other parts of the abdomen are also rather painful, but much less so than the locality spoken of. The peristaltic movement is materially impeded, in consequence of the effusion; no solid masses are evacuated; the antiperistaltic motion, on the other hand, is increased, not only producing nausea and a bitter taste in the mouth, but also manifesting itself in the vomiting of a green substance. The general reaction is still very considerable; the pulse smaller, 120 per minute; the skin soft; urine crude.

The sore part, caused by the blister, is to be kept open; the warm bath to be repeated, and the emulsion of laurel-water to be continued.

23*rd*.—No material change has taken place in our patient within the last forty-eight hours; at least, not such as to induce any favourable prognosis. The local symptoms are the same as we found the day before yesterday; the same prominence is still apparent around the navel, the same degree of resistance, the same dull sound, and the same feeling of fluctuation; on the other hand, the painfulness in this locality has rather decreased, and has almost entirely disappeared in the other parts of the abdomen. We do not like the circumstance, however, of the patient complaining of pains in the small of the back, a circumstance which leads us to apprehend that the inflammation may extend itself towards that direction. The consequence of the morbid action is manifested by a disturbance of the intestinal functions; two watery stools were evacuated within the last twenty-four hours; the vomiting is still of a green colour, and contains a large quantity of bile, having a very acid reaction; the urine is dark, and, on the contrary, very alcaline. In addition to this, we have now developed a considerable degree of fever, bearing the character of *hectica nervosa:* a small, weak pulse, 120 per minute; a distinctly marked redness of the left cheek corresponding to that side of the abdomen, where the morbid product is effused. We have, however, seen similar cases, which have terminated favourably, by perforation of the intestine, and evacuation of pus by the stools; a slow but perfect convalescence followed. Certainly we must allow that, even in the most successful cases of this kind, no great merit was due to medical art, the aid being solely afforded by nature.

Let the patient frequently take the effervescing draught, consisting of the bicarbonate of soda, with six to eight drops of *aq. laurocerasi;* and, instead of the emulsion, a saline, with addition of laurel water. The warm bath to be repeated.

24*th*.—Considering the previous state of the patient, it is something to have got safely over twenty-four hours, especially if we bear in mind how rapidly the inflammation of the peritoneal membrane runs its course; how rapidly it may produce a fatal issue, even after a momentary stand, or retrogression; the removal, however, of the morbid product, which has been formed, will require a long time, during which the inflammation may again make its appearance.

The symptoms now are the following:—The girl is much more calm, and capable of sleeping for hours; her face no longer exhibits that anxious expression; the pain in the abdomen is less acute; on examination (which we always institute with the greatest care, in order to avoid producing a new inflammation, by handling the affected spot too roughly*)we find that the left side is softer, and less painful on being touched; still, however, it gives a dull sound on percussion. Vomiting has only taken place once within the last twenty-four hours; the patient is now capable of retaining fluids, such as milk, soup, &c., on the stomach; a spontaneous intestinal evacuation took place yesterday, which was more fæculent; we should, however, have been more satisfied if pus had manifested itself. The febrile symptoms maintain themselves at the same degree. There is no increase in the frequency of the pulse in the evening; the skin is not hot, nor does it exhibit that unequal division of temperature, which is a very unfavourable symptom in this disease; the urine is clouded, and begins to form sediments.

26*th*.—Forty-eight hours have again elapsed, and no unfavourable change has taken place within that period. The intestinal evacuations are abundant, no longer thin, but more pappy. Vomiting took place twice yesterday, but it consisted no longer of a dark green, but of a brighter, liquid. The local phenomena are nearly the same: tumescency of the left side is still distinctly perceptible. Danger certainly exists, so long as the inflammatory symptoms, although much ameliorated, are not entirely removed; and, also, while the effusion remains unabsorbed.

Prescription.—For internal use: Infus. herbæ. digitalis, with saturated solution of potash and laurel-water. The abdomen to be covered with linen rags, spread over with grey ointment, to which iodide of potash has been added; and, over them, fomentations of an infusion of herb. malv. (℥iij.), herb. belladonn., and herb. hyose. (āā℥i.)

28*th*.—The patient, who had been free from vomiting for some days, has had another attack this morning, and, as I hear, not altogether without her own fault, for she has been tossing herself about incessantly during the night. Now, as recent adhesions are situated between the intestinal folds, it is evident that unnecessary movement must produce a new irritation. Ever since perforation of the intestines has been recognized, (especially in patients suffering from typhus) suggestions have been made to support the endeavours of nature by the aid of art: adhesive inflammation sometimes takes place in these cases, by which nature endeavours to close the ulcerated spot; and to support this beneficent arrangement of nature, it is necessary that the patient should remain for three or four days in one, settled, position, on the back, since every movement would cause a displacement of the parts, and, consequently, an interruption of the commencing adhesion. Dr. Stokes' advice to limit the peristaltic motion as much as possible, by large doses of opium, is, therefore, deserving of attention in these cases. The present instance is very similar; for, although not a peritonitis in consequence of perforation of the intestines, yet it is a *peritonitis rheumatica*, which has terminated with exudation of plastic lymph and effusion of pus into the abdominal cavity. If, then, the

* It is a well-known fact, according to Schönlein, that an increase of the intestinal inflammation, or even perforation of the intestines, may be caused by repeatedly and rudely pressing the abdomen, in cases of patients suffering from abdominal typhus. I have also witnessed a rapid increase of the inflammation, even terminating fatally, in cases of peritonitis, where the malady was already on the decrease and limited to a small part, in consequence of inattention to this fact!

patient becomes uneasy, and tosses about from one side to the other, the inflammation is naturally increased by the interruption of the adhesions; the frequent change of position, during last night, has thus produced an increase in the phenomena in our patient.—The treatment to be continued.

30*th*.—We have again passed another forty-eight hours, and that not altogether without favourable changes. The girl has not vomited at all during that time, nor even complained of nausea; the disagreeable symptoms of the anti-peristaltic motion have, therefore, disappeared, whilst the peristaltic action of the bowels is now regular; two pappy evacuations have taken place daily, which are of a pale yellow colour, owing to the quantity of milk drunk by the patient. Pressure on the abdomen proves that the physiognomy of the patient, which now expresses more cheerfulness and courage, does not deceive us; the abdomen is still certainly prominent on the left side, but softer, and giving a clearer sound on percussion; fluctuation is no longer perceptible there, and the painfulness on pressure in this locality has also diminished. The febrile symptoms, though less important, are also not unfavourable: there is uniform temperature of the skin; the pulse is small, 120 per minute, a *pulsus frequens et debilis ex inanitione;* the circumscribed redness of the cheek has disappeared; the tongue is clean; its epithelium beginning to desquamate.—Continue the remedies prescribed.

June 2nd.—An unfavourable symptom has made its re-appearance, owing to the fault of the patient—namely, a violent green-coloured vomiting, from her eating a raw apple; without, however, any increase being perceptible in the local symptoms. We shall have to be more cautious in our prognosis, since the patient will not follow our orders, and will not suffer herself to be protected against external injurious influences.

7*th*.—The patient still continues to vomit a frothy substance, a proof that the functions of the inflamed portion of the intestine are not yet restored to order. All the other symptoms promise the possibility of recovery, although a slow one, if the patient would only observe a proper diet and rest; for, without this, it cannot be guaranteed that a new inflammation will not make its appearance. The frequency of the pulse has also much diminished; the appearance of the patient has improved; the tumour on the left side of the abdomen becomes more and more contracted, and is less painful on pressure; a crepitating sound is now perceptible on pressing this locality.

8*th to* 19*th*.—The green vomiting has continued, and visibly exhausts the strength of the patient; she now takes nothing but drink. Continued nausea, and want of appetite, are her only complaints; the abdomen is certainly rather tense, but altogether without pain. A saline mixture with laurel water was ordered, but the greater part was thrown up again. The fever again increased, and on the evening of the 10th, the pulse rose to 136 per minute. The tongue at the same time continued moist, and covered with a slight yellow fur. When the evening exacerbation took place, it was attempted to appease the vomiting by doses of morphia ($\frac{1}{8}$th of a grain every three hours), but without success. The colour of the matter vomited changed from grass-green to brown. The patient vomited till twelve hours before her death, which took place on the 19th of June, under a perfect collapse.

Sectio.—The lungs were united to the pleura by old adhesions; the heart strongly tied to the pericardium; a trifling ossification of the valve of the aorta. The contents of the cavity of the abdomen were agglutinated together by plastic exudations, deposited partially in the form of fibres, partially in the shape of tubercles, on the surface of the serous covering, surrounded at some points by extravasated blood, and, more towards the left, by purulent matter. The discolouration of the intestines was increased in the region between the navel and the left os ilium; but fæcal masses, mixed with dirty matter, bad accumulated in the interior of the pelvis, owing to a rupture of the *colon descendens*, of about the size of a dollar-piece. The structure of the intestinal walls can here be recognized but with difficulty. The mucous membrano of the stomach is flabby, and of a red colour. The uterus contains a plastic lymph in its cavity, which has also deposited itself in the ovarian tubes; the left tube, however, which is contracted at its extreme point, is developed into a sac of the size of a hen's egg, and contains pure pus.*

A REPORT UPON SOME LATE STATEMENTS IN THERAPEUTICS.

By W. HUGHES WILLSHIRE, M.D., M.B.S., Physician to the Royal Infirmary for Children, and to the Surrey Dispensary, &c.

(For the "Medical Times.")

Continued from page 113.

Variola continued.—M. Baume discourages all the above practices.

To prevent the itching of the face during the suppurating stage, weak barley-water, a dilute solution of the chloride of sodium, and oil, have been severally recommended to be applied.

Dr. Baillcul strongly recommends the application of chloruretted lotions to the skin, throat, and nasal passages in severe cases of the confluent form. He is of opinion that they serve to decompose the purulent matter in the pustules, and thereby to counteract the tendency that exists to cutaneous and pulmonary asphyxia, by neutralising the noxious agency of the purulent matter on the cutaneous and mucous surfaces.

Scarlatina.—According to Godelle and Guersant, the prophylactic nature of belladonna, as originally promulgated by Hahnemann, is to be believed and trusted in. Belluomini says that this drug is only a preservative against the smooth scarlatina, and that aconite is the true one against the miliary form. Godelle also recommends hydrochloric acid as a safeguard in this disease.

MM. Cazenave and Schedel observe, that sulphuret of antimony and calomel in combination, have been employed for the above purpose with advantage, in the dose of one-sixteenth to one-eighteenth of a grain of each for a child from two to four years, repeated several times a-day.—Sims remarks the best preventive he found to be rhubarb, taken in the quantity of a few grains every morning, so as to produce one laxative motion in the day; not one who employed it was afterwards confined to bed, although several persons began it after they were infected, but before the period of their sickening.

Dr. Rieken advocates most strenuously the treatment of this disease by the sesqui-carbonate of ammonia, as advised by Peart, Stahl, and others, stating that there is no medicine more fit to restore to the blood the ammoniacal particles which it has lost in consequence of the scarlatinous eruption, and to remove the consequences injurious to life which are the result. The dose of the medicine varies of course according to age; but from ʒj. to ʒjj. dissolved in ℥vi. of water with a little syrup, and of this ʒj. to ʒiv. taken every hour, or even second hour, is recommended to be employed. According to *Chomel*, in order that cold ablutions should have beneficial effects, the patient must be strong and robust, otherwise reaction may not take place. A case occurred to him which was a proof of this. A woman was received on the second or third day of the eruption in a very debilitated state; instead of employing cold ablution, she was ordered a bath at 105° Fah.; when removed, the skin was of a scarlet colour. Would cold ablutions have produced the same effect?

Erysipelas.—Blandin advises, in the traumatic variety, leeches to be applied over the course of the lymphatics. Very often this is at once sufficient to put a stop to the disease; should it, however, continue to develop itself, the leeches must be applied a second or a third time. If the inflammation be chronic, or if called in too late, and symptoms of general infection already exist, antiphlogistics ought not to be employed, but purgatives and slight tonics must be had recourse to. After the application of the leeches, a layer of ceratum simplex must be placed on the erysipelatous surface, rendering it thus more supple and less tense, and finally over all, an emollient poultice, renewed as often as necessary. The ceratum is preferable to adeps, as being less liable to become rancid; as to mercurial frictions, they had no beneficial effects; on the contrary, they produced salivation, which was overcome with difficulty, and, in some cases, the patients fell victims to the accidents caused by the absorption of the mercury, rather than to the erysipelas.

Hæmorrhage.—Miller recommends particularly the acetate of lead and opium in heroic doses, and if this disagrees with the patient, sulphate of alumina and potash, in doses of fifteen or twenty grains; nauseatory remedies and the sulphate of soda are to be tried. The latter is considered to be useful by procuring serous discharges from the bowels, and thereby disposing the blood to "solid coagulation."

Dr. Lane administers fifteen grains of the acetate of lead in eight hours, without producing spasm, paralysis, or any bad symptom; he strongly recommends it, and expresses his doubts as to the opinion of its very poisonous nature.

According to an anonymous writer, the internal exhibition of alum is too much overlooked by the profession as a powerful remedy.

Dr. Bennett is inclined to reserve turpentine for those cases of hæmorrhage where there is an effusion of blood, as in purpura; in hæmoptysis he considers it of no use. Mr. Headland, though disposed to agree to some extent with Dr. Bennett, gives it in hæmoptysis and hæmorrhage from the bowels, accompanied with tympanitis, with advantage. Dr. Hunter Lane speaks favourably of *mattico* in hæmatemesis, hæmoptysis, and certain kinds of hæmaturia.

Metrorrhagia.—Chailly inculcates the propriety of keeping the upper parts of the body warm by every possible means in severe cases of hæmorrhage, while cold is being applied to the lower part of the abdomen and the thighs. It is stated that more than one case has occurred, in which, if this rational principle had been acted upon, the flickering spark of life that was still remaining might, perhaps, have been preserved, and health restored, when the little power that was left was exhausted by the too long continuance of cold.

Ramsbotham has found, in most cases, the temporary application of cold more beneficial than a regular perseverance in its use for a length of time.

Simon and Joly laud highly the practice of administering opium in uterine hæmorrhage, whether this occur at the menstrual period, or be connected with the puerperal state. According to a writer in Johnson's Review, this drug he almost invariably uses along with hyoscyamus and digitalis, in infusion of roses, given in repeated small doses. The patient, as a matter of course, being kept very quiet, and all warm drinks interdicted. If a tendency to the recurrence of the bleeding continues, the sulphate of zinc (made into pills), along with the diluted sulphuric acid, is then to be given. From the observations of M'Cave Smith upon the influence of opium on the catamenial functions, it is shown that in a majority of cases it will stop the discharge, and not only this, but that sometimes great difficulty will be experienced in bringing it back again to its normal condition.

Gondret has cured metrorrhagia by applying cupping glasses on the mammæ, or at the back, between the scapulæ.—Pincott orders the infant to be applied to the breast, as recommended by Rigby, being convinced that it is one of the most powerful means for arresting the discharge.—According to Sproule he has seen a thousand cases of this affection, but never yet one occurred where the hæmorrhage ceased before all the clots were removed.

D'Outrepont advises a strong solution of the chloride of iron, as a styptic, either to be injected, or a plug to be dipped in it, and placed in the vagina.

In *Menorrhagia*, Drs. Stevenson and Simpson recommend gallic acid as very valuable,—the

* We must still observe, here, that the patient was suspected of having miscarried, shortly before her reception into the hospital. According to the facts shown on the dissection of the internal genitals, we might almost suppose that the peritonitis had originated in these parts.

former gives eight grains every three hours, and it acts speedily and well; the latter orders it both in the intervals and paroxysms, and gives from ten to twenty grains in pills daily. It is said not to constipate.

In *Hæmoptysis*, Dr. Roupell gave ℈i. of the ergot of rye, and ordered it to be repeated every hour for three times; the first dose checked the discharge, and by the time the third was taken, all hæmorrhage had ceased.

In *Hæmaturia*, according to Larrey, he has seen the most powerful astringents given in the largest doses fail, whilst cold water thrown up the intestines caused the bleeding to cease directly.—Mr. Rock has successfully treated this affection with the tincture of the sesqui-chloride of iron.

Dropsical effusion.—In anasarca and ascites, occurring as occasional consequences of fever, Lombard recommends as one of the best remedies the chlorate of potash, in doses of fifteen or eighteen grains every four or six hours; covering the dropsical limbs with oiled silk, has seemed to promote the good effects of internal medication. Digitalis or other diuretics were rarely used, as the chlorate generally proved quite sufficient for the cure of the disease. It has this great advantage over most remedies, that it generally improves rather than impairs digestion.

Scrofula, &c.—M'Dermott, convinced of the value of a combination of the active principle of the barks with a salt of mercury, was brought to think that a *definite* compound might be formed, in which the bichloride would perform the part of an acid, and the alkaline quina that of the base, and which would combine the therapeutic value of these two important substances. On trial, he found the results exactly as he had anticipated, and the double salt—a protochloride of mercury and quina, is particularly recommended for scrofula and enlarged mesenteric glands, and the treatment of strumous ophthalmia.

According to Van Overloop, the treatment of the scrofulous diathesis should be hygienic. In the acute inflammations, the lancet must be used sparingly. Hemlock is a medicine, both externally and internally employed, of considerable value. Of iodine and its preparations no very great opinion is to be held.—Pirondi and Lisfranc still strenuously adhere to the now rather old medicine—muriate of barytes;—the latter also prefers the iodide of lead to the iodide of potash, as a local discutient, the latter being apt to create an unnecessary disturbance on the surface.

Van Huffel, Klencke, and Panck strongly recommend the employment of the cod liver oil; the latter affirming, that when fairly indicated and properly administered, it is an *indispensable* therapeutic agent.

Sir B. Brodie, in *scrofulous disease of the testicle*, recommends the use of the liquor potassæ; and an anonymous writer, who speaks highly of it, also states that it should be given up to sixty or eighty drops thrice in the day, and that combined with the iodide of potassium, it greatly enhances the value of the latter.

In the work of Louis upon *Phthisis*, a new edition of which valuable monograph has lately appeared—there will be found inquiries into the real efficacy of the various drugs which have more or less recently been brought into notice, as capable of arresting the course of the disease, or curing it altogether. Of these, we may mention the proto-iodide of iron, chloride of sodium, subcarbonate of potash, hydro-chlorate of ammonia, chloride of lime, chlorine inhalations, &c.; digitalis, prussic acid, creosote, and iodine. A brief survey of the judgment cast upon them, justifies our belief in the utter insignificance of all declared specifics.

Dr. John Hastings has brought forward naphtha as the medicine, *par excellence*, for the cure of pulmonary consumption, affirming that "single handed, if I may be allowed the use of the expression, it has cured pulmonary consumption *in almost every case in which it has hitherto been used*, when the disease has been treated *in an early stage*. And from what I have more recently observed, although I do not consider myself justified at present in publishing it, I am most sanguine that, *even in the latter stages of the disease, a restoration to health may generally be calculated upon.*"

By Mr. Worthington, this drug was found in a few cases to afford relief, but the approach of cold or of atmospheric changes always reproduced the symptoms.—Dr. May narrates several cases in which it entirely failed.—Dr. Ranking tried it in eight cases—three soon died, and the others were dying gradually; in none was the most trivial benefit perceptible; neither was the perspiration checked as it is stated to be, as if by magic, nor were the cough and expectoration diminished. In two instances nausea was complained of, and every patient without exception implored its omission.—Dr. Bennett used it in five or six cases, and in none was the disease arrested, nor any benefit derived from its employment, after several weeks.

The author gave naphtha in six cases, in five of which the diagnosis was clear and evident, in the other it was not. All of them thought themselves relieved at first;—five became just of the reverse opinion afterwards, and complained that it produced giddiness or nausea, or both. One patient considered himself cured by it; this, unfortunately in one sense, was the case in which the diagnosis of phthisis was not satisfactory. At the author's request, Mr. Southwood tried the naphtha in two instances;—the patients disliked it, it did no good, and it was left off.—On the other hand, Mr. Proctor relates a case of "pectoriloquy, and a gurgling rale!" cured by it; and Mr. Blanch "could show several cases of chest affections, where the exhibition of naphtha alone has produced marked benefit;" but he "now generally prescribes it in combination with prussic acid, opium, terchloride of carbon, squill, lobelia inflata," &c. And he has "found, in a vast majority of cases" the addition of the naphtha to be "attended with a speedy and important amelioration of the symptoms."—["So much for Buckingham."]

Dr. Griffith recommends the use of alcohol, camphor, pyro-acetic spirit (naphtha), &c., as agents which, after being taken internally, speedily find their way into the blood, and are burnt off almost entirely by the lungs.—Dr. Van Huffel has found the cod liver oil exceedingly useful in the treatment of tubercles of the lungs.—Dr. H. Lane has prescribed, unsuccessfully, *mattico* in those sweatings which often precede and accelerate the rapid development of phthisis.

Diabetes.—Bell maintains that the animal regimen, opium, warm baths, and blood-letting, are still to be considered as the most efficacious remedies in relieving the severer symptoms of the disease, but it is better to combine them together, and not to trust to one only. M. Bouchardat has introduced "gluten bread", with the view of giving that variety to the diet which patients, long restricted to animal food, almost imperatively demand, without doing injury by admitting farinaceous (saccharine) matter into the system.

(To be continued.)

WHAT ARE THE THEORIES OF LIEBIG? AND WHAT IS THEIR VALUE?

BY THE CELEBRATED DR. FRANZ SIMON.

Translated for "The Medical Times," by SIGISMUND SUTRO M.D., formerly pupil to TIEDEMANN, GMELIN, and BUCHNER.

(Continued from page 52.)

Theory of Disease.

I also give a concise abstract of this part, without entering into any discussion. As causes of disease, we must consider every substance, every chemical or mechanical effect (activity, function) which alters or disturbs the equilibrium between consumption and supply, in such a manner as to add the effect to the causes of consumption. If the sum of vital power, which seeks to destroy all causes of disturbance, be smaller than the invading disturbing activity, disease is created (arises). Death is that state in which all resistance of the vital power ceases. The observer sees the effect of disease in the disturbed relation between that proportion of use and supply which is appropriated to every age. In medicine, every abnormal state of use and supply, either in a particular part of the body, or in all parts, is called disease. One and the same morbid cause must have a very different effect according to the age; so that a certain measure of disturbance which causes disease in the mature adult, may be without influence in childhood or old age. The disturbance, which in maturity only shews an ill-proportion between use and supply, can cause death in old age, if it be added to the effect of the cause of consumption; and in childhood, a mere equilibrium between consumption and supply, or the abstract state of health. A morbid cause, on the contrary, which strengthens the cause of supply, and, consequently, weakens the effect of consumption, will destroy the normal state of health in childhood and maturity, but produce equilibrium between consumption and supply in old age. A child, lightly dressed, bears high degrees of cold without disturbance of health; whilst a high degree of heat, hindering the transformation of matter, produces disease. But old men, in whose sleeping places the temperature is only a little lower than the necessary degree, die in consequence of this moderate cooling. If, in consequence of a morbid transformation of the living organs, a greater quantity of force is created than is required for the performance of the natural functions, some, or all involuntary motions are accelerated; the temperature of the affected part is heightened, and this state is called fever. The excess of force produced by changes of matter is communicated to the muscles, since it can only be lost by motion: this state is called a paroxysm of fever. The accelerated circulation of blood, caused by fever, furnishes a greater supply of arterial blood and of oxygen to the diseased, as well as to all other parts of the body. But, if the functions of the healthy parts remain unaltered, the whole effect of the increased oxygen must be exhibited in the diseased part. If, in consequence of transformation of matter, new products be formed in the diseased part, and these products cannot be consumed by the neighbouring organs for their functions, nor eliminated, they undergo a process of transformation perfectly similar to putrefaction. In certain cases, these morbid states are removed by artificial morbid conditions, as blisters, &c., if the latter cause a greater disturbance than that which is to be cured. The heightened temperature of the diseased part shows a smaller resistance of the vital power to oxygen, than in the normal state. By an artificial *decrease* of resistance in another part, the resistance of the diseased part is *not increased*, but the chemical action is directed to another place. If the local artificial disturbances remain without effect, the resistance of vital power is increased by abstraction of blood, in consequence of the diminished number of "bearers of oxygen," viz., the molecules of blood. Non-azotic food operates in like manner; for it supports the respiratory process alone. If, by treatment, the chemical action be only diminished in so far as to be a little exceeded by the vital power, reparation (recovery) is certain. The vitality of the healthy parts of the body co-operates with the healing operation; for, in consequence of the withdrawal of blood and food, the sound part's proper activity is greatly increased. The sum of resistance increases in proportion as the invading oxygen diminishes. *Sympathy* is the communication of the diminished resistance of vitality from one organ to any other, with whose functions it is connected. The nerves occasion, it is true, voluntary as well as involuntary motions; nevertheless, they are not generators, but conductors of the vital power. They are similar, in this respect, to other causes of motion, the phenomena of which resemble vital power,—as electricity. *Cold* is used by the physician when material metamorphoses are to be accelerated; as, for instance, in inflammation or congestion of the brain. If great heat and rapid flow of blood to the head show an abnormal metamorphosis of the brain, applications of ice lower the temperature. The resistance of vital power is certainly diminished; but, at the same time, a greater quantity of heat is withdrawn, and this is only possible in a rapid metamorphosis. If the morbid state exist in any part of the body, it cannot be removed by the *chemical* action of a remedy, which may, indeed, limit the abnormal metamorphosis, but cannot restore health. In all diseases, in which fever accompanies the development of miasmata and exanthemata, two different

morbid states co-exist near each other, and fever re-acts as a remedy, for without it the morbid productions could not be made innocuous (harmless).

Theory of Respiration.

The molecules of blood change their colour in passing as venous blood through the lungs, while oxygen is absorbed from the air, and carbonic acid eliminated. The molecules of blood, containing a combination of iron, only lose their colour in passing through the capillary vessels. All constituents of venous blood, which can combine with oxygen, combine with it in the lungs. The disengaged carbonic acid cannot be derived from the serum of the blood, because that cannot produce carbonic acid by the contact of oxygen. The light red blood becomes black by carbonic acid, which change of colour proceeds from the molecules of blood. Blood absorbs several gases which are not dissolved in the serum; consequently, the molecules can combine with them. The combination of iron in the molecules is absolutely necessary for animal life. That mineral re-acts like a combination of oxygen, since it is decomposed by sulphuretted hydrogen, like oxides of iron, and can be extracted by diluted mineral acids, at a common temperature, equally from fresh or coagulated blood. The re-action of the compounds of iron may teach us the part iron acts in the respiratory process. Compounds of protoxide of iron can withdraw oxygen from other combinations of oxygen. Compounds of peroxide of iron, on the contrary, easily separate, under certain conditions, from oxygen. Hydrated oxide of iron, combining with organic matters, is changed into carbonate of protoxide of iron ($\dot{H} + \ddot{Fe}$ + organic matters = $Fe\,\ddot{C}$ + ...). Carbonate of protoxide of iron, in contact with water and oxygen, loses all carbonic acid, and is changed into hydrated peroxide of iron

Carbonic acid	$= \ddot{C}$ . . .	disengaged.
Protoxide of Iron	$= \left\{\begin{matrix}Fe\\O\end{matrix}\right\}$	Perox. of Iron.
Water	$= \left\{\begin{matrix}H\\O\end{matrix}\right\}$	Hydrated peroxide of Iron.
Oxygen	$= O$	

Even the combinations of cyanogen and iron show similar relations. These circumstances justify the opinion that the molecules of the arterial blood contain a compound of iron, saturated with oxygen, which separates in passing through the capillary vessels. This also happens when blood begins to decompose. By reduction, or separation of oxygen, carbonic acid is formed during the process of oxydation. That compound of iron in blood, which contains little oxygen, can combine with carbonic acid. It is clear that the molecules of arterial blood combine with carbonic acid, if, after disengagement of a part of their oxygen, they come in contact with it. In the lungs, they receive again the disengaged oxygen; and for every volume of absorbed oxygen, a corresponding volume of carbonic acid is disengaged. But, if carbonate of protoxide of iron be changed into peroxide of iron by absorbing oxygen, four volumes of carbonic acid must be disengaged for every volume of absorbed oxygen. But only one volume of carbonic acid can be formed in the blood for one volume of oxygen; consequently, only one volume can be separated. The compound, therefore, of protoxide of iron is able still to combine with carbonic acid; and it is actually shown that, in no phase of life, is the blood saturated with carbonic acid; that, in addition to the carbonic acid already contained, the blood could combine with a much greater quantity, without disturbance of its molecules. According to this theory, the molecules of arterial blood give out their oxygen in passing through the capillary vessels to certain parts of the animal body. A small part of oxygen serves to produce metamorphosis of matter, and occasions living parts to be eliminated, and secretions to be formed. The greatest part of oxygen is used to change those substances, which have ceased to belong to living structure, into combinations of oxygen. In the venous system, the molecules of blood deprived of their oxygen combine with carbonic acid gas. In the lungs the exchange takes place. In the animal organism, two processes of oxydation are performed; the one in the lungs, the other in the capillary vessels. The former preserves the constant temperature of the lungs, notwithstanding the strong cooling and evaporation; the latter, the equal temperature of the other parts of the body. A man who exhales daily 13.9 ounces of carbon in the form of carbonic acid, consumes, in 24 hours, 37 ounces of oxygen (5,648 Hessian cubic inches). With 18 respirations a minute = 25,920 in 24 hours, 1,99 cubic inches of oxygen is received by the blood at every inspiration. Thus, in one minute 35.8 cubic inches of oxygen, nearly 12 grains, combine with the blood. If 10 pounds of blood, = 320 cubic inches, pass through the lungs in a minute, 1 cubic inch of oxygen combines with about 9 cubic inches of blood. 10 pounds of blood contain about 61.54 grains of peroxide of iron in the arterial, or 55.14 of protoxide of iron in the venous blood. Thus 55.14 grains of protoxide of iron take, in their passage through the lungs, about 6.4 grains of oxygen a minute; and since blood takes, in the same time, 12 grains of oxygen, 5.6 grains of it must combine with the other parts of the blood. 55.14 grains of protoxide of iron combine with 34.8 grains, or 7,3 cubic inches of carbonic acid. It is hence clear that the quantity of iron contained in the blood, in the form of protoxide of iron, is sufficient to be the bearer of double the quantity of carbonic acid. If we imagine the molecules of the blood to lose their ability of combining with oxygen, of disengaging it again, and of combining with the formed carbonic acid, such a state of disease will immediately be recognised by the temperature and movements of the body. The conductors of force (the nerves) will continue to furnish to the organs, to the heart, &c., that force (through the muscular system) necessary for their functions, without the elimination of any constituent part. The usual secretions cannot take place; the temperature of the body must decrease; the nutritive function will cease, and death will ensue: no fever will accompany these phenomena. This fact ought to induce examination of the blood in similar diseases, since the action attributed to the molecules of blood is perfectly clear, if, in such circumstances, the molecules of blood deviate in form, bearing, or quality, a fact which must be discovered by proper tests.

T. T. Virey (*Journal de Pharmacie*) makes the following objections against Liebig's theory on respiration and nutrition. According to Liebig, a certain proportion takes place between the quantity of consumed food, and of exhaled carbonic acid and water. Though this theory might be applicable to mammalia, birds, and amphibia, it cannot be applied to animals which breathe by means of gills, since they take proportionately little oxygen, whilst many of them consume great quantities of food. The most voracious amphibia, like the crocodile, or the alligator, consume extraordinary quantities of food; whilst, with their vesicular lungs, they only breathe very weakly under their hot climate, and consume little oxygen. Fish, too, known as most voracious, have a very limited action as regards oxygen, and ought to take little food, according to Liebig's theory. The same may be said about the mollusca. The sepia, the buccinum, the strombus, &c., possess a very incomplete respiration, yet are large flesh eaters, and acquire a considerable size. Also crabs, lobsters, and other crustacea grow rapidly, and are known to be very voracious; but their respiratory apparatus only admits of a very limited action between the blood and oxygen. In all these animals, assimilation proceeds very rapidly, however weak their respiratory function may be. They possess muscular strength, though their blood be constantly cold, and their flesh less animalised, than that of higher animals. In opposition to the assumption, that the more complete the vital functions, the more numerous are germs, eggs, embryos, &c, we find that those animals in whom the respiratory functions are on the least extended scale, as fish, mollusca, etc., produce the most ova. Lastly, *Virey* concludes that the vitality or the energy of the nervous centres exerts a greater influence on the production of animal heat, than the consumption of carbon in the lungs. Though the objections of *Virey* deserve consideration, still his reasons for deriving the source of caloric from the nervous centres are not wholly unobjectionable. From the circumstance that a fecundated ovum resists the cold longer than one unfecundated, he argues that winter-sleepers are only enabled, by a certain vital power, to resist the cold temperature; and that mammalia and birds preserve their heat in the severe winter of polar countries, not in consequence of a greater quantity of consumed oxygen, or a greater muscular activity, but in consequence of a richer and more animalised food.

[In some future number we shall carry on the enquiry—"*what is the value of Liebig's theories?*" by a paper of great research and ability, from the pen of the celebrated Professor Schultz, of the Berlin University, who joins issue with the Giessen Chemist in reference to almost every one of his physiological and pathological theories.]

THE FUNCTION OF THE LYMPHATIC VESSELS.—This and the following article constitute the principal contents of a recent number of the *Medical Gazette*. Dr. Willis is of opinion that the *lymphatic* vessels, or *absorbents*, as they have been termed, perform the same office for the deeper tissues, that the sudoriparous glands perform for the superficial, namely, the abstraction of a certain quantity of the watery element of the blood, for the specific end of rendering the returning stream of greater density than the outgoing. To effect this object, he *believes* that they possess an especial elective and divellent power, powers, in fact, similar to those enjoyed by glandular organs, by which they separate from the blood, and prepare the various fluids which are called their secretions. The lymphatic vessels may, in fact, he says, be viewed as the essential elements of an universally distributed gland. Their walls and saccular commencements have been shewn by the latest and best observers, to be composed of an aggregation of granular matter, of nuclei, and of cells in various stages of development, precisely similar to the ultimate elements of every known secreting organ. Here, as well as elsewhere, nuclei in a ceaseless state of reproduction, attract a certain quantity of granular matter about them, and then they become surrounded with a delicate envelop filled with fluid,—they have grown into cells; and these having attained maturity, and being then in contact with the internal surface of the lymphatic vessel, in whose wall they have grown, give way, and shed their contents into its cavity. The secreted fluid, in reference to the lymphatic system, is the lymph, a fluid having on an average about 96½ per cent. of water, and 3½ per cent. of solid matter in its constitution, this solid matter being identical in chemical composition with that of the liquor sanguinis. The lymphatics, then, or to speak more accurately, the cells of which their walls are composed, in the course of their evolution, exert a special affinity for the watery element of the blood; and abstracting this from the fluid that is circulating in the capillary arteries, they in the same proportion inspissate the current which is returning to the heart in the veins, and thereby endow it with powers of imbibition, or endosmose, to effect a ceaseless and rapid change in the plasma, which is transuding the walls of the arterial system at every point. The lacteals take up the chyle in the same way that the lymphatics absorb the lymph in other parts of the body. The lymphatics of the intestines begin in the form of cœcal sacs, or canals, as elsewhere, and the only difference observable between their structures, and that of the lymphatics generally, appears to consist in the higher development of the essential elements of the system—the nucleated cells. The absorption of the chyle is readily to be explained in this way; the substance of the intestinal villi, where they are met with, that of the spongy tissue which still forms the inner layer of the small intestines, where they fail, like the substance of other tissues, is in a state of perpetual growth and decay. The decay here, as in glandular organs generally, takes place in the interior, towards intercellular channels or ducts; in the case under consideration,

towards lymphatic or lacteal vessels. But the cells of which the intestinal villi and pulpy inner membrane of the bowels principally consist, being evolved in mediate contact with the chyme, are penetrated by some portion of this; they gradually attain maturity, and then they give way and discharge their fluid contents, mingled with a peculiar granular matter, into the ducts with which they are in relation. The fluid contents are the chyle, the ducts are the lacteals. The contents of the nucleated cells of the intestines, it is to be observed are, only white and milky when there is chyme, and that even of a certain description, in the intestines; when there is not any chyme present, their contents are transparent and colourless, or nearly so, as is also the product of their maturity and rupture, then entitled *lymph*, and not *chyle*. Chyle only differs from lymph in containing a relatively larger proportion of albuminous and fatty matter, which is exactly what might have been expected in the fluid that is bringing fresh pabulum for the use and maintenance of the economy, albumen being the representative of the azotized fat of the non-azotized elements of the human body. The liquid carried by the lacteals is of much less density than the liquor sanguinis. The anatomical distribution of the lymphatics, Dr. Willis considers to be in perfect harmony with the views he has thus promulgated as to their physiological action, and he further illustrates them by the disturbance that ensues in the system generally, upon any implication of the functions or structure of the serous membranes, &c.

Lithectasy.—Dr. Wright was consulted by a farmer, 60 years of age, who presented the symptoms of stone in the bladder, which was detected on sounding. Lithotrity was inadmissible on account of an unusually small urethra, an irritable and contracted bladder, and the stone being large and hard, and the man obstinately refused to submit to lithotomy. The operation of lithectasy was therefore determined on, and performed, but not without difficulty, arising from the causes already mentioned. Many days elapsed before the dilatation of the neck of the bladder and prostate gland was sufficient to admit of the withdrawal of the calculus, which was of necessity partially broken up previously, on account of its great size. No unfavorable symptom followed the operation.

Iodide of Potassium.—Dr. Oke has published in the *Provincial Medical Journal* several cases to shew the efficacy of this salt in the treatment of rheumatism, dyspepsia, spasmodic asthma, and chorea. His usual formula is five grain doses in an aromatic water three times a day. He prescribes it also in cachexia syphiloidea, in the treatment of which complaint he deems it necessary to continue its use for at least two months. The iodide of potassium is always inadmissible whenever there is any febrile disturbance, or when the tongue is much coated.

Rupture of the Bladder.—Mr. Hall narrates a case of fractured pelvis and ruptured bladder, in which the patient partly recovered from the collapse produced by the accident, which he survived about forty-five hours. The examination of the body shewed that the bladder, besides the direct laceration caused by the injury, had been torn by the fractured pelvis. Several loose fragments of bone were quite detached in the pelvis, and two or three were in the cavity of the bladder. There was also considerable infiltration of urine.

NOTICE TO CORRESPONDENTS.

Mr. Mc Donough, Surgeon and Apothecary of the Sword's Dispensary, has favoured us with the following response to our invitation given to him last week:—

"I perceive by the Notice to Correspondents in the last number of your journal, that you have at last acknowledged the receipt of two letters from me on the subject of your attack upon the Apothecaries, and their Hall in Ireland. You are kind enough to say that you will promptly publish my defence if I send you another one; allow me to say that I never thought of writing a defence, either for the Irish Apothecaries, or their Hall, neither requiring to be defended. For my part, I only wish that the Government would make full inquiry into the working of the Apothecaries' Act in Ireland, before they legislate for the general profession. The first letter I sent you was merely a number of facts, correcting the mistakes in the article of your journal of the 20th April. I then stated, and I am now the more convinced of its truth, that you were imposed upon by some of the convicted quacks, who preferred studying in Scotland or England to the schools of Dublin, being, as you state of low repute. This, along with your 'tolerably satisfactory' acknowledgement of the regulations of the Apothecaries' Hall, which it is evident you had not seen or known before, prove beyond doubt that the article was written in ignorance of the true state of affairs. In correction of the article complained of, allow me to state that the Apothecaries' Hall never prosecuted any but those unqualified persons who violated the law by keeping open shop. The Hall never in any one instance prosecuted a medical man for supplying medicines to his own patients. Nor did Lord F. L. Gower ever intervene or put a stop to their proceedings; on the contrary, the legislature and the judges have frequently expressed their approval of them. Nor is it the fact that the Company enriched themselves by the fines obtained by those prosecutions; on the contrary, I know that they never were gainers in a pecuniary point of view by the proceedings, which they carried on solely from a sense of public justice. It is true that among the number of persons convicted for keeping open shops, and acting as apothecaries without the necessary qualification, there have been some surgeons and physicians, whether members of St. Andrews, or of the Glasgow Faculty, I cannot say. But this much I know, that the Apothecaries' Hall gave a year of grace to all physicians and surgeons who wished to qualify as apothecaries, without imposing any fine upon them, merely requiring them to undergo an examination as to their fitness to practice pharmacy. Many availed themselves of this privilege, and are now in practice, while many were too ignorant to risk exposure by an examination, and against the malpractice of such, the Hall is bound to protect the public and the qualified practitioner. This year of grace is not a mere matter of history, because it is only two or three years since it expired. Hoping that these explanations will set the matter rightly before our English brethren," &c.

—*Our correspondent is hasty in supposing that we were unacquainted with the general character of the Irish Hall's regulations,* because *we pronounced them tolerably satisfactory. One or two other points we now omit to notice, because, among other reasons, they are best left to the observations of the general practitioners, whom they more immediately concern.*

Mr. Paris.—*Clay, Walne, and F. Bird, have excised ovarian tumours more frequently than any other English surgeons we know of; all of them with much success. Dr. Clay, however, having operated the first by the large incision in England, most frequently, and most successfully, answers our querist as to the "most distinguished." Another eminent surgeon, Mr. Benj. Phillips, surgeon to the Westminster Hospital, has also performed this operation, we believe with great skill and success. In fact it is now a received improvement, and few of our best surgeons would hesitate about its adoption in circumstances offering what we would call an appropriate* casus belli.

Mr. Jenkins, *of Newport, states that he mesmerised first incredulously, but has found such beneficial effects from the process, that he has continued it with great advantage to several parties. Somnambulism, catalepsy, community of sense, are the phenomena which he claims for his patients, and he invites the attention of his medical neighbours to the experiments.*

Mr. Greatwood *calls attention to his petition which we some time since printed, No.* 236, *p.* 490, *asking the legislature to abolish the tax on medical practitioner's horses. We need not repeat the arguments which prove the good sense and justice of such an abolition, and we gladly join in Mr. Greatwood's request that our subscribers will do their poorer country brethren the favour of transcribing the petition, signing it, and then sending it by post to a member of Parliament for presentation.*

Mr. Anderson's *case is unavoidably postponed, with several others that are in type.*

Protection of Medical Men by the Apothecaries' Society.—*Mr. Hooper, of Hackney Road, was called to see Mrs. T., wife of a tailor, æt.* 37, *but so worn and emaciated as to present the aspect of* 50. *There were urgent symptoms of* acute gastritis, *extending along the duodenum and small intestines, which had been coming on gradually for the previous fortnight, but had become intense the last three days. It appeared that she had laboured under* lepra, *and had consulted a* chemist *six weeks ago for it. She got some drops to take three times daily, which she said were very powerful, and began to irritate the stomach in a few days. This treatment, though with reluctance, she was induced to continue until a week back, when the vomiting became so frequent, that she could take them no longer.—The phial contained a few drops, which, on examination, proved to be a strong solution of sulphate of zinc.—For many days the patient was in extreme danger, and though now much recovered, Mr. Hooper fears that she will never entirely be well. Our correspondent adds:—A number of minor cases have fallen under my notice illustrating the same principle, especially among children, who are frequently given drastic purgatives by such pretenders to medical skill, while suffering under fever with muco-enteritis and other similar diseases—of course, to the immediate exacerbation of the symptoms.*

Mechanical Support in Cough.—A. *writes*:—"The violent manner in which the frame is shaken during a fit of coughing, is a severe infliction upon delicate persons; it shatters them to pieces, strains them, rapidly exhausts their remaining strength, and, finally, prevents such a free expectoration as may relieve the system from an accumulation of irritating matter. The mischievous effect is increased by the want of some mechanical support, or fulcrum, which may afford a counter-pressure to the muscular action. Some relief is found even grasping the hand, or the arm, or by pressure round the waist. If we stand behind a child in the hooping-cough, and press our open hands firmly below the arm-pits, the expectoration is more complete, and the duration of the cough diminished. I leave it to your ingenious mechanical readers, to ascertain the point where the counter-pressure may be most beneficially exerted, and to contrive for consumptive persons some belt which can be suddenly tightened at pleasure."

Nightmare.—B. *writes to us:*—"A medical friend once mentioned to me, that during the night he lay without the power of motion, and that he quietly considered what part of the body could be moved with the greatest ease, and fixed upon the tongue. I have more than once been relieved from distressing nightmare by a knowledge of this fact, and I suspect that some cases of unexplained death might be so prevented."

Dr. Rule's *Considerations on the Origin of Yellow Fever, are ingenious and judicious, but in their present shape, we fear, we cannot use them.*

Several correspondents have asked us, what will be the effect of any visits rendered on the faith of an engaged attendance at a future midwifery case, supposing that, without fault, on the part of the accoucheur, his services be substituted by another's? Such visits are either a part of the engagement, or perfectly independent. If the latter, the charge for them can be recovered on their own account; if the former, the medical man has discharged part of the engagement stipulated for, and as it is not his fault that the whole is not performed, we think he can recover whatever was the sum he was originally to have obtained.

We have received an announcemet of the death of Dr. F. Johnston Aitkin.

Mr Taylor.—*The editions of* 1842, *are the latest for the works of both Ferguson and Elliotson. Write for catalogues to Longman & Co., Highley, Renshaw, Balliere, or Dulau and Co.*

Dr. Clay's *communication on "The Application of the Plug in cases of Uterine Hæmorrhage," will appear next week, when we shall also notice several other communications, which we have been obliged to pass over for the present.*

Mr. H.—*The exposure of the clairvoyant girl's artifices at the Adelaide Gallery must be deferred till next week.*

X.—*The communication of X. next week*

Having resolved to publish our PHARMACEUTICAL NUMBER with the largest size allowed by law, we have found that we can do it greater justice by deferring its publication to the 30th instant, when it will be ready to go in the Booksellers' parcels, with the Monthly Magazines. As we shall send none out that are not specially ordered, gentlemen will do well to give orders early to the Booksellers or Newsmen—or to remit 6*d*., or six postage stamps, to the Publisher, for the STAMPED Edition.—UNSTAMPED, 5*d*.

THE MEDICAL TIMES.

SATURDAY, MAY 18, 1844.

In Charity's name, what can be done with the Apothecaries' Company? Superannuated hopelessly, curelessly, an unshorn, musty, murky, peddling impersonation of senile senility, dotard dotage—old age at its maximum—dark chambered conclave of the withered hands and petrified brains of honest traders of another century—the "thrice worshipful Society," which has about as much right to stand amid the Scientific Institutions of the nineteenth century, as the Dolly Tearsheet of Falstaff's day amongst the living, waltzing dames of an Almack's ball; with what trembling limbs and drivelling terrors must it look at the next session of Parliament!—MEDICAL TIMES, Dec. 9, 1843.

THE "Worshipful Society of Apothecaries" are no sticklers—*in their own case*—for the division of labour. *Their* speciality, *in practice*, is something fearfully omnigenous. Already, first, drug-venders by wholesale and retail; secondly, Government inspectors and confiscators of drugs; thirdly, examiners of *qualified*, and prosecutors-general of *unqualified* practitioners; fourthly, professional tax-gatherers, by no means to their own loss; and, finally, so many perambulatory Hippocrates to the civic aristocracy who venture to employ them—they have yet not been content with so large a plurality of traffic, but with an "ability to do, increased by doing," have added, the last week, a bran-new business to their extensive firm—introduced an entirely new character to their comic monopolologue—and have come out as literary drug-men, real corporate pamphleteers, not only achieving a pamphlet, but—intrepid for beginners—achieving it in their own defence! Let no one for the future say, that, during their long reign, no *single* act of theirs made science *or* literature their debtor.*

The important book, the first-born of these patriarchal high-priests of drug-mysteries, appears under the auspices of that Rothschild of medieal publishers, who, in happy eontrast with his exquisitely grandiloquent shopman, has been defined the "best-natured man, with the worst-tempered muse,"—we mean Mr. Highley. With superb paper, delicate type, beautiful printing, the *brochure* is all that a "purist" can ask for; and if verbal colloeation, or "proper words in proper places," be the genuine perfeetion of writing, the author is as worthy of his work as ever was hard-working father of his well-dressed Cupid of a son. But when from form we go to things, from style travel to matter, we notice a saddening contrast. There is about it a "smell" of "the shop," a dismal, dingy look of the Hall! Page after page, the conviction strengthens that we are dealing with the men of rhubarb and aloes: that we are not far off anility and decay. With closer contact, a fetid noisomeness of breath is as clear as the prettiness of borrowed language; and though it be painted and begilded with fair sayings, our senses, sharpening by degrees, descry but a sepulchre!

The first feature which breaks out in the palpable obscure of the pamphlet, is, that the posts of Government from which we, the much-loved licentiates, are so jealously excluded, would, after all, be no great misfortune to us — if we could only get them. The yoke of office appears to be so sweetened, the burden of dignity so lightened by some delightful arcana of Puddledock worship — some mysterious and inexplicable phenomena of Hall management—on which we are never to lay unhallowed fingers—that the worthy Governors would seem so many Alderman Gibbs, in their readiness to continue us their services *ad infinitum*. Like Sir Robert Peel, insisting on two hours' extra labour, that he may disoblige operatives to their good—the Society *will* persevere in inflicting on us the boon of—themselves! More charitable than the divinities of the heathen poet, we may storm them with petitions to descend, and run no hazard of being *cursed* with our wish,

Now, of course it is known—or, if not, 'tis important we should make it known—that for every bad purpose, likely to be profitable to us, we have *motives* and *pretexts*: the first come naturally, and are kept to ourselves; the second we have factitiously, and liberally present to other people. If this important fact had never been discovered, the pamphlet we are noticing would have been in no way remarkably silly; but the worthy Company-men, so backward in their acquaintance with improvements, were clearly unaware of this accession to the range of moral science, and, therefore, have gone on as freely talking their antiquated nonsense about not their "good" but ours, as if it were possible they could get any human being, in our time, to believe them!

These worthy apotheearies tell us, all in the way of defence too, that they have raised the examination of candidates for their licence; that from Aug. 1815, to Jan. 1844 they have, really, only let loose on the public exactly ten thousand and thirty-three apothecaries; that during twenty-nine years they really extraeted very little more than one hundred thousand guineas from the praetitioners of England! How much must we thank them for their magnaminity to the public; their tender mercies to us?

Now, while gladly owning that they have raised the standard of medical qualifications, what argument is this that a gentlemanly profession shall be trammelled with the degrading government of an inelegant parcel of huckstering tradesmen? We avow that they raised qualifications; but did they more than their duty? Could they have avoided it without guilt, and are we to perpetuate their degrading ineptitude because they have been commonly honest? We may thank them for their goodness in not licensing utter quacks; but it was a merit that they have been paid for after a pretty tune, and if it so please them, with this reciprocity of *quid pro quo*, we will close the account.

But we are told (page 27,) that if physicians have the examination of general practitioners, they will contract the curricula and lower the examinations to reduce other's attainments and keep themselves superior. But why shall physicians necessarily govern examinations because apothecaries cease to examine? Why shall not general practitioners be seated at that general board which is to prescribe the curricula to be followed by candidates in each grade? Why shall they not take their place at the examining table of their own brethren? This is an arrangement so necessary to any settlement of the question of Medical Reform, that a bill that does not provide it is just simply ridiculous. Yet our apothecaries cannot foresee anything in the withdrawal from them of examinations but the absolute subjection of general practitioners to the physicians!

The third and last argument given in the eustomary neat and faultless verbosity of this specious pamphlet is one equally beside the question. Legal protection, they elaborately prove to us, is necessary to the general practitioner. Of course it is; but how thence infer that *they* are necessary to him? The pamphleteer himself recommends summary magisterial convictions, as the most effectual process. Why, then, support a society expressly for a purpose it never fulfilled when empowered, and which it now itself proposes another authority to fulfil? You have had large power to suppress unlicensed practice; you have received probably more than one hundred thousand pounds to assist you in the difficult exercise of that power:—and at this moment there is not a town—there is scarcely a village in the empire where illicit praetice is not rampant. Out of your own mouths then, do we eonviet you. You have prosecuted, but every one knows with what lukewarmness and inefficieney. You have proseeuted just enough to force respeetable men to enter your fold with their fees; and yon have proseeuted just too little to protect them when you have got them entered.

We have read the pamphlet earefully, and these three (and we speak eonscientiously) are all the "pretexts" we ean find alleged for perpetuating on us the incubus of the Society.

It is lueky for the reputation of the Corporate Apothecaries, as shrewd men of business, that their real reasons for their anxiety to examine us, are far more substantial than any they have ventured to put in print. Their *motives* are sound and private, to make up for their *pretexts* being flimsy and public. The eommand of four

* "A statement by the Society of Apothecaries on the subject of their administration of the Apothecaries Act, &e." Printed for the Society. Highley.

or five thousand a-year from examinations, with an amount of public influence, not very pleasant to forego, show that there is far more good sense in the Corporation's policy, than their pamphlet would at all lead us to expect. People who will take the chance of making themselves ridiculous before the public, that they may enjoy the comforts of a respectable exchequer in private, prove that they have not lived in the world for nothing: they have caught a reasonable notion of the value of things.

Like most unfortunate disputants who are compelled to argue beside the question, our pamphleteer has proved a great deal too much to be useful. He asseverates with great vehemence that the "Society" exacts from its licentiates, examinations equal to those sustained in the College of Physicians. What reason then, except the Society's fondness for fees, can be alleged for badging the general practitioner as an apothecary? With a surgical education, which guarantees at least a large acquaintance with anatomy, the general practitioner as he enters the profession, is even in point of *medical* attainments equal to the physician! Is it not then, on the pamphleteer's own showing, a deep injustice to the practitioner, a vast fraud to the public, that because the examinations occur in different localities of the same city *this* man shall be in law an esquire, and in popular faith, a person of high social standing, while *that* shall be treated by statute, as only one of a better class of tradesmen, and in general repute, take rank but with the body of druggists? The apothecaries have annihilated their own case. The greater merit they claim from their highly educated licentiates—the more do they establish the latter's title to enfranchisement. We are too good for the dingy hall: to fetter us there, is again to tie the living to the dead.

We repeat our matured conviction—strengthened much by this pamphlet—that the true place of General Practitioners is in the College of Physicians. Members of the College of Surgeons by their *surgical*, they should be Members of the College of Physicians by their *medical* attainments. This arrangement by no means requires the Licentiates of the Hall to take equal rank with the present body of Physicians. We believe that, while agreeing with us that inclusion in the Pall Mall College would better distinguish them in popular opinion from the body of Druggists, and much raise the whole profession in social standing—they yet appreciate the difficulties of all large organic changes, and would cheerfully support a scheme by which the present and future body of Physicians would be recognized as Fellows, and themselves formed into a second rank, as Members. One party, and one party alone, can offer a plausible objection to this great improvement—the less-educated of the present body of Physicians; for, with this arrangement, their success in competing with the now-liberated and fairly-placed General Practitioner would depend on scientific superiority. The grievance would not be very intolerable, and would certainly not injure the public.

After denying us for years all share or control in their management, and treating us with a *hauteur* which Turkish bashaws might study with advantage to their dignity, it is a glorious and just thing, let us say in conclusion, at length to see the Hall rulers in the position of petitioners. How pleasing to find that it is no longer we that are at their feet, but they at ours! Their existence depends on the fiat of those whose will they were accustomed never to think of save to oppose or contemn! So long known as but their fee-making machines, we are now recognised as their masters—their destiny in our hands—their fate in our good keeping. Their destruction—we boldly pronounce it—is all but certain! Knowing, as we do, that the question of suppressing illicit practice is one that stands by itself, and is wholly apart from the continuance of the Hall as our governing medical body, we much mistake our brethren's opinion if the most pleasing part of a Medical Reform Bill will not be that which pays a Profession the compliment, and does it the high service, of enfranchisement from the sordid and degrading management of this "trading guild," exercising *absolute* powers!

PARISIAN INTELLIGENCE.

(FROM OUR OWN CORRESPONDENT.)

Paris, May 9, 1844.

On Febris Intermittens and Hypertrophy of the Spleen, with remarks, by Professor Piorry. The following cases, chosen among numerous others, prove that intermittent fever is produced by hypertrophy of the spleen (*hypersplenohæmia* or *hypersplenotrophia*, according as there is merely a congestive state *hyperæmia*, or true *hypertrophia*,) and, at the same time, show that the discovery of this condition was obtained by plessimetry. The practical induction to be drawn from this fact, was to discover a remedy which would act principally on the diseased organ; and clinical observations shew that the sulphate of quinine possesses that quality to an eminent degree; for, when administered, the spleen decreases rapidly in size, and at the same time, the paroxysms of the fever diminish in intensity, and totally disappear when the organ is reduced to its normal state. This fact may be daily observed in the wards of the Professor at the Pitié.

Case 1.—A man at No. 17, *Salle St. Raphael*, was affected with intermittent fever, the paroxysms of which came on every 8th day. By plessimetry the spleen was found to be upwards of eight inches in length. Desirous of proving to several physicians present the efficacy of the sulphate of quinine, and as no immediate danger was to be feared, the Professor administered nothing for about a fortnight, during which time two new paroxysms took place. He then ordered 15 grains of the sulphate of quinine, and, in the space of five minutes, the dimensions of the spleen had decreased about one inch. The dose was repeated in the evening, and the next day the length of the organ was only 6¼ inches. The vegetable alcali was continued until the spleen offered only 4½ inches in length (its normal size), after which the paroxysms disappeared, and the patient left the hospital cured.

Case 2.—Jean Janin, a mason by trade, ætat. 39, native of a department where intermittent fever is endemic, especially in autumn. In the month of September, 1830, he was seized with *quartana*, which lasted thirteen days, and which yielded to a few doses of cinchona. Admitted into the hospital for a bronchitis, he stated that, three days before, he had experienced an abundant epistaxis, by which he had lost about lb.j of blood. On examination, the dimensions of the spleen were found to be in length 11½ inches, breadth 5½ inches. Its anterior border was easily felt on depressing the abdominal parietes; it descended as low as the fossa iliaca, was hard and thick. The patient was placed so as to relax as much as possible the abdominal muscles, and several persons were requested to place their hands on the spleen. The sulphate of quinine was then administered at the dose of grs. xviij; a minute had hardly elapsed before the organ was felt to recede, and four minutes after, it presented less than 10 inches in length. The quinine was continued, the dose being gradually increased to grs. xxvij morning and evening. The third day the patient was much better, and could lie on either side without experiencing the least pain, which he could not do before his entry. Five days after, the spleen was only 5½ inches in length, which, though larger than in its normal state, had decreased upwards of one-half; abdomen decreased in size; facies natural. The patient then left the hospital, if not completely cured, at least much better.

Case 3.—At No. 34, Salle St. Raphael, is a man affected with *hypersplenotrophia*: dimensions of the spleen: length upwards of 4½ inches; breadth 4 inches; and from the matity produced on percussion, it may be concluded that its thickness was considerable. Questioned, the patient mentioned that he had a paroxysm (the first, the day before he entered the hospital), but as there might be some doubt as to the existence of a paroxysmal fever, notwithstanding the enlarged state of the spleen, Professor Piorry waited until a second paroxysm appeared, ere he administered the sulphate of quinine. The return of the fever did not cause the spleen to increase in size, a fact which proves that the former is the effect, not the cause, of the hypertrophy of the latter. After the second paroxysm, grs. vj. of the sulphate of quinine were administered, and repeated the next day, which quantity was sufficient to reduce the spleen to its normal size, and to prevent the return of the fever.

Case 4.—A young girl, ætat. 16, entered the hospital for violent cephalalgia, with a sense of lassitude and uneasiness. On examination, all the organs appeared to be in their normal condition; when, the third day after her entry, she was seized with a shivering fit, followed by slight heat and sweat. The next day she was as well as ever; pulse 70, regular; heat natural. On inquiry, it was discovered that she had remained late out of doors in the damp, and had felt a chill. The spleen examined was found to have: length six inches; breadth five inches; and its thickness in proportion, as the matity was considerable. Quinine was administered after the second paroxysm only, after which two very slight ones took place, and then the cure was complete. This case is remarkable on account of the enormous size of the spleen; and evidently the intumescence of that organ existed previous to the apparition of the fever, which must be considered as produced by this hypertrophy.

Case 5.—This case alone, did not numerous others exist, would be sufficient to prove the utility of plessimetry, in establishing a diagnosis. A man, at No. 7, Salle St. Raphael, came to the Pitié on account of what was supposed to be an organic disease of the heart, with which he had been affected several years, and for which various remedies (local and general bleedings, temporary blisters, and all the ordinary measures adopted in these diseases) were employed, but without the least benefit. The symptoms presented were: dyspnœa; palpitations; slight œdema of the inferior extremities; pulse regular, normal; from time to time slight heat of the skin, and irregular paroxysms of fever. With the hand placed on the cardiac region, it was perceived that the pulsations of the heart extended more to the right, and somewhat higher than usual; nothing was heard on auscultation: no abnormal sounds. With the plessimeter, the heart was found of the normal

size, but its base was about an inch higher, and half an inch more to the right, than customary. To what was this change of position to be attributed?—on what organic lesion did the cause of the symptoms observed depend? Closely questioned, he mentioned that he had been affected with intermittent fever for several years, and that the paroxysms were especially intense at the period when the first symptoms of the affection of the heart manifested themselves. This fact, added to the existence of the irregular paroxysms of fever, led naturally to the conclusion that the spleen was the affected organ, and when examined its dimensions were found to be: length seven inches; breadth five inches; thickness proportionate. It had developed itself principally upwards, and extended to about half an inch above the nipple. The sulphate of quinine was ordered (grs. xxviij. in divided doses per diem) and continued for several days. A week after, the spleen was reduced to its normal size; the diaphragm was not pushed upwards as before, and the heart had returned to its natural position; in short, all the signs of an organic disease of the heart had disappeared, with the exception of the œdema of the lower limbs, but which in all probability will disappear by rest, and as the circulation becomes gradually re-established.

The following fact is still more conclusive in favour of the opinions expressed by Professor Piorry. It was communicated to me by M. Damoiseau, formerly *interne* under Prof. P., and now with M. Lisfranc. M. D., requested to examine a man supposed to be affected with typhus abdominalis, found, on percussing the abdomen, that the spleen was considerably enlarged, and that no other appreciable lesion existed. Consequently, he enquired if any paroxysmal fever had taken place, and, receiving a negative answer, he predicted that one would soon appear. The next day, intermittent fever made its appearance: quinine was administered, and the patient recovered.

Hæmaturia; carcinoma of the bladder.—The following, interesting, case occurred in the wards of Professor Cruveilhier, at the Charité. Constant Lemoine, by trade a baker, ætat. 58; although not of a strong constitution, yet in general enjoys good health. He had been affected twice with pleuritis, which yielded to the ordinary means, and, when 18, with a blennorrhagia, which disappeared after a twelvemonth, without his having employed any remedies. Three months previous to his entry, he remarked that his urine was bloody; no pain either in the hypogastrium or the lumbar region; no fever, heat, or thirst; stools natural; his appetite was sometimes greatly diminished; and though not positively ill, still he felt that (to employ his own expression) all was not right. The blood voided with the urine was sometimes in clots; and he observed that, while making water, the flow of urine, when the bladder was nearly empty, ceased suddenly, but soon after went on again, until the whole contents of the organ were evacuated. Examined on his entry, there was no pain on pressure over the lumbar vertebræ, the hypogastrium, or the peritonæum; the difficulty experienced in making water had considerably increased during the last two or three days, so much so that ischuria existed. The urine evacuated was so high-coloured, and contained so large a proportion of blood, that on a superficial examination it appeared to be formed of that fluid alone. *Diagnosis*: *fungus hæmatodes, or carcinoma of the bladder. Treatment:* astringents internally (*decoctum rhataniæ*, and pills containing *extractum rhataniæ* and *alumen*. Two cauteries on each side of the lumbar vertebræ. For six months, the state of the patient continued the same; when he was taken with a sharp pain in the right hypochondrium, attributed by Professor C. to the development of similar tumours in the liver. Soon after, without any considerable aggravation of the symptoms, the *facies* changed; the skin presented the yellow tint pathognomonic of a cancerous diathesis, and the urine, still containing a good deal of blood, was evacuated in small quantities and very frequently. Finally, death closed the scene seven months after his entry. *Sectio.—Bladder:* in its interior an encephaloid tumour which filled it completely, and which was attached to the posterior surface of the mucous membrane; walls somewhat thicker than in the normal condition. *Kidneys* presented signs of Bright's disease; cortical substance somewhat atrophied and pale. *Liver* offered two encephaloid tumours, containing a dark coloured liquid in their interior.—Astringents, said Professor Cruveilhier, are useful in similar cases—inasmuch as they diminish the intensity of the hæmorrhage and prolong the life of the patient; but this can only be really efficacious when the hæmorrhage is not produced by an organic disease. Catheterism was not employed, because experience had pointed out to me the danger sometimes attendant on it, as the following case will shew:—Some time before this man's entry, I was called in to see a general officer suffering from affection of the bladder; I diagnosticated a fungus, and advised him to avoid, above all things, employing catheterism. Other eminent practitioners having been consulted, this advice was not followed; the consequence was that hæmorrhage took place; the bladder was filled with blood; cystitis was produced, and death shortly afterwards terminated the sufferer's life. It was the remembrance of this fact that directed my choice of remedies in the present instance. This disease is not of common occurrence; Sœmmering affirmed that it never existed in the male sex, and, when it existed in the female, it always complicated cancer of the uterus. Chopart quotes a case of a scirrhous tumour attached to the spot where the ureter enters the bladder. MM. Mercier, Civiale, and Piedagnal relate instances in which there existed degenerescences similar to that presented in the present instance. Finally, Professor Bouillaud observed one in the wards of Professor Fouquier, at the Charité, in 1828, in which a cancer like a cauliflower closed hermetically the orifice of the bladder.

Treatment of the Secondary Symptoms of Syphilis.—Dr. Devergie, physician at St. Louis, has just published the mode of treatment adopted by him in that hospital. It consists in the association of ioduret of potassium with the oxymuriate of mercury and sudorifics, adding, if necessary ferruginous compounds, such as Vallet's pills,* Passy water, and sometimes a few grains of the extractum cinchonæ. When the patients have already been submitted to a sufficient mercurial treatment, and are in a suitable hygienical condition, mercury is not administered, but the ioduret of potassium alone had recourse to, at the dose of from grs. xviij. to grs. xxvij. per diem; but it is rarely necessary to have recourse to the latter dose. In general the method adopted is as follows: 1°. With the exception of *rupia*, in which disease emollient poultices are applied, to cause the scabs to fall off, the treatment is principally internal. 2°. If, after five or six weeks treatment, the morbid symptoms still persist, as sometimes happens in tubercular affections of a cancerous nature, caustics are employed, and in preference a solution of the nitric oxide of mercury. Two or three cauterisations suffice in general to obtain a cure. They are principally requisite in cases of mucous tubercles of the lips, tongue, and cheeks, covered with a horny production of a dull white colour. 3°. The administration of mercury is sometimes persisted in for two and even three months. 4°. The dose of the remedy is proportioned to the age and strength of the patient, but ordinarily it ought never to go beyond gr. ¼ of corrosive sublimate per diem. 5°. Opium ought always to be combined with the mercurial preparation. 6°. Finally, the treatment may thus be resumed: Commence with lbij. of a sudorific tisanne per diem; after some time, take in a wine-glassful of the decoction, at first morning and evening, and afterwards morning, noon, and night, a tablespoonful of the following solution.

℞. Iodur. potass. ʒij.
Aquæ puræ lb i.

Each tablespoonful contains grs. v. of the iodaret. One of the following pills,* during a week, every morning, and afterwards morning and evening.

℞. Extract. guaiac. ʒss.
Extract. opii. grs. xxiv.
Hydrargyr. oxymur, gr. xij.,

M. ft. pil. No. xl.; moderate diet; milk instead of wine; tepid bath weekly.

Academy of Sciences.—Sitting of the 6th May.—Baron Ch. Dupin in the chair. Dr. Bonafonds writes, stating that he accepts the proposition made by Dr. Deleau—to submit to the examination of a commission, the merits of their respective modes of treatment.

On the Frequency of Cancer.—Dr. Tanchon addressed a letter containing the following remarks on this disease. From statistical tables it would appear that the number of cancers augments annually; in England, Mr. Farre indicates 2448 in 1838, and 2691 in 1839; at Berlin a similar remark; on the registers for the deaths in the department of the Seine, in 1830—668 were produced by cancer or 1.96 per cent.; and, in 1840, there were 889 or 2.40 per cent. The cause of this disease seems to be aggravated by civilization; for it is more frequent in populous cities than in the country; thus, in Paris, there are 2·54 deaths per cent., and only 1·63 in the country. Of 9118 deaths caused by cancer, there were, in France, 6967 women, and 2161 men; and, in England, on 5139 deaths, 3859 women, and 1220 men. The age in which it appeared was from 40 to 70. In the female the breast, and in the male the stomach, is mostly the seat. As to the treatment: surgeons operate though they admit that extirpation does not cure, and that the disease frequently reappears and ultimately carries off the patient; should they, however, not operate from the refusal of the sufferer, or any other cause, they leave the disease to nature, saying, that there is nothing to be done. From these remarks and his experience, the author concludes, that cancer is deserving of the serious attention of the physician; that a medical treatment ought always to precede a surgical one; and that extirpation ought never to be had recourse to, but when all other means have failed.

On the Plague and Quarantines.—Letter presented by Dr. Serres, M.A.S., in the name of Dr. Sturmer, Professor to the Faculty of St. Petersburgh. The plague, which reigned epidemically during the Turkish campaign of 1828, 1829, and 1830, developed itself first among the Turkish soldiers, and afterwards propagated itself to the Russian army, where it made numerous victims. Its principal symptoms were petechiæ and bubos; it did not spread by immediate contact. The calamities which invariably follow, and accompany warfare, such as excess of fatigue, over exertion, inclemency of the weather, want, accumulation of a great number of men in a small space, fright, errors in diet, excess of drink, or of venery, contributed to increase the number of victims. Cauteries and cutaneous eruptions seemed to act as preservatives; whilst, on the contrary, chronic diseases rendered the person more susceptible to contract the disorder. The period of incubation was from two to three days. As to the treatment: it varied according to the physician; thus purgatives, emetics, refrigerants, antiseptics, cinchona, acids, &c., were given; but the best method consisted in first isolating the patient, and then employing remedies according to the predominant symptoms.—From his remarks, the author concludes:—1° That the plague is endemic in Asia Minor, Egypt, and Constantinople; sometimes, while sporadic, from the influence of certain atmospherical and meteorological causes, inappreciable to our methods of investigation, it becomes eventually epidemic.—2° That the plague during the Turkish campaign had no similitude with the diseases which propa-

* *Vallet's Pills.* ℞. sulph. ferri crist. lbj. carbonatis sodæ ℥xviij. mellis optim. ℥x. Dissolve the sulphate and carbonate; add ℥j. of syrup for each lbj. of the solution; allow it to deposit in a phial with a glass stopper; decant the liquid; wash the deposit with sugar and water; dry it on a bit of linen, impregnated with syrup; mix it with the honey, and evaporate it to the consistence of an extract. These pills, of gr. iv. each, are to be made by means of gum arabic, q. s. Dose, two to ten pills per diem.

* They are very similar to Dupuytren's antisyphilitic pills, composed of ℞. dento-chloruret. hydrarg. grs. viij., extract. opii. gr. x., extract, guaiac. ʒiss. ft. massa, divide in pilulas, No. xl.

gate themselves by immediate contact, or contagion, such as,—vaccine, syphilis, psora; but that it may be produced by mediate contact, or miasmatic contagion, because: (A) if an individual who offered a predisposition to contract the disease, exposed himself to the influence of the miasma, he fell ill immediately—(B) During the whole campaign, this disease increased constantly —(C) It was not limited to certain places, but appeared wherever an infected person was to be met with; consequently, there must be something in the organism, the clothes, &c. which propagates the disease by means of miasma—(D) Pest houses and other measures, employed to prevent its spreading, seemed to have an influence on its development.—The foregoing remarks are applicable to the cholera, the ophthalmia of Egypt, and typhus which is *positively* not contagious.

On the Influence of the Sun's Rays, transmitted through Coloured Glass, on the Growth and Germination of Plants.—Report of M. Dutrochet on a Memoir of M. M. Zantideschi, Professor of Physics, Venice:—Senebier, in 1782, was the first who studied the influence exercised by coloured light on plants. Germination took place as follows: first, in a yellow; then, violet; thirdly, in a red light; and, finally, in obscurity; the growth of the stalks and roots took place in the following order: in the dark; submitted to the yellow, violet, and red light; then to the light transmitted through a bottle containing water alone; and, finally, in the atmosphere. *Etiolation* took place less when the rays passed through a violet-coloured glass. Carradori, in 1841, confirmed the results obtained by Senebier, and, moreover, found that the green colour of vegetable, was more developed under the violet and blue glass than under the others, but less than in the atmosphere. Dr Sebastien Poggioli, in 1817, published a remarkable work on the same subject; but instead of submitting plants to a light transmitted through coloured glass, he employed the red and violet rays of the *spectrum solaris;* plants submitted to the latter grew considerably, while those exposed to the former were *etiolated* on the fourth day. The experiments of Dr. Zantideschi were performed thus:—a wooden box was divided into seven parts, each covered by bits of coloured glass —orange, violet, yellow, blue, green, and black; a balsam seed was planted in the five first. Under the blue the plant grew quickest; under the green it died on the eighth day; under the violet it appeared to be most vigorous, but did not blossom; under the violet and green the leaves retained their natural colour, but became yellow under the others; under the violet, blue, and green, the stalks bent towards the light; under the orange and yellow they remained straight. Germination commenced under the green the second day; under the violet the third day; under the yellow and orange the fourth day; under the blue the fifth day; in the atmosphere on the ninth day only. Under the green the seminal leaves offer a green tint, whilst they are yellow under the others. From his researches the author concludes:—that vegetation under the influence of light transmitted through coloured glasses is, as Senebier and Carradori indicated, languid and sickly; that germination does not take place precisely in the order mentioned by Senebier; that the violet colour has a power but little inferior to ordinary light, in rendering some plants green—balsam, for instance —but this is not the case with the *oxalis multiflora;* that vegetation is not more vigorous under the violet than under the yellow and red glasses, but principally under the blue. The conclusions of the report were:—that although the researches of the author were not as complete as might be desired, still they were interesting; consequently the reporter proposed that Dr. Z. should be thanked for his communication, and encouraged to pursue his experiments.—(Adopted.)

On the Causes of Albuminuria.—Dr. Fourcault read a memoir on this subject, and from his experiment on animals, he concludes:—1° that the skin is merely an excretory organ; the liquids eliminated by transpiration are not secreted in its tissue; 2° that the animal preserves its normal temperature when the skin is removed, and albuminuria is not the result of this operation; 3° that when the cutaneous transpiration is suppressed, five kinds of phenomena develope themselves:—a considerable change in the component parts of the blood—a notable diminution in the temperature—super-secretion and effusions of various kinds—local lesions, and alteration in the composition of the urine or albuminuria; 4° That the same phenomena, especially the latter, appear when, after removing the skin, an impermeable coating is applied on the part; 5° That cutaneous asphyxia is produced when the transpiration is completely intercepted, and may cause death, as the arterial blood may thus be made to attain the maximum of the rifrigerating and stupifying qualities of the venous: 6° That when this suppression is partial, it gives rise to the general symptoms observed in fevers and phlegmasiæ.

Academy of Medicine. Sitting of the 7th of May.—M. Caventou, V. P., in the chair. The President read the discourse which he had the honour of addressing to his Majesty on the 1st of May, as well as the King's answer.

Professor B. Dubois informed the Academy that he had called with M. Baffos upon M. Ferrus, and that he was happy to be able to inform the assembly that their Honourable President was much better, though still suffering from lumbago, which probably would prevent his going out for some time. He concluded by thanking the Academy, at the request of M. Ferrus, for the concern they took in his welfare.

On the treatment of Rheumatism by Sudorifics.—M. Villeneuve read a report on a memoir of M. Colstadt. The author related eighteen cases, in which the pulvis ipecacuanhæ comp. was administered, combined with purgatives and colchicum. The duration of the disease was from eleven to thirty-two days. In conclusion, the reporter stated, that he did not partake of the opinion expressed by the author; on the contrary, he considered the increased action of the skin to have been produced rather by the warm tisannes given to the patient than by the pulv. ipecac. comp.; that the observations were neither complete, nor conclusive enough to merit the approbation of the Academy; consequently, he proposed simply thanking the author for his communication.—M. Martin Solon said, that the treatment of rheumatism was far from being settled. Venesection performed at very short intervals does not succeed so often as has been asserted. Have not sulph. quininæ, nitras potassæ, and opium, been said to be specifics? and as to the treatment recommended by the author, it is not new; and the remedy itself being composed of several others, it is impossible to say to which the cure ought to be attributed. Is it to the opium?—the ipecacuanha?—the sulphas potassæ? Besides, the duration of the disease was not shorter than when no such remedies are employed. The benefit to be drawn from the cases quoted in the memoir, is tantamount to nothing; consequently I am of the opinion expressed by M. Villeneuve in his conclusions.—M. Rochoux remarked that as rheumatism might be articular or muscular, acute or chronic, so the treatment would necessarily vary; in other respects, he partook of the opinions expressed by the reporter and M. Martin Solon. Conclusions adopted.

M. Villeneuve then read a short memoir on the different modes in which the pulvis ipecac. comp. is prepared.

On Varicocele.—M. Vidal de Cassis, one of the candidates for the vacant seat in the Academy, *Section de Chirurgie*, read a memoir on this disease, giving a description of a new mode of treatment employed by him, and by which a radical cure is obtained. Commissaries:—MM. Gimelle, Blandin, Velpeau. (This interesting memoir will shortly be condensed and given in the *Medical Times*)

GARLAND DE BEAUMONT, D.M.P., B.L., & S., &c.

Honorary Physician to the Spanish Embassy.

PUERPERAL CONVULSIONS.—In a case of this disease, occurring in a young primaparous woman, at the seventh month of pregnancy, Mr. Bree induced premature labour successfully.

REVIEWS.

Remarks on Vivisection. By RICHARD JAMESON.—Bailliere.

THIS is a sensible and clever pamphlet, in defence of Vivisection. The writer exposes the fallacies and absurdities of some of the authors who have written under the patronage of the "Society for the Prevention of Cruelty to Animals;" retorts upon the more aristocratic members of that body their cruel sports; and contends with force for the lawfulness of vivisection in those cases where their results are of service to humanity. The pamphlet is not ill-timed; and if the members of the Society we have before referred to, wish to shew that they understand the true meaning of the comprehensive word, mercy, they will do wisely to award Mr. Jameson their next annual prize.

Elements of Anatomy. By JONES QUAIN, M.D. Fifth Edition.—Taylor and Walton.

THIS standard work, reaching another of the many editions which its merits assure it, appears now before us with the favourable circumstance of having for its editors, Professors Sharpey and Richard Quain. We observe that the portion of the work on which advancing science has recently thrown so many new lights—we mean, General Anatomy—has been re-written by Dr. Sharpey, (need we say, it has not suffered by the circumstance?) and the whole has been apparently carefully revised, and brought forward to the advanced point of our anatomical knowledge. The engravings strike us as very *recherché;* and the printing and paper;—but the book is so well known that our praises must sound dull as a thrice-told tale. We pronounce the "Elements," as they now stand, the best book on the subject in our language.

Contributions to the Diagnosis of Empyema, with Cases. By R. L. MAC DONNELL, L.R.C.S., I. —Hodges and Smith. 1844.

IN this essay, which is one of considerable practical value, under the title, "Pulsating Empyema of Necessity," Mr. MacDonnell describes a variety of empyema; during the existence of which, there forms a pulsating tumor in the intercostal spaces, which afterwards bursts and discharges its contents. To this form of disease Mr. Lloyd alluded, in a recent discussion on paracentesis thoracis, at the Royal Medical and Chirurgical Society. Three cases are placed on record by our author, which, although clearly cases of empyema, present several characters by which they might have been mistaken for thoracic aneurism, or encephaloid disease of the lung. The distinguishing signs between these diseases are alluded to by Mr. Mac Donnell, who thus briefly sums them up:—Pulsating empyema of necessity may be diagnosed from thoracic aneurism by the history of the case—the dulness extending over the whole side, the pulsation being only felt in the external tumour—the absence of thrill—the absence of *bruit de soufflet*--and the extent and nature of the fluctuation: and it may be distinguished from encephaloid disease of the lung and mediastinum, by the absence of the expectoration resembling *black currant jelly*—the absence of a persistent bronchitis—the absence of a varicose condition of the veins and œdema of the side affected--and in cancer of the lung, the situation in which the external tumours form, is not invariably confined to the thorax.

The other conclusions arrived at from the reflections and cases published by Mr. Mac Donnell, are as follows:—

That copious purulent expectoration in empyema

s not always indicative of cavities in the lung; but, on the contrary, is of frequent occurrence in his disease, and seems to be the result of an effort of nature to get rid of the purulent collection by he nearest and readiest outlet.

That this symptom, when it results from the above cause, is not attended with the usual symptoms either of abscess of the lungs, or inflammation of the bronchial mucous membrane.

That a *true* bronchitis of the sound lung frequently complicates empyema.

That still more frequently, the sound lung becomes congested, and presents some of the ordinary signs of bronchitis and pneumonia.

That in addition to *depression* of the liver, from mechanical causes, that organ is likewise *enlarged from engorgement with blood* in empyema: this enlargement not being confined to empyema of the right side, but occurring also when the disease is seated in the left cavity of the chest.

That this enlargement is identical with that which takes place in other affections of the lungs and heart, where, in consequence of their functions being impaired, an additional duty is imposed on the liver, viz., *that of eliminating carbon from the blood*, as proved by the researches of Tiedemann and Gmelin, Elliotson and Liebig; and as occurs in the former cases, so likewise we observe in this, that the increased size of the organ is due to an additional afflux of blood, whereby its structure becomes engorged, softer in consistence, and darker in colour.

This condition of the liver has been mentioned by many writers, in their accounts of the appearances noticed at the autopsies of cases of empyema, who have recorded the fact, though unaware of its connexion with the subject under discussion, and it must now be considered as constituting an additional feature in the diagnosis and pathology of empyema.

This condition of the liver, when it occurs in the ordinary diseases of the heart and lungs, has been observed to disappear as soon as the obstruction to the circulation of the blood and want of proper aeration, which gave rise to it, had ceased. So likewise in empyema, its disappearance is one of the first signs which indicate the removal of the effusion, and the return of the compressed lung to the performance of its functions.

This essay, as we have already stated, is well worth the attentive consideration of the profession.

Medicines, their Uses and Modes of Administration, including a complete Conspectus of the three Pharmacopœias, an Account of the New Remedies, and an Appendix of Formulæ. By J. Moore Neligan, M.D., Physician to Jervis-Street Hospital, and Lecturer on Materia Medica, &c. —Dublin: Fannin and Co.

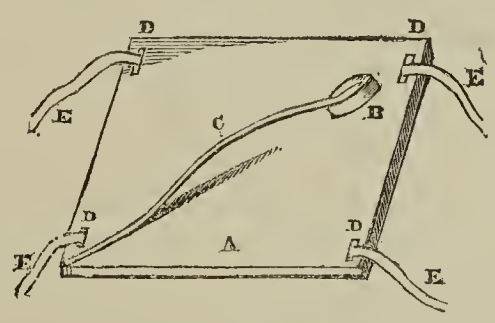
The work of Dr. Neligan is one of the most valuable that has recently issued from the medical press, and should have a very extensive sale in a country, where—as a celebrated French Physician once remarked to us—" the first question is, what is the medicine?—the second, what may be the malady?" The author, having an eye to the practical tendencies of our countrymen, has kept his book within a reasonable size, by omitting the natural and chemical history of medicines. His object has been to give a concise view of all well recognized important medicinal agents, and he seeks to do this through the medium of a classification founded on the nature of their action. In working out his object, Dr. Neligan gives us the officinal and vernacular appellations—the physical properties—the chemical properties—the mode of preparation—adulterations, and their detection—therapeutical effects—dose, and mode of administration—the incompatibles—antidotes, and means of treatment of poisons—with an appendix of formulæ, and extensive nosological table. The book thus contains a mass of practical matter, selected with taste, excellently digested, and, while creditable to the erudition and talent of the author, is valuable to the medical man. We think a work of the kind was wanted, and that this work supplies the want.

A NEW INSTRUMENT AFTER PARACENTESIS THORACIS.

Sir,—At a late meeting of the Royal Medico-Chirurgical Society, Dr. C. J. B. Williams noticed that there had been an instrument invented by Dr. Skoda, of Vienna, for the purpose of preventing the access of air into the cavity of the pleura, after paracentesis thoracis had been performed for empyema. He, however, objected to its use, in consequence of its liability to become clogged with lymph.

I am not acquainted with the kind of instrument alluded to by Dr. W., but have for many years adopted, in my own practice, a means in cases of large accumulation of purulent fluid, which I have found to answer all the purposes required.

However careful we may be in performing the operation of " tapping," it cannot be conducted in such a manner as to prevent entirely the ingress of air. Our means should therefore be such as not only will prevent the ingress of air after the operation, but also will remove that which may have entered during the operation; and to enable us to remove the fluid whenever, and in whatever quantity it might be considered requisite. To answer these ends, I constructed an instrument of the following description.



A a flat piece of thin wood, three inches square; B an opening in the same, with valve covering it; C a spring; DD holes for tapes; EEEE the tapes. An instrument with a spiral spring would answer better. The under surface of A is rendered adhesive.

The operation having been finished, the instrument is then to be adjusted with the valvular opening corresponding with that in the integuments. The fluids are to be removed by the application of cupping glasses of the ordinary kind, or such as are furnished with exhausting syringes, (the latter of course are preferable,) which may be repeated as often as is necessary, without disturbing the instrument. By these means, we not only can use our discretion as to the quantity of fluid to be removed at each time, but also, in empyema, can, by the vacuum produced, assist the lungs in regaining their former capacity, and approximate the serous surfaces. The lymph which accumulates under the valve will not offer sufficient resistance to oppose the power of the glasses, provided the valvular opening be made sufficiently large. The use of the stiletto and canula in empyema can not be too much deprecated, as such cannot be otherwise than liable to serious accidents, or to increase the mischief, if nothing more.

I am, Sir, your most obedient servant,

R. A. VARICAS.

CONVERSAZIONE ON "HYPNOTISM"

AT THE ROYAL MANCHESTER INSTITUTION.

We have been favoured with the following report, through a valued correspondent who was present on the occasion, Monday, 22d April, when Mr. Braid, Surgeon, Manchester, by invitation from the Committee, read a paper on the above interesting subject. The interest felt by the members of the institution in the subject, was manifested by the attendance of one of the largest audiences we ever recollect to have seen present; and we observed amongst the audience several of our most distinguished members of the faculty.—Dr. Fleming took the chair.

After giving a short sketch of the rise and progress of mesmerism, Mr. Braid adverted to the report of the French commission of 1784, regarding which he remarked, " though the report of the commissioners was unfavourable to Mesmer's *theory*, yet they bore positive testimony to the *reality of the phenomena*." After giving an apt quotation from the report in support of this statement, Mr. Braid observed:—

" It is quite obvious that there is no attempt here to deny the phenomena; on the contrary, they actually confirm their reality, and yet this is the celebrated decision which has been continually referred to ever since as a complete death-blow to mesmerism and all its pretensions."

He then referred to the progress of matters in other countries; to the commission appointed by the Emperor of Russia, which reported it to be " a most important agent;" and also to the *second* French commission, who prosecuted their inquiries for five years, and, in 1831, read their report to the Academy, in which they stated, " considered as a cause of certain physiological phenomena, or as a therapeutic remedy, magnetism ought to allowed a place within the circle of the medical sciences."

On the subject of Wakley's experiments, and his own conversion from the erroneous impressions he had imbibed from them and other sources, he remarked that :

" Mr. Wakley's experiments with Dr. Elliotson's patients, were well contrived and well conducted for determining the correctness of the doctor's *theory*, and that he considered Mr. Wakley to have clearly proved Dr. Elliotson's theory to be in error, but he deprecated the conclusions into which Mr. Wakley rushed in representing the patients as impostors, and the mesmeric phenomena as 'unmitigated imposture.' He characterized this as not only equally erroneous, but as being far more, heartless and unwarrantable, and said, the true solution of Mr. Wakley's experiments had been determined by his (Mr. Braid's), which shewed that patients who had been either mesmerised or hypnotised, became *liable* to be affected entirely through the imagination, sympathy, and habit; and that they became affected, or the contrary, by the same appliances, according to the results which they previously expected. He said he had himself, from the perusal of Mr. Wakley's papers, and other similar productions, become quite sceptical as to the mesmeric phenomena, and he adverted to his conversion from these opinions during Mr. Lafontane's lectures in Manchester, during one of which he discovered that some of the phenomena were unquestionable, but that the theory by which they were accounted for was wrong. It was then that he first explained to some friends his own theoretical views on the subject, that the effects were not the result of any magnetic influence passing from the operator to the patient, but of the continued fixed stare exhausting the irritability of the optic and motor nerves of the eye, and which would be produced by a fixed gaze at *any inanimate* object."

Contrasting his views with those of the mesmerists, he said:—" The mesmerists believed in a magnetic fluid, a special influence or virtue, as the cause of mental and physical action, which could be brought into activity, by looking into the eyes of the patients, by contact, certain gesticulations called passes, or even by the mere exercise of the will of the operator; that they believed it to be objective, or an influence from without, by which either man, or brute animal, could be thrown, *nolens volens*, into the condition; and that neither bars, nor bolts, nor distance could resist the influence of the omnipotent volitions, passes, powers and gesticulations of the mesmerists; and that their patients also became thought-readers and clairvoyant. On the contrary, Mr. Braid believed the cause to be *subjective* or *personal*, and that no one could be thrown into the condition, unless in accordance with his knowledge, will and consent to comply with certain prescribed conditions.—

Belief or faith in the proceedings might aid, but were not indispensable to success, even at first trial; but imagination, sympathy, and habit were sufficient to throw some of those into the sleep who had been previously impressed. He stated that the most rapid mode of producing the sleep, was by arresting the attention through visual sensation, by causing the patient to maintain a steady fixed stare at some object placed so much above the head as to produce a slight strain on the eyes. He laid much stress on the induction of *a habit of intense abstraction or concentration of the attention*, and to the suppressed state of the respiration during such abstraction interrupting the free circulation and purification of the blood, which acted on the brain as a narcotic, and thus hastened the tendency to sleep. He did not profess to render patients clairvoyant, or thought-readers, by hypnotism. He gave the following quotation from a letter he had lately received from Dr. Collyer, —"The discovery of producing sleep by acting on the eye, as you have described, *is yours*—no one has a right to rob you of it."

He said Mesmerism and Hypnotism supported each other, as demonstrating the reality of *all the ordinary and useful phenomena*, being producible by different artificial means; but, as the ordinary mesmerising processes included all which he had proved to be necessary to hypnotise patients,—namely, the fixation of the eye and attention, in addition to their assumed special influence; unless they could by mesmerism produce all the phenomena of hypnotism, *and something more*, their special influence must be a mere gratuitous assumption. He confessed that he could not produce the phenomena of clairvoyance, thought-reading and mesmeric intuition, by hypnotism, and said that when the mesmerists have proved they can by mesmerism do so on incontrovertible evidence, then and then only will they be entitled to claim the special influence which they contend for. He said, in reference to this debateable point:—"He had studied the subject with some attention, and without wishing to impugn the veracity of the operators (for he was aware that some of the brightest ornaments of science had recorded their belief of the higher phenomena), still," he continued,—

"I must acknowledge that to my apprehension the evidence is by no means adequate to substantiate all the marvels recorded, and the powers which the mesmerists claim. There ought, in my opinion, to be far stronger evidence, and a more extensive series of experiments, and those subjected to more searching scrutiny than hitherto, before being received as facts; for to me it appears far more probable, that the narrators have been deceived, than that the Almighty would ever delegate to man such dangerous prerogatives and powers—powers which are quite inconsistent with the security and harmony of society in the present state of our existence."

He referred, in support of this opinion, to the small number of satisfactory cases which had been met with of the kind, compared with the length of time over which they were spread, and the number of the investigators. Then, he observed,

"Again, there is the acknowledged uncertainty with even the most clairvoyant patients, for in general they are oftener wrong than right; whereas, answers from true perception ought always to be right. Nor should we overlook the fact that most of their answers are given in very vague language, which may admit of very different interpretations. Moreover, every case of supposed clairvoyance which I have had an opportunity of investigating closely, I have been enabled to convince the parties that they had been deceived, and that the whole was explainable on principles which I shall immediately point out, and a want of the knowledge of which I believe has been the chief source of error in those inquiries. Until cases are investigated, with due attention to these sources or fallacy, no implicit confidence should be given to the results recorded."

After appealing to cases of the greatest authority as most decided and extraordinary examples of clairvoyance, which, when investigated with precautions to guard against deception, pointed out by him, had been proved devoid of these supposed marvellous powers, he referred to the sources of error likely to mislead investigators, thus,—

"Amongst the sources of error which should be kept in view whilst investigating the subject of clairvoyance, community of feeling, and mesmeric intuition, (the remarks apply equally to hypnotism, as mesmerism,) the following are the most important: 1stly, the extreme exaltation of function, at a certain stage, of the organs of special sense, which enables them to perceive impressions through the ordinary media, so faint that they could not be perceived in the waking condition; 2ndly, the extreme docility and sympathy which gives a tendency to imitate the action of others; 3rdly, the extraordinary revivification of memory at a certain stage of the sleep, which enables them to remember things long forgotten in the waking condition; 4thly, the remarkable effect of contact or touch in arousing memory; 5thly, the remarkable condition of double consciousness, or double personality; 6thly, the vivid state of the imagination, which instantly invests every idea suggested or remembrance of past impressions, with the attributes of present realities."

In proof of these positions he referred to cases such as those enumerated in his late papers in the *Medical Times*. As an interesting addition to the remarks at page 32, of your No. 238, on the power of contact or touch in exciting memory, we shall quote an ingenious mode of accounting for the supposed transposition of the senses on this principle. Thus a patient who shall be unable to answer a question on a subject with which he was perfectly familiar, on being touched with a finger (or even inanimate object) shall instantly be able to recollect it. This he alleges arises from the touch partially arousing the patient and concentrating his attention to whatever sense may then be most naturally excited. He accounts for the supposed transference of the senses on this principle; thus, a patient may appear unconscious to loud talking, but shall instantly reply to the faintest whisper uttered with the lips near to the pit of the stomach, the hand, or other part of the body; not that these points had become *direct organs of hearing*, but because the breath acts on the skin, and rouses and concentrates the attention to the sound, which was not heard, or not attended to, before, merely because of the diffusiveness of the mind, giving no specific or personal interest to the patient in what had been said and heard. He illustrated this by the well-known power of a mere glance of the eye of a speaker meeting that of any one in an audience, in arousing and rivetting attention in the individual. He considered this explained much of the supposed mysterious influence of the *rapport* of the mesmerists. The induction of sleep he considered to be entirely subjective or personal; but the other phenomena depended very much upon the modes of management, through impressions on the organs of sense and the mind. The natural tendency was to fall into a sort of torpor if allowed, but as the first stage of the sleep was one of great exaltation of the function of all the organs of sense (sight excepted), and a consequent increased quickness of perception, the subjects were liable to be influenced by, and obey the, ordinary stimuli, whether of a chemical, mechanical, electric, or calorific nature, when so feeble that they could not be appreciated in the waking condition. Then their extreme docility, &c., disposed them to obey those impressions according to natural or accidental associations; and, for the same reasons as in the waking condition, they will approach to or recede from impressions according as their quality or intensity renders them agreeable, or the contrary. They would thus observe that he attributed these phenomena to exalted functions of natural organs, enabling patients to perceive faint impressions through the ordinary *media*, whilst the mesmerists alleged that they resulted from some peculiar and impalpable medium through which the unexpressed thoughts, knowledge, and desires were imparted from the mesmeriser to the mesmerisee, as by a species of inspiration or sympathetic reflection. With regard to the curative effects of this agency, which Mr. Braid said he considered the most important of all, he said the committee had requested that that branch of the subject should not, that evening, be entered upon. Mr. B. observed that it ought never to be overlooked that at certain stages of the sleep, the acts are voluntary acts, although unremembered by the subjects when awake, and that they are regulated in their actions by the ordinary laws of sensation and association of ideas, as in the waking condition, with this difference that the quickness of their perceptions, and tendency to concentrate their attention entirely to individual acts, instead of the more diffusive tendency of the waking condition, gives an energy and promptness to their actions almost equal to the force of instinct which we observe in the lower animals. When, however, the patient has been allowed to lapse into the deep stage when the sense of heat and cold as well as sensibility to pricking and pinching is gone, these transitions are effected with much more difficulty. The patient then requires continued wafting for a considerable time, more particularly over the face. The rigidity only yields gradually. Without especial attention being given to the opposite conditions and phenomena at the different stages of hypnotism, it is impossible for any one to test the subject correctly, or to comprehend what he really witnesses. *He said it was of the utmost importance to attend to the last remark.* In reference to the passions and emotions, or phenomena of phreno-mesmerism, he observed, that it is quite possible to excite them entirely through automatic muscular action, arising from the anatomical relations of the physical frame. This, I therefore consider the most natural mode, and it is explainable on the ordinary laws of sympathy and association. Whoever has carefully attended to the manifestations of the passions in the waking condition, must have observed that they are all characterised, in susceptible subjects, by particular combinations of the muscles, giving characteristic expression to the features of the face, and corresponding attitudes to the body and extremities. This is what Sir C. Bell calls the anatomy of expression. They are also accompanied by a corresponding condition of the respiration, and in many cases also of the action of the heart. We are so familiar with this that we readily, and in general, pretty correctly, determine in our own minds the state of the feeling of others from observing their attitudes and the expression of their features; and we are so sympathetically constituted as in many cases speedily to acquire, to some degree, a corresponding condition both of mind and body. Now, the idea occurred to me that by titilating certain combinations of nerves, and thus exciting into activity certain combinations of muscles by a sort of inversion of the ordinary sequence, we might thus,—through muscular action, suggest the idea to the mind which ordinarily preceded and excited the muscular action. This, then, would be a mere inversion of the ordinary sequence, the attitude and muscular expression of our *own* body, suggesting the idea to our *own* minds, just as the effect is produced through the eyes by looking at any one pantomimically expressing any given passion or emotion. It is long since it was observed that any one in the waking state, while assuming and endeavouring to maintain the attitude of expression of any passion or emotion, will soon experience a corresponding condition of mind engendered thereby. By a series of experiments, this theoretical view seems to be borne out, as I have found that the stimulating into activity any class of muscles either in the *head*, *trunk*, or *extremities*, speedily engenders the ideas with which they are ordinarily associated in the waking condition. Thus, putting a pen or pencil into the hand excites the desire to write or draw; moving the fingers or hand, as in sewing, gives the idea of sewing; approximating the palms of the hands gives the idea of devotion; clenching the fist, the idea of fighting; the muscles of the back, pride and firmness, and so on. He illustrated this by a series of the most beautiful experiments imaginable, and which were so characteristic that they seemed to carry conviction to the minds of all present.

During the conversazione, it is worthy of remark that *not a single doubt was expressed as to the reality of the ordinary phenomena.* A question having been put as to whether Mr. B. thought certain cases of clairvoyance reported to have been

recently exhibited in Manchester, by Mr. Hewes' boy, "Jack," who had named various things held before him, whilst his eyes had been covered with many folds of adhesive plaister could be explained on natural principles; Mr. B. said he had not been present on the occasion, *but no use of adhesive plaisters would be satisfactory to him as a test*, because it was so difficult to apply plaisters, *and keep them so entirely adherent as to remove all possibility of so much light being admitted to the eyes as would enable the patient to accomplish all he had heard described.* He, Mr. B. would propose as a more satisfactory test than any bandaging of the eyes could be, that a portion of print should be cut off and inserted under the cover of a book, without the operator looking at it, and then let the patient read it *through the cover of the book.* If the case was one of decided clairvoyance, then the patient ought to be able to do so. (Hear, hear.) As a further experiment, if the operator were allowed to look at the printed words, and then, without communication with the operator, the patient read the printed words, which he could not in the former mode, it would be a question not of clairvoyance, but as to whether there was "thought-reading." (Hear.) But the person who could not read through a book-cover could never read through a brick wall—unless there was a hole in it! (Laughter.)

Mr. Newborn expressed his approbation of Mr. B.'s proposal, and thought it a very fair test.

Dr. Bardsley thought there was not clairvoyance in the case mentioned, but suggested that there might be an exaltation of sight; and asked, if some of the phenomena Mr. Braid had attributed to exalted smell might not arise from exalted sight?

Mr. Braid shewed that this could not be the case; and as a proof of it, said that the patient's nostrils being covered, they could trace nothing. Besides, on this principle, it was easy to understand how patients could discover mesmerised water. A patient he had tried himself never failed to point out water by the smell, in a state of exaltation, which had only been breathed upon, from that which had not.

Mr. Sowler could confirm Mr. Braid's statements on every one of these points, having himself tested them, and proved their reality.

Mr. Caw asked, on the ground of humanity, if patients did not suffer injury of the nerves from these experiments.

Mr. Braid said by no means. Could he have gone into this part of the question he should have shewn that they derived much benefit from the experiments properly conducted.

Dr. Bardsley here rose to propose a vote of thanks to Mr. Braid for his interesting paper, which he said was highly creditable to him. He thought Mr. Braid had pursued his experiments in a highly philosophic spirit, and had displayed great ingenuity in the explanation of the phenomena he had so successfully investigated. He (Dr. Bardsley) had, like Mr. Braid, during the lectures of Mr. Lafontaine, taken the phenomena as real, though he differed as to the cause from Lafontaine, and thought with Mr. Braid that it arose from the fixed gaze. However, whilst he contented himself with mentioning this opinion to the surgeons at the infirmary, Mr. Braid, like a true philosopher, set about proving his opinions by experiments, and obtained the results which had been related by him in the paper he had read, with so much credit to himself, to-night. (Applause.)

The vote having been seconded was carried unanimously, and with great applause. The company then separated.

The handsome and distinct testimony of Dr Bardsley is particularly valuable, as coming from a gentleman who, both from his age and high standing in the profession, has long ranked as the father of the profession in Manchester.

Dr. CARPENTER ON MESMERISM.

Sir,—In my former communication I attempted to show that, among the phenomena of Mesmerism, there are some which it does not require any large amount of credulity to admit, on account of their occasional, spontaneous occurrence; but the dependence of which upon any peculiar influence exercised by the Mesmeriser, and their independence of the will or imagination of the patient, is the question at issue. And I pointed out the assistance which may be gained from carefully examining the phenomenon of *traction*, as aiding us in the determination of this question. If this phenomenon can be exhibited in *untrained* patients, on their first occasion of being seen by the operator, and under circumstances which render collusion impossible, I submit that the existence of a peculiar relation between the nervous systems of the Mesmeriser and the patient, must be regarded as standing on the same evidence as any other scientific truth to which we give our ready assent. Now, our knowledge of the nature of "nervous influence"—that is to say, the change in the nervous fibres by which an impression made on the organs of sense is conveyed to the brain, so as to become a sensation, or by which an exertion of the will, acting through the brain, causes motion of a distant muscle—is, at present, absolutely *nothing*. The physiologist confines himself to the study of the laws according to which it acts; and he finds that these laws have more similarity to those of electricity than to those of any other agent; and that, to a certain extent, electricity may produce the effects of nervous influence. But he does not hence conclude these two agents to be identical, resting in the ascertained fact of their analogy until satisfactory proof or disproof of their identity be attained. But the closeness of the analogy should lead us to pause ere we condemn, as absurd and incredible, the supposition that "nervous influence" may, like electricity, act at a distance as well as through its ordinary conductors.

In regard to the so-called "higher phenomena" of Mesmerism, the difficulties attending the investigation are much greater; from this cause among the rest—that they rarely manifest themselves in *untrained* patients, and that the subjects of them are almost entirely patients of a kind whose performances are to be received with the greatest suspicion. I trust that I shall not be thought to cast a slur upon the character of the fair sex in general, when I mention the fact, perfectly well known to medical practitioners, that the minds of young females suffering under hysterical disorders are often affected with a kind of monomania, which leads them to practise deceptions of the most extraordinary kind—often so cleverly as to delude not only their own friends, who cannot imagine the possibility of any fraud, but even their medical attendants—and carrying these on for months, and even years. And frequently, when there is no intentional deception, the morbid condition of the mind leads to various affections of the bodily frame, some of them so strange as almost to take away all feeling of surprise as to any new manifestation, however unlooked for. Hence it is not to be wondered at that medical men, especially those who have had most personal experience in such cases, should be ready to interpret the "higher phenomena" of Mesmerism as so many new protei-form manifestations of hysteria, misunderstood by Mesmeric observers, and applied by a little unintentional twisting to the support of their own doctrines.

But I feel quite sure that a more careful analysis of these phenomena will show many of them are either altogether the result of the most refined artifices, which must involve both the patient and the Mesmeriser as intentional deceivers; or they are produced by the operation of a cause which is entirely new to us. Now, in regard to the first supposition, there is, of course, no impossibility in the idea; though our knowledge of the character of the individuals concerned may lead us to regard it as highly improbable. But as the facts are of too extraordinary a nature to be received, except upon the most unexceptionable evidence, the investigation of such phenomena ought to be carried on as if the parties *were deceiving*; and such precautions should be taken, and such tests applied, as would prevent the success of collusion, if any previously existed. I cannot imagine it to be very difficult to devise such precautions and tests, in cases well fitted for their employment,—as, for instance, the Mesmeric *community of sensation.* I have myself witnessed a most striking experiment, in which it seemed next to impossible that Mr. Brookes's patient, even if she had all her senses about her, could know what he was eating or drinking the other side of the room, several individuals standing between the two; and in which, whilst apparently in the sleep-waking state, she positively and correctly stated what had just passed his mouth, three or four several times, breaking off from a conversation in which she was engaged with another person, to claim her share of the good things. The precautions taken were not such as to have *absolutely* prevented collusion; but they were such as to render it highly improbable; for neither Mr. B. nor his patient knew that it was intended to try the experiment on that occasion, and the patient had no opportunity whatever of knowing what viands were to be placed before the Mesmeriser. The experiment would be easily repeated with additional precautions; and I cannot but think that it affords the means of coming to satisfactory conclusions as to the question of community of sensation. This phenomenon, if its actual occurrence be established, is one which no operation of the imagination, of hysteria, or any other such vague influence, could produce.

But some will say that a clever juggler will easily produce phenomena much more extraordinary and will be inclined to treat all the operations of the Mesmeriser—the "higher phenomena" particularly—as ingenious performances got up for the occasion. This is, no doubt, a very convenient and summary method of accounting for them; but there are, then, important objections to such a view. In the first place, as I pointed out in my former letter, some of the phenomena peculiar to Mesmerism have been produced under circumstances which put the idea of collusion out of the question. Secondly, whilst the juggler keeps his stage apparatus and his confederate from the examination of the spectators, the Mesmeriser, with a strong appearance of sincerity, calls upon the sceptics to apply any test they can devise, to prove or disprove the existence of collusion, constantly expressing his confidence that those who candidly and fully examine the pretensions of Mesmerism, will become as fully convinced of its truth as he is himself. And, thirdly, the idea of collusion involves *two* parties, the Mesmeriser as well as the patient; and there are several Mesmerisers whose high personal character, and the worldly injury they incur, quite forbid the idea of their being parties to intentional deception. It may be said that they are themselves the dupes of designing patients; and no doubt this has been the case *to a certain extent*, and may be so again, in more than one instance. But there are phenomena which cannot be explained without the idea of designed collusion on both sides; and these, as I have just shown, are the true tests of the existence of a peculiar influence exercised by the Mesmeriser over his patient, and of a peculiar relation between the nervous systems of the two. To these tests Mr. Brookes professes his readiness to submit himself completely; and to myself the experiment I have last detailed affords a reason for desiring further investigation, being more remarkable in its results than anything which was exhibited at Mr. Brookes's public lectures, and having been performed subsequently to them. As I cannot expect, however, that the statement of an anonymous correspondent should have much weight in such a matter, I will briefly inquire into the results of these exhibitions.

Few persons, but those accustomed to scientific inquiries, are sufficiently aware of the important difference in the value to be attached to *positive* and *negative* experimental results. The latter can very rarely be admitted as contradicting the former, but only as showing that some unknown cause is in operation which prevents the expected phenomenon from manifesting it. Thus, for example, in making experiments upon the nervous system, the physiologist would be continually led astray, if he were to assert that a given function is not influenced by a particular nerve, because, in a great number of experiments, he had been able to procure only a few manifestations of that influence. Nine experiments out of ten may *fail*, producing only a negative result; and yet the tenth may com-

pletely satisfy him that a positive connexion exists between the two. It seems to me that in this way we are to look at Mesmeric phenomena. Simple, negative results should go for nothing against positive ones, so long as the latter are of a decisive nature. And on this account I cannot agree with those who seem to have considered the *failure* of Mr. B.'s last public experiments as conclusively establishing the invalidity of his pretensions. I did not perceive anything in these circumstances which should lead to the belief that collusion existed between Mr. B. and his patient: on the contrary, there were many which produced the impression on the minds of impartial observers that, if the whole were a got-up scene, and the young woman was acting a part, she would have managed much better. For instance, at one of the morning lectures a gentleman placed himself under her examination, who had suffered under confirmed blindness for many years. I do not think that, even giving her credit for the power of detecting diseased actions at present going on, she could have been fairly expected to discover this fact, since the blindness of Mr. W. is the result of a disease which has long lost its activity; and this opinion I had expressed previously to the trial being made. The blindness was not discovered by the patient, although several leading questions were asked. Now, had she been acting, how easy it would have been for her to discover Mr. W.'s blindness by a furtive glance at his movements when ascending the platform! The same remark applies to many other of her failures.

Moreover, her complete failure on the last evening may be fully accounted for, if her statement is to be believed at all, by the circumstance of the thundery state of the atmosphere which prevailed that night. The patient declares that, from her infancy, she has been most unpleasantly affected by this state; and Mr. Brookes asserts that he has never been able to obtain Mesmeric phenomena from her when it prevails. This may be thought, by some, a very convenient excuse; but it is one which must be admitted to be a satisfactory one, if Mesmerism have any truth in it. Experimenters in other sciences are obliged to have recourse to similar excuses. A lecturer on Electricity, for example, is obliged to apologise to his audience for want of success, when the atmosphere is damp; and a lecturer on Physiology may not succeed in experiments he desired to exhibit, because it is a few degrees too warm or too cold. In all sciences, certain conditions are required for the production of the phenomena peculiar to them; and if these are not complied with, the expected result does not occur—the experiment fails. This is most of all the case in the science of Life; for our experiments often fail, when we have had the fullest expectation of success, without our being able to assign any cause for the failure. And it is not to be wondered at that, in a branch of that science so new as Mesmerism, and involving so peculiar a state of the nervous system, the failures should be numerous in proportion to the positive results. Such failures leave the question as it was; but they do not prove Mesmerism to be false: they merely show that we do not yet understand the conditions necessary for success.

With regard to Phreno-Mesmerism, and the asserted power of detecting disease, it is more difficult, in my apprehension, to form a decided opinion either way. In Phreno-Mesmerism, the Mesmeriser professes to be able to direct the patient's train of thought, by simply *pointing* with his fingers to the several organs, in such a manner that the patient is not conscious which is the one to be excited. The manifestations, however, may be much influenced by the patient's previous state of mind; just as, in our ordinary state, the same circumstances will excite feelings and trains of thought entirely different, or may make no impression whatever, according to the direction of the mind at the time. The allowances which it is necessary to make for this and for other circumstances (as, for instance, the influence of the Mesmeriser's mind upon that of the patient, if its existence be admitted) render it very difficult to arrive at any definite conclusions. I have seen in Mr. Brookes's patient some very remarkable manifestations of the alteration of the train of thought in accordance with the organs excited by him, but I have also seen some errors which seemed to me almost as decisive the other way. So, also, in regard to the detection of disease, I have seen results which were most striking, and, taken alone, would have been most convincing; but which were, to a certain degree, invalidated by other errors. I use the word errors instead of failures, because in *these* inquiries, every *wrong* manifestation impairs the value to be attached to the right one, since it tends to reduce the whole to a series of guesses, some of which may be expected to be correct. For instance, if a disease is said to exist in a healthy person, the error is much greater than if no disease were detected in an individual really suffering from illness. I think that the *possibility* of some peculiar sensation being experienced by the somnambulist, when the hand is passed over a part in which a diseased action is going on, can scarcely be denied; since it is comformable with many facts which are well known to the medical practitioner. The interpretation given to this sensation by the somnambulist would very much depend upon her previous notions of anatomy, &c.; and hence the fact may be accounted for that the diseases mentioned are so frequently those which correspond with the notions prevailing at the time among medical men and the general public. Some remarkably correct guesses have been made by Mr. Brookes's patient, in private trials, which are on many accounts more satisfactory than public ones; and he assures me that in several cases of epilepsy, (a disorder to which she has herself been subject) she has been peculiarly successful in determining not only the nature of the disorder, but the frequency of its attacks. He professes himself to be willing to abide the result of fair trials of this nature; and, for the reason I have already stated, I cannot regard the question as at all settled in the negative by the failures of the public experiments.

It only remains for me to notice two objections which are very commonly regarded as sufficient to upset the whole fabric of Mesmerism. One is, that the number of persons capable of being influenced by it is comparatively small, and that the number of those who show its higher phenomena is so inconsiderable that great suspicion must attach to them. It is a sufficient answer to this objection, that the peculiar condition of the nervous system induced by Mesmerism corresponds very closely with that which occasionally occurs spontaneously; and that, as the latter depends on a rare constitutional peculiarity, so may the former also. I quite agree with such an objector, that all Mesmeric somnambulists, especially hysterical females, should be treated as *suspicious* cases; but surely a score of doctors and lawyers are competent, by their united wisdom, to detect imposture in the phenomena to which I have particularly referred as test-experiments.

The other objection is, that Mesmerism proves too much; some of the facts alleged by the advocates of the science being too preposterously absurd to be believed by any but the most credulous, and thus, by parity of reasoning, the whole being deserving of rejection. The fallacy of this kind of argument is evident. There is scarcely a remedy in the whole Materia Medica which has not, at some time or other, been cried up as a panacea, even by regular members of the profession; yet this is not a reason for discarding all belief in its curative virtues. Or, because medicine is sometimes practised empirically, and made an instrument for deluding the credulous and extracting coin from their pockets, should the public reject the assistance of the well-educated and honourable physician?

Being one of those who have seen enough to convince me that there is *something* in Mesmerism, I cannot rest satisfied until I have ascertained *how much* it can fairly claim; and I would conclude by again assuring you that, as yet, I am far from being the *advocate* of Mesmerism, but desire to be regarded only as AN INQUIRER.

TRANSACTIONS OF LEARNED SOCIETIES.

MEDICAL SOCIETY OF LONDON, May 13—Dr. Thompson, president, in the chair.—*Action of secale cornutum—Case of sponge swallowing.*

The discussion on the action of secale cornutum was resumed by Dr. Waller, who added his testimony to that given by Mr. Hooper on a previous occasion. About fourteen or fifteen years ago, his attention was directed to the subject by a book published by Dr. Merriman, he believed; and he then undertook a series of experiments on a large scale, by giving it in every case in which it was not absolutely contra-indicated. The result of his investigations was that, as regarded the death of the child, it was quite innocuous; at the Charity where he practised, there were not more deaths after he commenced using the ergot than previously. He also differed in opinion with those who stated that the placenta was retained more frequently under its use. He had not found it so in his practice. He had not found it produce any effect on the unimpregnated uterus, nor should he give it with any confidence during parturition, if the pains had entirely ceased. There must be some uterine action for it to exert its influence. With regard to the character of the pain, if there were merely an increase of the ordinary uterine pain, which might be called a "brisking up," with the usual intermissions, he should not regard it as produced by the action of the secale. The pain which ergot caused was one long continuous pain, without termission, scarcely allowing breathing time, and lasting for ten or twelve minutes. About a week ago, he (Dr. Waller) had been called away from the Society to a consultation on a very interesting case. A lady, about forty years of age, had been in labour for a long while, and her medical attendant had been up with her all the previous day and night. In this case there were not any pains, but as there were not any symptoms of danger, he (Dr. Waller) advised delay, and ordered salines only. He saw her again the next morning, when affairs were as they were the previous night. He advised the surgeon in attendance not to interfere unless labour pains came on, and then to give a dose of ergot. This direction was attended to, and when he saw her at twelve o'clock she was in hard labour, and the child was born in ten minutes. The pain was so continuous as hardly to afford breathing time, and he had no doubt that it was caused by the action of the secale cornutum. He had had a case in which there was a fearful amount of uterine hæmorrhage at the fourth month of utero-gestation. The os uteri had begun to open, and he told the lady there was not any chance to save the ovum, and he should prescribe a medicine to bring it away soon. When he went the next day, expecting to see the ovum, he found that, instead of miscarriage, four doses of the secale had completely arrested the hæmorrhage. The lady went her full time. In another case, in which miscarriage was threatened from a similar cause, but which was unattended by pain, the secale also arrested the hæmorrhage, and the patient went the full time of utero-gestation. He mentioned these cases to shew that even when there is a tendency to uterine action, the exhibition of secale will not always induce labour. In conclusion, Dr. Waller alluded to a paper read by Dr. Negri at a meeting of the Society some years since, in which that gentleman pointed out the use of the ergot in arresting all hæmorrhages—hæmoptysis, as well as menorrhagia, and in which also he shewed that it was of service in the treatment of leucorrhea and gonorrheal discharge.

Dr. T. Thompson remarked that, in all probability, the danger to the child was proportioned to the time that elapsed between the exhibition of the remedy, and the recurrence of delivery. Of this he thought there was sufficient evidence on record, and the fact mentioned by Mr. Headland at the last meeting, of the pallid, livid appearance of children born some time after the exhibition of the drug, supported that view. The opinion that secale acts on the circulation of the mother and child is confirmed by the statements contained in a paper published by Dr. Beatty in a recent number of the *Dublin Medical Journal*. In that paper Dr. Beatty mentions that death of the child occurred, when birth did not take place for two hours after the ergot had been exhibited, or else that a peculiar state of the muscular system—a partial paralysis, with convulsions, occurred. One case was mentioned in which the paralysis was persistent five years after birth.

Dr. Waller enquired if the paper gave a comparative account of the appearance presented by children born after lingering labours, in the course of which secale had not been exhibited?

Mr. Headland asked Dr. Waller if children born after lingering labours presented the exceedingly remarkable pallor which he had always thought was referable only to the action of secale. It is a singular lividity, and he could compare it to nothing else than the appearance presented by poisoning by prussic acid.

Dr. Waller's answer would not perhaps be a very satisfactory one as he had not kept any comparative statement, his attention not having been particularly directed to that subject. He had however seen children still-born present that appearance, although secale cornutum had not been exhibited. He was not prepared to give an opinion as to which predominated, but he would examine the next case that occurred to him with more precision.

Dr. Chowne observed that there were two points connected with the discussion on which he wished to remark, and the first was as to the non-effect of secale cornutum, unless there is a disposition on the part of the uterus to act. This is a question of great importance, both in midwifery, and in forensic medicine. Many instances certainly have occurred in which it has exerted its peculiar influence on the uterus, where there has not been any previous disposition of that viscus to act, and it has been said by many practitioners of repute to have originated labour-pains; but this must be regarded as the exception to the rule; it is not its character so to act. The other point is with regard to the kind of pain which is produced by secale cornutum, and in that respect his experience did not coincide with that of Dr. Waller. Secale cornutum might certainly sometimes produce the long, strong, continued violent pains that had been spoken of, but such also was the exception rather than the rule. It generally only increased the pains which presented intermissions like ordinary labour-pains, and unless such were its action, he should regard its exhibition as dangerous in the extreme. If he had reason to expect the strong continued pains that had been mentioned, then would he never give it, as he thought there would be great risk of the occurrence of mischief under such circumstances. The violent action of the uterus behind, and the resistance in front would probably cause the death of the child. In making these statements, he had merely given the result of his own experience; that of Dr. Waller was of course equally valuable. He had omitted to say of the secale cornutum, that it not only seemed to know its work, but also when its work was done, for no sooner was the child born than all became peace and quietness, even if its action had been marked by the violent continued pains to which allusion had been already made. This he said without intending to retract his previous observations on the irregular contraction of the uterus after its use, causing retention of the placenta.

Dr. Waller thought he could mention a case where Dr. Chowne would give the secale, even if its action was continuous and violent. He had been sent for to a case, where the head had been on the perinœum for many hours, but where there were not any pains. He, (Dr. Waller) of course, would only order it in cases for which it was adapted, and not, as a medical gentleman told him he did, to dilate the parts. For such a purpose it would prove injurious.

Dr. Chowne then narrated the case of an infant, three months and a half old, who, while being fed from a bottle, the artificial nipple of which was formed by the end of a glove, in which a piece of sponge was enclosed, suddenly appeared to choke, and became very red in the face. These symptoms passed off, and the child continued to feed. The bottle was afterwards examined, and the sponge being missed, the mother at once conjectured that the child had swallowed it, and a medical man was called in, who ordered half-an-ounce of castor-oil to be taken immediately. No pain or inconvenience resulted, and the bit of sponge ultimately passed *per anum*. Dr. Chowne mentioned the case on account of the popular belief that sponge, cork, &c., when taken into the stomach, caused fatal results, not by poisoning, as it did not appear to possess any poisonous properties, but by the mechanical irritation or obstruction it produced. Cases of death caused by swallowed pieces of cork are not at all frequent, but one has been mentioned of a good-sized dog that died from swallowing half a wine cork. A case occurred some time ago of a child, two years old, that died suddenly, and its grandmother was tried for its murder. On opening the body, a piece of wood was found in the stomach, two or three pieces of sponge in the ileum, and a pin imbedded in the liver. It is doubtful which of these was the cause of death, and the prisoner was acquitted, as the medical man stated in evidence that their presence in the body might be the result of accident. Such a remarkable series of coincidences might certainly be within the range of possibility, but not of probability, and yet the admission was correctly made, as their entrance into the body might have been accidental. The action of sponge in the stomach is not known. It is supposed, popularly, to be injurious, from its being indigestible, and liable to swell: it is regarded, professionally, as a mechanical irritant. Dr. Chowne then referred to two cases recorded by Mr. Rickwood, in the *Veterinarian*, of sponges swallowed by horses. In the first, after the liberal use of aloes and calomel, for nine or ten days, the animal did well, without having passed the sponge *per anum:* in the other, the period when the sponge was swallowed was not known: the horse was only known to have done so, from its passing the sponge in a fœtid state by the bowels. The first horse was not watched after the tenth day. These two cases, Dr. Chowne observed, were in opposition to each other as to the digestibility of sponge, a process which, he remarked, might be aided in the horse, from the fact that the bowels also participate in the performance of that function.

Mr. Headland mentioned that he had been called to a child, seven months old, who was supposed to have swallowed a piece of sponge under somewhat similar circumstances. No ill consequences ensuing, he determined to leave the child alone, and it did very well. As the sponge did not apparently come away from the child, he though it possible the friends might have been deceived, and that after all it had not been swallowed, or it might have been passed imbedded in a solid fæcal motion. He objected to the exhibition of purgatives when small foreign bodies had been taken into the stomach. He thought it was the more advisable practice to allow matters to take the ordinary course, and that more mischief would ensue if the substance were hurried away by the action of a purgative, than if it were allowed to imbed itself in fæcal matter, and so be discharged from the bowels.

Mr. Pilcher was pleased to hear the remark that had been made by Mr. Headland, relative to the treatment of these cases. He thought the use of purgatives was not based upon scientific principles. and he mentioned the practice of Mr. Baynton, of Bristol, in illustration of his views. He believed that the best plan when foreign bodies had been swallowed, was to leave them alone, and give such food only as would form solid fæcal matter, in which they might be imbedded. With respect to sponge, he should be glad to know what became of it, as he was very much in the habit of ordering it to be used for applications to the fauces, and an accident might occur. He thought it would act as a mechanical irritant, or cause obstruction by its absorbing fluids, and thus be unable to pass through the pylorus, or the ileo-cœcal orifice.

Dr. Waller wished to enquire of Dr. Chowne if he thought swallowing so small a piece of sponge could produce deleterious effects. If he were called to such a case, he should be very much inclined to leave it alone. The case at Colchester, he thought, had not any bearing upon the discussion, as the pin and wood were quite sufficient to cause death, without the piece of sponge.

Mr. Dendy thought it would be advisable to ascertain whether sponge was noxious or not, before the question as to the proper treatment was discussed, as if it was deleterious, the sooner it was got rid of the better. He had never seen a case where sponge had been swallowed, but had seen all other sorts of substances, and had generally given a dose of castor oil, which he had never occasion to regret doing.

Dr. Bennett thought there was not any evidence to prove that sponge was deleterious; indeed, it used to be given medicinally, after it had been burnt. Analysis had not demonstrated any thing in its composition to indicate a poisonous character. It could act only as a mechanical cause of obstruction. One reason of its being difficult of digestion might be the quantity of silex it had been recently shewn to contain. He had never heard of any injury being caused by swallowing sponge, and he agreed in opinion with those who objected to the exhibition of purgatives, after foreign bodies had been swallowed, as they were more likely to pass away without causing mischief if they became imbedded in fæcal matter.

GOSSIP OF THE WEEK.

We are happy to have to announce to the public, and more especially to those interested in the Literature, Science, and the Arts, in Egypt, Nubia, Abyssinia, Arabia, Palestine, Syria, Mesopotamia, and Asia Minor—the formation of an important Society, "The Syro Egyptian Society of London," under distinguished auspices. The friendly and social, as well as literary character contemplated in the prospectus just set forth by the Council, we regard as a matter of congratulation, as it cannot but tend in a variety of ways to the ultimate benefit of those countries.—Sir James M'Gregor, Bart., Dr. Paris, President, R.C.P., and Sir Wm. Burnett, Bart., have joined the Association."

The death of Sir Francis Burdett appears to have created a strong sensation amongst the advocates of the "Cold Water Cure." A long letter has been addressed to one of the leading morning Journals, by a number of Englishmen sojourning in Graefenberg, in vindication of the system they pursue in the cure of diseases. The subscribers, who include one baronet and three or four parsons, state that their health has been much improved since they have placed themselves under Herr Prissnitz. They endeavour to prove that Sir Francis Burdett's death was not occasioned by the "Cold Water" treatment, but because "inflammation attacked—grief for the loss of his wife overwhelmed him, and he died." Thus to use their own few words, "Sir Francis Burdett's case is easily disposed of." The other principal feature is condemnatory of medical men, that whilst they are willing to blazon forth to the world the number of failures that daily take place in those cases that are practised upon by hydropathy, they are not honourable enough to come forward, and publish to the world "how many are the victims of the lancet,—of minerals, and other poisonous substances." The first of those two statements will be given to them with all the advantages derived from it, nobody for a moment doubting their having very "easily disposed" of "Sir Francis Burdett," with regard to the other it would have shown a stronger conviction in their own minds of the greater advantages derived from the Cold Water treatment, if they defended it upon some stronger ground, that its being less killing than the minerals, drugs, &c. which they consider so killing.

The "Carlisle Journal" speaks of a married woman in Distington, who after suffering severely for some months past from a pain in the stomach, ejected during a fit of coughing, a living reptile, about twelve inches in length, resembling the water asp.

At a special Meeting of the Greenwich Board of Guardians, held on Thursday last, a letter from the Poor Law Guardians of the Devizes Union was read, recommending in strong terms the abolition of fees in cases of Midwifery and Surgery, and the substitution of fixed salaries. The reason given was the EXCESSIVELY HIGH AND UNNECESSARY charges made by the medical officers in such cases, and the object of the correspondence was to induce the Board to petition Parliament for an alteration in the law, whilst the amended Bill is before the House. Mr. Powle and Mr. Haycraft had attended (on being summoned) the Committee, of which Lord Ashley is Chairman, and he, Mr. Haycraft, was of opinion that the Government had determined to abandon the "contract" system in the cases of medical officers' salaries, and he thought the present was a good opportunity for acting upon the suggestions offered by the Poor Law Guardians of Devizes. Mr. Powle was of the same opinion. It appears that the total cost of the medical attendance for the immense Greenwich Union during the whole of the past year, including salaries, surgical cases, drugs, &c., was only £526, and yet these gentlemen think their poor get too good attendance, or that their doctors are too well remunerated. Our readers will remember our prophecy, that the Poor Law Commissioners, bad as they had shown themselves, would yet become very necessary to protect medical men from the Guardians. The Greenwich Board, of course, agreed that a petition should be presented to the House of Commons, praying "that all fees for medical attendance in Unions should be abolished, and salaries to be fixed by the Guardians, subject to the approval of the Poor Law Commissioners, should be paid in lieu thereof."

The following Students received Prizes or Certificates at the Annual Distribution at St. Bartholomew's Hospital:—Thomas R. Evans, George Saunders, George Hemsbrow, W. S. Kirkes, Thorp M. Gridlestone, John Stopford Taylor, George H. Sidley, R. E. Semper, S. T. Badger, J. F. Reeve, Edward Whately, George King, Robert Mason. N. D. S. Wallich, Edward Archer, Robert Brent, Robert S. Thornly, D. H. G. Wildbore, A. R. H. Podmore, Thomas James, George Williams, Henry E. Shaw. Mr. Kirkes was presented with the Silver Inkstand, given by the Treasurer

to the Collegiate Student who had obtained the highest honours in the examinations.

Dr. Paris last week gave his first *soirée* as President of the College of Physicians. Many of the nobility were present, with some of the most distinguished members of the College.

The papers announce that among the policemen of the Great Western Railway Company, are eight surgeons and three solicitors.

Dr. James Risdon Bennett has been elected Assistant Physician to St. Thomas's Hospital.

Apothecaries' Hall.—Gentlemen admitted Members on 9th May, 1844:—Peter Parlet Ransom, George Harvey Thompson Jarvis, David Evans, Henry March Webb.

The mortality tables for the week ending Saturday, May 11, are satisfactory. The deaths during the week were 812, out of a population estimated at 2,007,500. The weekly average at a corresponding period of the last five years was 883, whilst the number of deaths throughout the last five years has averaged per week 946. The most apparent decrease is in the number of deaths caused by diseases of the respiratory organs—241 this week to an average of 269 in corresponding weeks of the years 1839 to 1843. This may be taken as a proof of the mildness of the present season, as may also perhaps the number of deaths recorded as occurring from "old age," and which were last week 37, whilst at corresponding periods they have averaged 64. The deaths from "violence, privation, cold, and intemperance," were last week 17, whilst the average appears to be 25—a proof, it is to be hoped, of superior morality and of temporal advantages to the poor. The number of deaths from diseases of the heart are 35 to an average of 21, whilst those of the brain were 165 to an average of 152.

PERISCOPE OF THE WEEK.

ARTIFICIAL DILATATION OF THE OS UTERI.—This and the five following articles, comprise the principal contents of the last number of the *Lancet*.—Dr. Breen is of opinion that artificial dilatation of the os uteri is requisite in some cases, as by it much suffering may be prevented, and labour terminated at a much earlier period than would otherwise be the case. He thinks that artificial dilatation should not be attempted for at least ten hours after the real commencement of labour, no matter what the duration of spurious labour may have been previously. When this measure is called for, the membranes will be usually found ruptured, but not universally so. Two fingers are to be introduced, either between the os uteri and unruptured membranes, or, if ruptured, between the os and presenting part of the child. The fingers are to be used either for the purpose of dilatation, or as a wedge, to resist the coming down of a flap of the cervix of that viscus. Above all things it is particularly to be kept in mind that the fingers are to be quiescent in the interval of the pains, and to be used only during the most severe portion of this action. By this proceeding no additional suffering will be caused to the patient. About two hours will be usually found sufficient to obliterate the undilated cervix, but the attendant need not be anxious to complete this measure within so short a time. He may occasionally cease from his toils, and watch what nature be capable of effecting. By following these rules he will avoid the risk of increasing the tendency to inflammatory action, which is always to be dreaded when severe labour is complicated with a long duration of that process. Blood-letting, although not contra-indicated, need not in general precede artificial dilatation. Dr. Breen supports his views by quoting the opinions of other writers.

FUNGOID EXCRESCENCE OF THE CERVIX UTERI.—Dr. Bedingfield narrates the case of a married woman, thirty-five years of age, and the mother of six children, who at the third month of gestation perceived a small tumour at the entrance of the vagina, which bled when touched. This tumour continued to present itself from time to time, and was accompanied by considerable hæmorrhage. After some time, when near her confinement as we suppose, for the exact period of gestation is not mentioned, Dr. Bedingfield was sent for, in consequence of excessive flooding, threatening dissolution. On examination, he found a large, highly, vascular pulsating tumour between the thighs, and partially filling the vagina, which in appearance resembled the uterine surface of the placenta. He proceeded to effect version, which was readily managed, and the woman delivered. The placenta speedily followed without additional hæmorrhage, and the woman gradually recovered. She was, however, afterwards troubled with profuse sero-sanguineous and sero-purulent vaginal discharges, which produced great exhaustion, and in the month of May of the succeeding year, Dr. Bedingfield was again called in. Upon introducing the finger he found an immense spongy mass filling and distending the vagina, and attached by a firm base to nearly the whole posterior portion of the cervix uteri. When a portion of this mass was brought into view, it looked very like medullary matter covered by a membrane resembling the pia mater, with here and there a minute hydatid scattered over the surface. It broke readily under the finger without consecutive hæmorrhage. Dr. Bedingfield decided on removing the diseased structure, which he effected by means of a ligature, the fungoid mass being separated after the lapse of ten days. The patient apparently recovered rapidly, nor did the slightest tendency to disease ever after manifest itself upon the cervix uteri. The catamenia also became regular, but in the succeeding October she became much indisposed, and her abdomen was observed to enlarge, particularly on the right side. Upon examination, a large swelling was detected, which, on being struck, conveyed the sensation of a gelatinous, rather than of either a solid or fluid body. The patient sunk at the latter part of November, having been comatose for several days previously. On opening the abdomen after death, about two gallons of serous fluid were found in its cavity, but all the viscera were in a healthy state. The right ovary had attained a great size; it formed a large bag, in which were contained an immense number of hydatids, balls of transparent gelatine, (without any investing membrane,) masses of coagulable lymph, and medullary matter, covered with a vascular membrane, giving to some parts of the tumour an appearance very similar to that of the excrescence which had been removed from the cervix uteri. This resemblance was much more striking in the left ovary, in which the disease had made comparatively little progress.

PARAPLEGIA.—Mr. Gorham describes a case of paraplegia, which he treated by bleeding and cupping, and by the internal exhibition of iodine and mercury, followed after a time by strychnine. His patient improved considerably under this treatment. The paralysis of sensation and motion of the lower extremeties was complete.

PREGNANCY MISTAKEN FOR OVARIAN DROPSY.—Mr. Magennis was called to attend a female, thirty-three years of age, who had been married twelve years, for, as it was supposed, ovarian dropsy, she having been treated for some time by a physician for that complaint. On examination he ascertained that she was seven months gone with child, and that no disease existed. The mistake arose from the physician not examining the abdomen.

NECROSIS OF THE LOWER MAXILLA. — Mr. Brown removed from a little girl, a portion of the lower jaw, which had become necrosed after scarlatina. Some bleeding followed, but was easily controlled. The portion removed was a mass of alveolar process, which had occupied the space from one anterior molar tooth to the other, and consequently contained the bicuspids and incisors, as well as the two anterior molars.

HYDROPHOBIA.—Mr. Walton mentions a case of hydrophobia, which occurred when he was house-surgeon to St. Bartholomew's Hospital, and which conveys the salutary caution of the necessity of excision in every case of bite by a dog, whether known to be rabid or otherwise. The case does not present any feature of especial interest, nor did the examination of the body after death,—the spinal cord and brain being in a healthy state, the mucous glands at the root of the tongue being slightly swollen, and the larynx, pharynx, and œsophagus somewhat congested.

IRREGULAR CONTRACTION OF THE UTERUS DURING PREGNANCY.—Mr. Stewart, in a paper entitled "Statistics of Obstetrics," published in the *London and Edinburgh Medical Journal*, in adverting to some of the causes of tedious labour, signalizes as one of the most frequent causes, that irregular form of labour, where the patient suffers pain to a severe extent, without labour progressing in the same ratio; or, in other words, where deficient or deranged uterine action is the cause of the difficulties and delays experienced in partu tion. He illustrates this doctrine by the case o patient to whom he was called one morning, wh labour appeared to be progressing rapidly; t pains were severe, and of an expulsive characte the os uteri dilated to a considerable extent; t presentation natural, and the pelvis well forme The liquor amnii escaped soon after, the he descended a little, having just entered the brim the pelvis, when all at once the pains began to alt in character, and instead of being expulsive, th became of that description designated by patien as tearing pains without any force. Matters co tinuing thus for six hours without any progres being made in the labor, Mr. Stewart bled h freely to sycope, and gave forty drops laudanum, but ineffectually. The hardness an prominence of the uterine tumor suggested fea as to the safety of the organ, and the forceps wer applied, but the labour could not be thus term nated. Eighty drops of laudanum were then giver and on the reapplication of the forceps, during a interval of pain, the head was brought beyon the os externum, when the same opposing forc appeared to be again brought into play, the pain returned as before, and the further extraction o the child was delayed for upwards of an hour When born, the child was dead; on examination the head was found to be well formed and sound but the body appeared as if it had been tightly grasped round the shoulders and back, and roun the pelvis. Dr. Wilson adduces a case where th uterus was ruptured, and where every attempt a delivery by the forceps proved abortive, even whe the patient was in a more sound state: and men tions that after death the Cesarian section wa performed, when the uterus was found firmly con tracted round the body of the child, and completely adapting itself to the inequalities of the child's surface, thus embracing it so powerfully as to form the only obstacle to delivery. Dr. Wilson in a paper published in the *Glasgow Medical Journal* fourteen years ago, attributes the cause of delay in this case to irregular contraction of the uterus, the transverse muscular fibres of that organ not acting synchronously, and in a subordinate degree to the longitudinal fibres. When the transverse fibres act alone, expulsion of the uterine contents cannot take place, the expulsive process being best effected when the longitudinal fibres are acting powerfully, the transverse action being also carried on in a subordinate degree. Mr. Stewart has found blood-letting the best remedy he could employ in these cases, with the sole exception of the one just narrated.

ARTIFICIAL DILATATION OF THE OS UTERI.—Mr. Stewart draws attention to the soft, flabby, and œdematous condition of the os uteri, as a cause of tedious dilatation, and consequently of retardation of labour. This state is generally induced by the early rupture of the membranes, owing to which the cervical portion of the uterus is compressed between the head of the child and the pubes; and the return of the fluids being obstructed, the os uteri becomes thickened, and its dilatation is in consequence extremely slow. In a case of this kind, which occurred to Mr. Stewart, that of a woman who had been in labour all night, a midwife attending her, he found the anterior lip of the os uteri still covering part of the head of the child, while the posterior was completely dilated. The parts were much swollen and painful to the touch, and the woman was undergoing the most severe suffering. The treatment he adopted was as follows:—Previously to a pain coming on, he introduced his two fingers under the edge of the os uteri, and when the pain came on, gently raised them. By continuing this plan during the occurrence of three pains, the head of the child got completely disengaged from the uterine cavity, and the remaining part of the process was speedily accomplished. The patient suffered afterwards for some time from pain in the os uteri and purulent discharge, doubtlessly brought on by the continued pressure of the uterus between the head of the child and pubes. This plan of treatment is that advised by Dr. Gooch, by whom this condition of the os uteri is clearly described. It is only in the thick, spongy, and œdematous state, that this kind of artificial dilatation can be of service.

A COURSE OF CLINICAL LECTURES ON SOME IMPORTANT POINTS OF SURGERY,

Delivered at St. George's Hospital, by Sir Benjamin C. Brodie, Bart.

Lecture VII.

Stricture of the Urethra.—I shall speak to you to day, gentlemen, of the case of James Miles, on whom you saw me operate a few days since for stricture of the urethra ; and, at the same time, I shall make some general observations on the treatment of that disease. This man has been making water in a small stream for several years past; we cannot tell exactly how long, because labouring men do not attend to these things, and it might have occurred a long time before it attracted his notice. About a year ago he was seized with retention of urine, and had it drawn off by Mr. Bates, who introduced a catheter into the bladder for the purpose. He was admitted into this hospital on the 12th of July last (six months since) with the following symptoms ; his water was alkaline, and deposited a ropy mucus; his countenance was anxious; he was feverish, and had great difficulty in passing his water. Catheter, No. 1, was introduced into his bladder, and its use was continued till lately, having been now discontinued, because there has been great difficulty in passing the instrument, the urethra feeling hard and resisting, and because its introduction was followed by shivering, and attacks of fever which endangered his life. The patient then was in this condition: he had stricture of long standing; the mucous membrane of the bladder was inflamed, as was shown by the adhesive mucus in the urine; and he could not be relieved by ordinary treatment, as he could not bear the catheter being left in the bladder from the shivering. In the generality of cases, no bad symptoms follow the ordinary mode of treatment, but, in this instance, such a proceeding was inadmissable. Let me then point out the best course to pursue in such cases ; also, explaining what are the principal difficulties in stricture of the urethra. First, cases occur where the passing of an instrument is followed by a violent attack of shivering, and fever supervenes which may last for weeks ; sometimes a rheumatic fever, and I have known instances where it has been followed even by mania. Much depends in these cases on the constitution of the patient; and this class of symptoms occurs chiefly in persons, who have resided in hot climates. Now you know that, if you pass an instrument repeatedly for a patient, submitting him each time to these attacks of shivering and fever, you will reduce his strength to an alarming extent, and for a long time I did not know how to overcome this difficulty. In some instances you will succeed by giving large doses of opium, purging the patient next day, and repeating this treatment after each introduction of the catheter. I say the rigors may subside from the effects of these remedies, but their efficacy is doubtful, and they succeed permanently in comparatively few cases. Sometimes the opium relieves the symptoms one day, but they return the next; at other times it distresses the patient so much that he will not take it ; sometimes it relieves the patient for a length of time, but then if discontinued the symptoms return. But in all these cases, I observed that the shivering did not come on till the patient made water, so that it struck me it might be produced by the urine passing over the part, and not from the mere passing of the instrument. I directly said, therefore, that if such be the case, I have only to prevent this occurring, and the symptoms will be permanently relieved. In order to effect this, I introduced a gum catheter into the bladder instead of a bougie, and putting a peg in the open end, left it there; by this method the urine has been entirely prevented from flowing over the part, and I believe in every case where I have employed this method of treatment, it has been successful, although I have been told that in other hands it has failed. A gentleman who had been residing in Gibraltar came to me some time ago: he had been suffering from stricture a great length of time, for which he had had a bougie passed from time to time; but it was always followed by an attack of shivering which laid him up for a month. Well, I passed a bougie for him, and sure enough I laid him up for a month; during that period I observed the circumstances which I have been relating to you, and having passed a gum catheter for him, I left it there, and he had no return of symptoms. When it had been there several days I withdrew it, and in about half an hour replaced it by one a little larger; after this he was able to pass the instrument himself, and no further difficulty arose. Secondly, cases occur in which the difficulty arises from your not being able to get an instrument into the bladder ; you pass it once perhaps, and then are prevented doing so for a twelvemonth afterwards ; when this happens, it is mostly in old cases where the urethra is very much narrowed. The nitrate of silver will sometimes relax it for a little while, but I have seen cases where even this was ineffectual, and where no common method would succeed. When I commenced practice, I met with a case of this description which perplexed me very much, but it has served as a practical lesson to me ever since. The circumstances of the case were these. A gentleman came to London, and placed himself under my care for a stricture of the urethra. I passed a bougie for him once, but could never succeed afterwards; perhaps if such a case occurred to me now, I might succeed, but from what I recollect of this case, it is quite possible that I might not. I tried the application of nitrate of silver, and gave him opium, but still he could not make water. In two or three days, his bladder became so much distended that I was afraid it would burst behind the stricture. To avoid this I introduced my finger into the rectum, and punctured the bladder from that part, leaving the canula in the opening for several days, as the opium he had taken constipated his bowels. At the end of about the second or third day I removed the canula, and the opening became fistulous, so that the water for the most part came from the rectum. What was the consequence ? Why, in a short time, the stricture became manageable, and the patient soon got well. The pressure of the urino on the back part of the stricture had been keeping up a constant state of irritation, and when this was removed the disease also disappeared.

Some now present will remember a patient who was in this hospital three or four years ago, on whom unsuccessful attempts were repeatedly made to pass a catheter; I succeeded twice only; and the patient, much plagued at getting no better was, at his own request, taken to the operating theatre, when I cut into the perinæum, and dissected down to the bulb of the urethra, then directed the patient to strain; this enabled me to feel the bulging in the urethra, by which I knew I was in the right place; I then made an incision into the membranous portion of the urethra, and the contents of the bladder immediately gushed out. This case occurred just before I went into the country for my usual vacation; and during my absence the urine was allowed to come away by the fistulous opening in the perinæum, and when I came back I was enabled to pass an instrument without difficulty. Mr. Stafford invented an instrument for cutting through a stricture, but I do not think it safe to employ it. It is nothing more than a common silver catheter, with a lancet at the end; you may have half an inch to cut through, and if you passed such an instrument into the cellular membrane surrounding the urethra, you would have effusion of urine, from the effects of which the patient in all probability would die. But this may be modified, as you see here (showing the instrument), where you have no curve in the instrument, but merely a straight catheter, having at its extremity a stilette, which, by means of a screw at its extremity a stilette, which, by means of a screw at the opposite end, may be made to protrude any required distance. I will tell you of a case in which I first employed it. A man who had previously been under the care of Mr. Earle, at Bartholomew's Hospital, was admitted here and placed under my care ; he had stricture, and I never could pass a catheter for him ; I therefore had him taken to the operating theatre, and I cut into the perinæum on the left side of the raphe; then dissecting down to the urethra, I laid it open behind the stricture; and having passed the instrument I have just shewn you into the urethra, and drawn the penis as forward as possible, I passed one finger of my other hand into the opening of the urethra close under the symphysis pubis, and then screwing out the stilette, and being guided by my finger, I pressed it forwards through the stricture. Having done this, I removed the instrument, and replaced it by a common gum catheter, which I left there several days to prevent the irritation which would have been produced by allowing the urine to flow over the part, and the patient entirely recovered. I can recollect the time when the surgeon used to cut into the perinæum, and, what was called, dissected out the stricture: I say "what was called," for, in fact, the surgeon did not know what he was doing ; this I have from persons who saw the operation performed. I never saw it done in this hospital, but it has been done in others. I have been told that sometimes the surgeon succeeded, but in most cases the patients died; and certainly it does appear absurd, when there is an operation so simple as the one I have been describing, to venture on one extraordinary in itself, —dangerous in its consequences. When the opening has been made, as directed in my operation, the catheter is immediately passed, which entirely prevents effusion taking place. In the two last cases you have seen in the hospital, the instrument could be got through the stricture, but the difficulty was this: it always produced a fit of shivering, so that it could not be allowed to remain. The operation you saw me perform the other day was as follows: I cut down into the perinæum till I could feel the staff at the part where it passed through the prostate gland ; then, turning the knife forwards in the groove of the staff, I divided the stricture in the direction of the penis, and I could feel that I was cutting through a hard gristly substanee. The question then was, whether an instrument was to be passed through the urethra, or the opening made in the perinæum ? The latter was decided upon, and the patient is going on tolerably well. The urine is already alkaline.

COURSE OF LECTURES ON THE THEORY AND PRACTICE OF MEDICINE.

Delivered by C. J. B. WILLIAMS, M.D., F.R.S., Professor of the Practice of Medicine, and of Clinical Medicine, at University College.

Pericarditis and Endocarditis. (continued.)—Pericarditis, gentlemen, requires very active treatment ; but there are cases in which endo-carditis, commencing at a very early period, and being accompanied by very acute symptoms, also requires an energetic treatment. With regard to both of these diseases, unless they have been existing but a very short period, a day or two days, there is no expectation of knocking them down altogether by a single bloodletting; in all these forms, there will be considerable disadvantage from syncope, and the subsequent effects which arise from the products of the inflammation : the heart being exhausted by carrying the antiphlogistic measures to an extreme degree.

The *causes of pericarditis* and *endocarditis*, you remember, are of that character that it is impossible altogether to remove the disease by bloodletting; and it is useful to bring into aid other antiphlogistic measures, such as mercury, &c. At the close of the last lecture, I mentioned a matter so important that I think it necessary to advert to it again : that is, the tendency of these diseases to produce an undue action of the heart, and to weaken it in force. In this case the antiphlogistic treatment ought not to be kept up; and under these circumstances, when we see the signs of a general weakening of the circulation, a moderate use of stimulants is requisite, not withholding a sufficient quantity of nutritious food to sustain the strength of the body. I therefore adopt, in cases of pericarditis, a transition to mild tonics, such as bitters—columba, sarsaparilla, and so forth, with mineral acids, and the iodide of potassium. If the disease is one altogether of local excitement, it is to be treated by local means; and it therefore often becomes useful in the treatment of the after-states of pericarditis, when it comes on in the chronic form, at the same time that you are giving mild tonics, to continue the application of blisters and counter-irritants to the side; and a seton is in some sueh cases highly useful. I have

thought it necessary to mention this circumstance again, lest the matter should be forgotten. You find it stated in some works on this subject, that the treatment of these cases is to be absolutely antiphlogistic—of a most uncompromising character. This, I am sure, is highly pernicious; and I have seen cases, where this kind of treatment has been put in practice; where it has had a tendency to produce a state of weakness and cachexia, from which the patient never recovered; and indeed its tendency is to increase the organic disease rather than otherwise.

Organic Diseases of the Heart.—Hypertrophy, Dilatation, &c.—We now come to consider *organic diseases of the heart;* and I think it desirable, first of all, to notice hypertrophy, dilatation, and diseases of the muscular structure, because these require to be carefully distinguished in the treatment. Now, the muscular structure of the heart is scarcely liable to inflammation in itself, and *carditis* in the surrounding coats is extremely rare. The muscular structure of the heart is nevertheless liable to remarkable changes, and these appear to have relation more to the immediate derangement of its functions than to inflammation. There are many cases of structural disease in organs, in which direct inflammation is produced; but it is not so with regard to the heart. We find the origin of structural disease of the heart to be more particularly depending on disorder of its function; and it may be stated, as a general fact, that circumstances which interfere with the function of the heart, which over-excite it or tax it in various ways, tend to produce diseases in its structure. Now, inordinate action and defective action may both lead to structural disease of the heart. On the other hand, we sometimes meet with cases in which the structural affections will go on for an almost unlimited period, without leading to great functional derangement. These are principally cases of anæmia, in which the quantity of blood is insufficient. Again, there are cases in which an over-quantity of blood may have an influence in producing disease; where there is a plethora or fulness of the vessels. In some, this is accompanied by a peculiar activity in all the functions connected with the circulation, secretion, and nutrition; this is comprehended under the term *sthenic* plethora. In the other kind, there is an absence of power in the blood to nourish and increase the muscular substance of the heart, arising from some deficiency in the quality of the blood, or from some other cause; and this comes under the head of *asthenic* plethora. Now, in relation to these two cases, we may observe the development of two opposite conditions of the muscular structure of the heart. *Sthenic* plethora, inducing an excitement of the heart, will lead to hypertrophy of this organ, and an increase of the muscular structure. On the other hand, the increased or irregular action—which you will frequently find connected with *asthenic* plethora—a state in which there is a distension of the heart, without a corresponding increase in its nutrition, leads to a lesion called dilatation of the heart. These are the two modes in which these lesions are produced, and they comprehend the various exciting causes. The matter however may be stated in another point of view; and this leads us to an explanation as to the modes in which various exciting causes act; as, when the heart is excited by continued obstruction—when there is some difficulty to the passage of the blood through the heart, either from weakness in the walls of the heart, or from positive obstruction in the vessels leading from it. Either of these causes excites the action of the heart, and leads either to dilatation or hypertrophy, according to the preponderance of the elements hitherto considered.

Now we come to *hypertrophy*. This is a somewhat rare disease. But, when the heart struggles long against an obstacle to the circulation, at the same time that the nutritive function is active, and the muscular strength is kept up, hypertrophy does take place. The exciting causes of hypertrophy are several:—excessive muscular exertion, more particularly during the continuance of growth, when the nutritive function is active, and there is sthenic plethora in the system; that condition in which the blood is rich in nutritive matter, and ready to deposit its fibrine; when the heart is strong, and great excitement is given to it, it then grows in an inordinate degree. It is not, however, enough that the muscular exertion is occasional, it must be habitual. Again, in structural diseases, which are accompanied by so much obstruction as to impede the circulation, and excite the action of the heart in an inordinate degree, as the various obstructions that arise in the course of the large arteries, such as aneurism, &c., or any cause interfering with the current of the circulation, as emphysema of the lungs, and all those various circumstances which overtax the heart; in all these cases the muscular fibres of the heart are enlarged and hypertrophied. Obesity, too, when it is accompanied by sanguineous plethora, has a similar effect; and you find many cases of obesity attended with hypertrophy. This always manifests disorder of the circulation. Whenever a person is inclined to be corpulent, there is naturally more work for the heart, according to the necessary order of things; an increased task for the heart requires increased power and exertion. But in a state of cachexia, this increase in the substance of the heart does not take place; and we find symptoms of weakness of the heart, tending to palpitation, and other things under the head of defective action; and though the heart is not diminished in size, yet it has become too weak for the work it has to perform. These are the only two elements required for the production of hypertrophy, which it is necessary to bear in mind: namely, sanguineous plethora, and excessive and continuous excitement of the heart. Any circumstances contributing to these two things, usually lead to a greater or less amount of hypertrophy.

There are some circumstances that excite the heart, without causing obstruction to the passage of the blood from it:—circumstances affecting the pericardium, or lining membrane of the heart, and thus to a certain degree irritating this organ, which are very commonly followed by hypertrophy, in an active state of the system.

Now, before going further into the pathological effects and the symptoms, I must advert to some of the varieties of hypertrophy as they are presented anatomically. The natural size of the heart is the first point. The length, from its apex to the middle of the auricles, is from five to six inches. The circumference of the base of the heart averages between eight and nine inches, in the adult male, and an inch less in the adult female; the weight of the heart, by a curious coincidence, is from eight and a half to nine ounces, in the adult male, and one ounce less in the adult female. The thickness of the walls of the right ventricle may be stated to average about half the thickness of those of the left, which vary from half an inch to about five-eighths. The auricles are much thinner, but they vary in different parts.

Now, hypertrophy affecting any one of these parts increases their thickness; there may be hypertrophy of one ventricle, and atrophy of the other. There is, in many cases, hypertrophy of the walls, with enlargement of the cavities, or, as it is called, *dilated hypertrophy*. There is, also, what is called *concentric hypertrophy*, in which the cavity is diminished in size, and the walls thickened. There is, again, a medium state between these; where the cavity is of the natural size, and the walls are of an increased thickness. Hypertrophy may be merely partial; so that even when it is connected with dilatation of some parts, other parts may be unusually contracted. Sometimes, for instance, the heart is elongated, and the diameter of the ventricle is unnaturally contracted. Concentric hypertrophy, as well as that species accompanied by considerable enlargement of the cavities, is usually of a more rounded form.

I will now just advert to the subject of concentric hypertrophy, without enlargement, but where there is a diminution in the actual size. The cavity is here, in some instances, almost obliterated. It has been a question, of late, whether this form of hypertrophy is not ordinarily induced by spasmodic contraction of the heart to an extreme degree; for it has been found after death, that a heart presenting this appearance, may be distended to the natural condition, by putting in the fingers and pushing out the walls. In some cases of sudden death from diseases of the heart, this appearance has been presented: where persons have died from drinking an excessive quantity of spirituous liquors, the heart is usually found small and perfectly solid, the cavity being almost obliterated. This ought not to be confounded with true hypertrophy of the heart.

Now, the *symptoms of hypertrophy* will vary in some degree, according to its combination with other diseases. Increased action may be said to be the general rule; and in proportion to the increased strength and force in the circulation, so do you get more or less of the signs of inordinate action of the heart. This may present itself under the form of palpitation; or it may come on in paroxysms accompanied with a disturbance of the various functions of the circulatory system; there will also be a degree of dyspnœa in extreme cases of hypertrophy, accompanied by increased action. The dyspnœa arises, in this case, from the force and irregularity with which the blood is sent to the lungs, and this frequently leads to inflammation of the bronchial lining. Giddiness and stupor are frequent accompaniments of hypertrophy of the heart, along with all those various symptoms which imply a determination of blood to the head: such as sudden dimness of sight, vertigo, noises in the ear, or deafness; and sometimes even apoplexy and palsy, resulting from the increased flow of blood, and the augmented force with which it is sent to the head. Sometimes, we see ophthalmia, and various other defects of vision and hearing, connected with the too great force of the circulation. All these symptoms are aggravated by circumstances which increase the action of the heart. Thus, for instance, sudden or violent exertion, in a person labouring under this condition, may bring about an attack of apoplexy; a stooping posture may also do the same.

There are conditions that take place as effects of long continued hypertrophy, when the circulation is increased to a high degree: such as various derangements of the secretory organs; the patient is liable to serious stomachic attacks; to dyspepsia in its various forms; the urine is high-coloured, and throws down a lithic or albuminous deposit; we find a disposition to inflammatory action, or hæmorrhage in various parts; diarrhœa and catarrhal affections of the mucous membranes throughout the body. Thus, you may perceive that hypertrophy of the heart directs its morbid influence to various parts of the system; and it is remarkable that it may do this at the very time that the symptoms of themselves are not very prominent, although the patient, owing to the disease being thus gradually propagated, may not recover. And, when we come to examine the patient after death, we observe its effects in various parts; we find indications of inflammation, of congestion, or hæmorrhage, in various parts of the body. Thus, when hypertrophy of the heart goes on for a long time, it is found that a great number of viscera are, more or less, affected. This has been long familiar to myself, and it has been frequently observed by others. Sometimes, there is mere congestion of organs, while, at other times, degeneration takes place. The liver, for instance, becomes congested to a high degree, with a tendency to further alteration. The same thing is observed in the kidney, which is charged with more or less of albuminous secretion. There are other peculiar conditions connected with this increased action of the heart: the arteries are found to exhibit some changes, particularly on the surface, and there are deposits on the arterial coats. This may occur in the immediate neighbourhood of the heart, but more particularly in other parts.

The physical signs of hypertrophy are very distinctive. There is an increased development of the muscular fibre, and this renders the contraction stronger, and consequently the impulse is more perceptible; but it is slow and more heaving. The fibres do not contract with the same abruptness and suddenness, as in the normal state, and the sound is more or less modified. Where there is simply hypertrophy, unaccompanied by dilatation, the sound is usually diminished; whereas, in cases of dilated hypertrophy—where dilatation and hypertrophy are combined—there will be an

increased loudness of sound, together with an increased strength of impulse. But the chief characteristic, distinctive of hypertrophy without dilatation, is an increase of impulse with a diminution of the sound, just as in dilatation there is an increase of sound with a diminution of impulse. In some cases, the first sound is very indistinct at the region of the heart, and the impulse is strong and heaving; but near the large arteries, the first sound is heard more plainly. Where the increase of the substance of the heart is considerable, and the dilatation great, we then have a remarkable kind of motion produced during the diastole. In the normal state of the heart, the diastolic motion is scarcely perceptible; all that is felt is the apex of the heart coming in contact with the ribs, with the motion of the ventricle to the left of the sternum. But, in these cases, during the diastole, we have a kind of heaving up of the walls of the chest, and that to a great degree; but there is a sudden collapse or pulling back of the walls at the moment of the contraction. This diastole Dr. Stokes called the back stroke, and it is frequently met with in cases of dilated hypertrophy. Now, besides this, the impulse is stronger and more extended; but the degree of this extent will vary according to the form of the hypertrophy. If it be simple hypertrophy, without any great enlargement of the cavities of the heart, the beat will be found but little lower than usual, and the impulse will seem to be directed downwards, without extending beyond its usual locality. But, in hypertrophy, with enlargement of the left ventricle, the impulse will vary according to the degree. The apex will be felt beating to a greater or less extent below the left breast. On the other hand, this dilated hypertrophy may sometimes assume the globular form, and then the impulse is felt mostly higher up, and has not that striking or lifting character usually accompanying it. This is a curious phenomenon of this species of hypertrophy. Ordinarily, the whole heart is lifted up, as it were, during the diastolic action, and at the time of the contraction, the apex is forced towards the walls of the chest. This is the reason why there is a sort of heaving swell felt in the region of the heart, when it is considerably hypertrophied. This is chiefly felt in the neighbourhood of the sternum, and sometimes as low down as the epigastrium. Now, when the heart is very much enlarged, and the impulse is felt over a very great extent of surface, we shall find the sound on percussion considerably modified. The stethoscope is an invaluable instrument in these cases, and may be applied with great certainty to measure the dimensions of the heart in contact with the walls of the chest. And in cases of greatly enlarged heart, where there is not only hypertrophy, but dilatation of the walls of the heart, you will find that this viscus occupies a great part of the front of the chest, from the upper margin of the second rib, extending to the epigastrium; also, around the left side, and the axilla, and passing two or three inches to the right of the sternum. This is particularly the case in young subjects where the chest is narrow.

The *effects of hypertrophy* vary very much. You may find the enlargement of the heart accompanied by a more extended impulse than usual, but with little increased dulness on percussion, in some individuals scarcely amounting to disease; whilst in others it may occur to the extreme degree I have just been describing. Indeed, I believe that, in some cases, hypertrophy may be considered almost as a corrective of disease, and sometimes little inconvenience is felt from an enlarged heart. You find enlargement of the heart accompanying other diseases—diseases of the lungs and visceral affections, and in the greater number of instances of this kind, the progress of the disease is rather retarded than otherwise. There is a constitutional state in which there is a diminution of energy in some functions, at the same time that others are more active. Where enlargement of the heart accompanies emphysema of the lung, you do not have the dulness over the region of the heart, nor the impulse usually manifested, in consequence of the lung standing between the walls of the heart and the chest; but you have the signs of enlargement at the epigastrum, and you have also increased pulsation in the arteries. I have had cases of emphysema of the lung under my care, in which nature has overcome the obstacles in which the enlargement of the heart had originated.

Treatment of hypertrophy of the heart.—You must remember that hypertrophy, although it may exist to a great extent, is not always a disease against which remedies can be directed. In fact, hypertrophy is to be considered as a condition which may terminate in disease. When, by the application of auscultation, we find the heart larger than usual, this indicates the necessity for precautionary treatment, but not for inferring the actual existence of disease. Accordingly, the treatment will vary very much. In extreme cases, where there is increased strength in the heart, and the circulation is very strong, there will be sometimes determination of blood to the head; and arising out of this there will be disorder of the secretory organs, and of the system generally, which may thus act secondarily on the heart itself, the violence of its action producing pain, and other sensations of discomfort. Now, we cannot expect to remove such a state as this altogether by bleeding. In severe cases, where there is an extraordinary amount of congestion and pressure in the system, there is no doubt of the expediency of blood-letting. In cases, where there are symptoms of congestion of the brain from determination of blood to this organ, blood-letting may be resorted to in proportion to the strength of the patient. You must not, however, take too much blood at one time, but rather take a small quantity, and repeat the operation if necessary. Use evacuants, and such medicines as will reduce the quantity of blood, without much impairing its quality. Also, sedatives of various kinds; such as *digitalis, hydrocyanic acid, &c.*, to diminish the irritability of the heart's action, which is not to be knocked down at once, but to be reduced in a gradual manner. Where there is much pain and oppression, with a feeling of uneasiness at the chest, there is reason to suspect something of an inflammatory character, either accompanying the hypertrophy, or produced by the increased efforts of the enlarged heart. In this case, not only the depletory measures I have alluded to should be employed, but mercury should be administered, and cupping, blisters, and setons, may be used. The diet should be sparing, and irritating liquids should be avoided. The object is not to carry the antiphlogistic measures to the highest degree, but to produce a more moderate and equal action.

CLINICAL LECTURES ON MEDICINE;

Delivered at the GREAT CHARITY HOSPITAL, Berlin, by Dr. SCHONLEIN, first Physician to the King of Prussia, founder of the Natural System of Medicine in Germany, and Professor of Pathology and Therapeutics in the University of Berlin.

Prepared from the German expressly for "The Medical Times."

LECTURE XII.

Hæmorrhagia Uterina, with Inflammation of the Right Ovarium.—Attacks of Shivering.—Apprehension of an Extension of the Inflammation to the Plexus Pampiniformis.—Tumour perceptible on examining the Vagina and Rectum.—Gradual Diminution of the Swelling.—Recovery.

June 28th, 1842.—Augusta Baumann, the wife of a labourer, twenty-nine years of age. The patient has borne child twice—the last time six years ago; her period of menstruation has not been quite regular since that time, but unattended with pain. She caught cold by using a cold bath, a fortnight ago, at the commencement of her last menstruation. The menstrual flux certainly took place, but it was under a more mucous form, and only subsequently became sanguineous. Simultaneously with this, she experienced a pain on the right side, over the situation of the os pubis, towards its connection with the ilium. The patient describes it as an urgent, oppressive pain, which was at first of an intermitting nature, but subsequently became permanent, though varying in intensity. Various kinds of concomitant phenomena took place, at the same time. Urgency to make water, the discharge of it being accompanied by pain; disposition to go to stool, with tenesmus, and even discharge of blood from the rectum; violent pain in the right thigh extending downwards to the knee, and attended by a crawling sensation; finally, a feeling as though a substance were rising up from the depth of the pelvis to the stomach, with subsequent nausea and vomiting.

The patient came into the hospital the day before yesterday; a general, as well as local, antiphlogistic treatment was adopted. I saw her to day for the first time, when I find the following phenomena:—the face is calm; the abdomen wrinkled, and presenting an appearance similar to that found in women who have borne several children—flabby and but slightly prominent; the patient complains of violent pain over the os pubis, which, however, has considerably decreased under the treatment instituted; on more minute examination of the right inguinal region, we observe a painful swelling, radiating from which the pain extends itself down to the uterus. On examining by the vagina, we find a displacement of the uterus, the fundus being turned more towards the left, which position is evidently the consequence of the mechanical pressure of the tumour felt in the abdominal region. No examination has yet been made by the rectum.

In addition to the phenomena already enumerated, and which sufficiently prove that an inflammation of the right ovarium and Fallopian tube extending towards the uterus is existing, other symptoms have taken place since yesterday, which do not essentially belong to the affection, but the appearance of which yet affords an important signification respecting the progress of the affection.—The patient was seized last night, for the first time, with a violent attack of shivering, lasting half an hour, and succeeded by heat of skin, which attack has been repeated this morning. These attacks of shivering, so usual in affections of the genital organs, are suspicious, and give rise to the fear that the large vessels in the neighbourhood may be commencing to be affected; that the inflammation has not only attacked the parts already enumerated, but probably also the *plexus pampiniformis*. Before, however, we pronounce any decisive opinion respecting this, we shall wait to see whether the attacks of shivering will be repeated, which would be an unfavourable symptom. A copious menstrual discharge has taken place, which might create confidence; but I have already directed attention to a form of hæmorrhagic disease, in which the discharge of blood from the uterus depends on inflammatory action in the tubes and ovaries, and which is to be considered as a morbid, and not as a critical, symptom; the pain has become more violent since the commencement of this bleeding. The fever is very moderate: the pulse soft, 88 per minute; the temperature of the skin but little heightened; the urine deviating but slightly from its normal condition.

Prescription.—Application of 20 leeches to the *regio inguinalis dextra;* embrocations of grey mercurial ointment; emollent fomentations, (Flor. malvæ. verbasci, herb. cicutæ.); emulsion of aq. laurocerasi for internal use.

June 29th.—We instituted an examination *per rectum* to day, which only confirmed the diagnosis already formed. A tumour of about the size of a hen's egg, and painful on pressure, was discovered against the anterior wall of the rectum, somewhat towards the right side; it can be more distinctly felt from this part than from the abdominal region. We had already conjectured this circumstance from one of the concomitant symptoms: namely, the tenesmus; although I must confess, (admitting the mechanical explanation of this symptom, by the pressure of the tumour upon the rectum, to its fullest extent) that I should not feel perfectly confident of such a condition in all similar cases; since a degree of irritation of the rectum, without the fact of any pressure exercised upon it by a neighbouring tumour, will take place as a purely concomitant symptom in the form of inflammation we are here treating of. The urgency and pain in making water have entirely disappeared, but nausea and vomiting have again exhibited themselves; the tongue, at the same

time, is perfectly clean ; the pain in the right thigh, and the tenesmus, have very much decreased; the menstrual discharge has also diminished. The fever is very moderate; but a violent attack of shivering, lasting for half an hour, again took place this morning. The repetition of these attacks of shivering at irregular periods, as already stated, gives rise to the apprehension, that the inflammation is extending itself towards the vascular system. Continue the remedies ordered yesterday.

June 30th.—This case presents two principal features, by which we have to arrive at a judgment respecting the state of the patient :—firstly, the phenomena presented by the inflamed ovary ; secondly, the symptoms of the extension of the inflammation towards the surrounding vessels ;—the former are constant, the latter intermitting. Respecting the former, the tumescency is still perceptible from the abdominal region; the patient describes the pain as exactly extending along the course of the right tube; the tumour is, moreover, painful on pressure, and may be distinctly felt through the right wall of the vagina. It would be a not unfavourable symptom if suppuration were to take place, and the abscess to discharge itself through the vagina or the rectum, and thus find an opening externally. The accompanying phenomena have, since yesterday, again more strongly developed themselves ;—(pricking pains in the rectum, shooting down the right thigh ; nausea.) The fever is even more moderate than it was yesterday; but the patient again had a violent attack of shivering this morning at half-past five o'clock.

In addition to the remedies already prescribed, let the patient have a warm bath, consisting of a decoction of emollient herbs, with henbane.

July 1.—The examination by the rectum, as well as by the vagina, proves the tumour to be evidently decreased in size and less painful; the uterus also, which was formerly forced downwards, has again assumed a more elevated position. The abdomen is less distended, and capable of enduring forcible pressure, even over the region of the *symphysis pubis;* the point where the right Fallopian tube joins the uterus is alone still rather painful. The concomitant symptoms in the rectum, right thigh, &c., continue in a moderate degree. The patient certainly has again had an attack of shivering this morning, but of much less intensity and duration. The symptoms of reaction have entirely disappeared. The warm bath, which we prescribed for the patient yesterday, seems principally to have contributed to this favourable change. We have, however, by no means subdued the disease yet ; for the continued attacks of shivering, although they have diminished in intensity, still keep us in suspense.

Prescription.—Repetition of the warm bath.

July 2nd.—1st. With regard to the local phenomena: a more violent pain has again exhibited itself behind the *symphysis pubis*, extending horizontally along the right tube; simultaneously with this, the flow of blood has again increased ; the examination by the rectum and vagina proves the tumour to be in the same state as before. 2dly. Respecting the concomitant phenomena : the tenesmus still continues, although not so violently as before ; the irritation of the bladder has disappeared ; that of the stomach, and the pain in the thigh, have diminished in intensity.—3rdly. The attacks of shivering have not again made their appearance ; this, however, cannot altogether remove our fears, since we know that there is a possibility of their return after an interval of three, four, or five days, especially as the pain in the locality pointed out still continues.

A slight increase of the local phenomena has, then, again taken place; and this is likewise attended by renewed displacement of the uterus, the *fundus* projecting towards the left; considerable pain was caused by an attempt to replace this organ *in situ*.

We shall continue the same mode of treatment, repeating the warm bath, but add some iodine to the mercurial ointment used for rubbing into the abdomen.

July 6th.—The state of the patient assumes a more favorable form. The painfulness of the right inguinal region has entirely disappeared; the tumour felt through the rectum and vagina gradually decreases; the concomitant symptoms are very slight, only exhibiting themselves separately and occasionally ; the hæmorrhage continues moderately. The fever has ceased ; the attacks of shivering have not made their reappearance.

July 12th.—We may now certainly consider the patient as convalescent; though not as perfectly cured, which we can only do when she has regained her strength (so much impaired by strict antiphlogistic treatment), and when the functions of the uterus are restored to perfect order.

We will now once more pass in review the chief characters of the disease, which we have so happily subdued in this instance. We had, here, an inflammation of the right ovarium, as well as of the right Fallopian tube, extending to its point of insertion into the uterus, and that combined with peculiar hæmorrhagic symptoms. Repeated abstractions of blood, frictions with mercurial ointment, to which iodine was subsequently added, and warm baths, produced a most beneficial effect; all the morbid symptoms have disappeared: not only the painfulness and swelling in the right inguinal region, as well as the concomitant phenomena in the bladder, rectum, stomach, &c., but also the material symptom—the intumescency which formerly protruded itself into the vagina and rectum, as proved by the examination of these parts. The feature, which in this case caused our particular apprehensions, consisted in the rather considerable attacks of shivering, which returned several times, and which created the fear that the inflammation might progress to the *plexus pampiniformis*, and produce phlebitis; or that suppuration would have taken place, which would have rendered the cure itself very doubtful. Both possibilities are now happily removed. With regard to the latter possibility,—namely: the termination of the inflammation in suppuration, it is not always an easy task to ascertain it in the cavity of the abdomen, as I have already shewn in another case. In this instance, we certainly had some compass to guide us, as the inflamed organ was within the reach of our touch, and since continued and careful examinations would always have enabled us to determine correctly. That, however, which might have taken place in the tube, we should only have been able to infer from other phenomena. The diagnosis must, of necessity, be uncertain in complicated cases of this nature. If the abdomen is very much distended and puffed out, then the determination of the state of the inflamed parts must be very difficult ; and I have, therefore, in another case, signified the appearance of pus in the urine as a most important phenomenon.

The strength of the patient gradually increased under the influence of a light nourishing diet; and she was discharged from the hospital on the 20th July, the flux from the vagina being then scarcely worth mentioning, and all the other morbid symptoms having disappeared.

THE TRUTHS AND FALSEHOODS OF THE THEORIES OF LIEBIG,

WITH NEW VIEWS ON SOME IMPORTANT PARTS OF ORGANIC CHEMISTRY AND PHYSIOLOGY.

(Prepared expressly for the "Medical Times.")

In my last communication I endeavoured to prove:—1st. that bodily strength, or bodily spirits, was the galvanoid product resulting from the chemical action of air on *motor*—or, as Liebig calls it, *respiratory*—food, which the general reader will understand to be, such portions of our food as would burn most readily if thrown into fire, and are mainly constituted of charcoal and hydrogen; 2ndly. that this portion of our food acted the part of the amalgam of the electrifying machine, and the zinc plate of the galvanic battery; (*i.e.*) constituted a base, in combining with which, the oxygen of the air evolved the electroloid or galvanoid force, which is the nervous energy that actuates the animal machine; and 3rdly. that the production of heat was a secondary phenomenon, contingent on the application of force or strength.

It may be further remarked, that in the highest specimen for the generation of electro-momentum that we possess, (namely, Armstrong's hydro-electric machine,) the electricity is due to the friction of the steam against the sides of the tubes forming part of the apparatus. Now, the very condition necessary for the production of the electric momentum in Armstrong's machine is complied with, and supplied by friction of air on the tubes of the bronchi ; so that, with regard to this, as with regard to other electric machines, we perceive a perfect analogy between them and the human body.

In the present paper, the new and grand principle of Liebig and others, that "*all vital activity arises from the mutual action of the oxygen of the atmosphere and the elements of the food,*" will be applied to the subject of digestion in connection with the use of alcoholic liquors.

Premising that the human body is a self-propelling machine capable of generating the force for its own propulsion, and when the material is supplied, creating from it the textures for its own formation, we are naturally led to view the apparatus or digestive system which performs this as *double*; inasmuch as it prepares the animalised matters to make parts of the machine in which it is, and at the same time, the non-animalised matters to drive or move that machine when made. This being in reality the case, we may lay it down, as a general rule, *with regard to all organised material for* NUTRIMENT, that it should be as little changed from its primitive state as is consistent with its ready solution, and entrance into the blood, there to become part of a new organism. By this we mean that all animal food should be under-cooked; while, on the contrary, farinaceous food from grain, rice, potatoes, &c., should be well done, that is, should have their organic nature annihilated by fermentation, coction, &c.; because they act not by virtue of their organised structure, but by virtue of their chemical affinity for air, like the amalgam of the electrifying machine, and are therefore improved by destroying their organic nature. Hence, to make common bread so as to be easiest of digestion, we ought to bring it as nearly to the state of charcoal as is consistent with solution in the animal fluids. This may be done by making the bread small—so that for the same quantity there may be a large surface in the shape of crust. While, as a food it may be further improved by allowing the phospates, &c. (bran) to remain, because these perform the other function of food, namely, nourish the body. This principle of improving bread by exposing it a good deal to the fire has been sometimes recognised empirically, and it is well known to many that a very digestible food for infants is prepared by roasting flour. A high authority states in speaking of the article here referred to, that he has sometimes cured infantile diarrhœas by this means, after having failed by the action of medicines.

From this it will, therefore, be inferred that formative, or plastic food, for the nourishment of the body, should not be over-baked or cooked—but that farinaceous substances, comprising bread, which act by virtue of their inorganic nature, should be well cooked. Hence, the reason that *toasted* bread is easiest of digestion.

With reference to the use of alcohol as a *motor* food, it will be necessary to bear in mind that 15 ounces of sugar (the material from which alcohol is formed) are composed of 6 oz. of charcoal, 8 oz. of oxygen, and 1 oz. of hydrogen. These, namely the charcoal, oxygen, and hydrogen, may be symbolically expressed by the letters C. O. H., and if they be multiplied by three we have C3. O3. H3. If this be fermented, there is withdrawn O2. and C1., in the form of carbonic acid, leaving the whole of the hydrogen (i. e. that portion which has the strongest affinity for oxygen,) and two portions of charcoal, a substance which, after hydrogen, has a strong affinity for oxygen.

From this it will appear that the fermentation of sugar is a mode of facilitating its oxydizement in the blood, by first withdrawing its natural oxygen before it is ingested, in order that it may the more eagerly supply the deficiency from the inspired air. Now, the function of the digestive organs, in so far as *motor* food is concerned

may be expressed as the performance of such changes upon that *motor* food as render it easy of oxydizement in the circulation.

And, as the changes which the *motor* food undergo, from its ingestion by the mouth, *until it is expelled by the nostrils*, are performed at the expense of the previously existing animal forces, where these forces are weak, that is to say, the strength little, the forces can be aided, or the strength of the individual spared, by getting sugar and farinaceous food fermented previous to their ingestion. So that in fact, fermentation may be viewed as an attempt to digest these aliments out of the body, to save the organs the fatigue and labour of performing that function, and on that account it is, under certain conditions, necessary and proper.

Having remarked that digestion is maintained at the expense of the strength generated in breathing, we will assert, as an incontrovertible truth, that persons who have large, capacious, well-acting lungs, generally digest well, because they generate abundance of galvanoid energy. That, next to large and capacious lungs, a large and capacious spinal-marrow, particularly the *pons-Varolii*, denoted by a thick, large neck, is favourable, if not absolutely necessary, because the large development of these parts tends to localize or centralize the nervous power on the roots of the eighth pair of nerves. And that those, who digest most imperfectly, are chiefly such as have narrow chests and badly-acting lungs, narrow necks, small back of the head, or cerebellum, with large cerebrum,—because such formation determines expenditure of energy in the function of the cerebrum, namely thought. Now, in persons of the delicate constitation last described, where the galvanoid force generated is not great, and where the expenditure in the exercise of thought is considerable, or incessant, the constitution is not able to supply the whole of the organism with the strength required in thought, in muscular motion, &c., and, at the same time, to supply the stomach with that previously-existing strength, which must always be expended upon a meal in the oxydizing or **dehydrating* it, that is, in withdrawing from it oxygen and water, that it may afterwards combine the more readily with oxygen in the blood. For such persons, it is useful, and sometimes absolutely necessary, to ferment (that is, partially digest) farinaceous and saccharine principles before they are ingested; thus, to save for them the expenditure of galvanoid force.

With regard to the constitution previously mentioned, where the chest is large, the occipital region balancing the forehead, or predominating over it, in this case it is not only unnecessary, but may even prove injurious, because here breathing generates as much galvanoid power as sufficiently actuates the system, and supplies the spinal marrow with that expended in digestion. More nervous power or strength would here subject the brain and spinal marrow to a super-excitement incompatible with the duration of function; and this particularly happens in such climates as of those parts of America, where the electric condition of the air renders its combinatiou with the elements of the food energetic, and the consequent development of galvanoid force abundant. If such persons, in such climates, drink wine, spirits, or other malt liquors, there is an excess of function in the whole nervous system incompatible with health, and the person soon wears out. But if, on the contrary, the air be damp and stagnant, and the soil level, the respiratory function is worse performed. There the air doing less, the food is required to do more, and the stomach and digestive organs not being able to digest the food in sufficient quantity to supply the nerves, the latter are *empty* and *craving*, though the former is full. Here we have the strange phenomenon of a person eating heartily, perhaps too heartily, and still craving more. Such a person complains of a "sinking" at the stomach, and is always relieved by good wine and brandy, provided that the digestive organs, and the liver in particular, are not previously injured by their use. This will be denied by all those who are influenced by "total abstinence" doctrines, because until very recently we have been in the habit of viewing all food for one use only, namely, nutrition; overlooking in our philosophy the other great function in the animal machine, namely, the generation of the galvanoid force, which is to the body what steam is to the ship, or what gravity is to the earth as a planet.

But, when the human body is viewed as an electro-locomotive machine, generating its own moving power,—the "raw material" for which is air, and respiratory food, while the material for composition, only, is the nitrogenized,or animalized portions of our food, the objections of the partisans of "total abstinence" vanish. So long as food was supposed to be for nutrition alone, and before the minds of physiologists were fixed upon the necessity of a propulsive food, it was natural to condemn alcoholic liquors as useless; and the reason assigned for their condemnation was, that they could not make blood. Now, while it was true that alcohol could not make nutrient blood for composing the textures of the body, it was untrue to assert that it could not make propulsive blood, for maintaining those textures in motion when made. Indeed, the want of a distinct idea of this double nature in the animal machine, I mean that of a formative and that of a propulsive requirement, was not only the cause why many fell into a mistake with regard to the use of wine, &c., but is the cause of our being in ignorance, until this hour, of the correct function of many organs of the body.

To give an example that may invite to enquiry: What is the use of the ganglionic system of nerves? Marshall Hall, whose opinion may be looked upon as the expression of the most advanced physiologists, says, that they are for nutrition,secretion, &c. But when we find the nutrient and secretory functions performed in vegetables—nay, even in the lower classes of animals, without any demonstrative ganglionic system of nerves whatever, is it not illogical to attribute, in the series of animated beings, a new organism to an old function? that is, to impute to ganglionic nerves the performance of a function, which in lower orders of beings were and are carried on without those nerves? Indeed, as soon as we are correctly aware of the distinct nature of the animal machine, of the force that moves it, and of the existence of an apparatus for the production and maintenance of that force, we begin to ask ourselves whether any particular organ, such as the liver, spleen, thymus and parotid gland, belong to the first or the *nutrient*, or to the second or *propulsive* division? This view of the subject may convince us that the use of the above mentioned organs is yet undeveloped, and, by inciting enquiry, may perhaps lead us to discover what is the true function of those organs.

I have said that the necessity for vinous liquors is greater where the air is damp and stagnant, as in low, level, districts in England, the Netherlands, &c., and this leads us to ask the question, what is there in air in *motion*, that does not belong to air in a state of *rest?* Why is it that air in a state of motion, as in most parts of the North of France, some parts of America, &c., sufficiently charges or fills the nervous system of the inhabitants, while the nervous systems of those on level plains, with damp and stagnant atmospheres, are empty and void, though the stomach may be plentifully supplied with the best selected viands? The answer can be given in one word: that the very *motion* of the air imparts to it a new electric quality. This is exemplified by the rapidity with which the fire burns when the air is brisk and dry with a smart breeze. Now, burning being nothing more than the oxydizement of the coals: and the generation of animal spirit, in bodily strength, being nothing more than the oxydizement of motor food: it is to be expected that the same atmospheric state, which,—to the *great* increase of heat and flame would soon empty the grate of fuel, would also,—to the great increase of health and spirits, soon empty the stomach of food. While, as a contemporaneous phenomenon, we notice a great increase of electrical sparks, and that the amalgam of the electrifying machine is more rapidly consumed. These three facts being contemporaneous, lead us naturally to enquire whether they may not have a common causation; and we find they have; and that it consists in the increased oxydation of the fuel, of alimentary matters in the blood, and of the amalgam of the electrifying machine. Now, if, in a country where fuel is rapidly consumed, such as the parts already referred to, and also the states of New England, where long sparks will be drawn from the electrifying machine, and where, it may therefore be inferred, oxydizement of *motor* food (that is) the generation of galvanoid force proceeds with rapidity, persons drink vinous liquors, by which I mean alcoholic, there will be generated more force,or strength, than the bodily machinery can bear, and it will be consequently injured or destroyed. In such a climate,since intoxicating liquors are nothing but food more oxydizable, the inhabitants inhaling a high oxydizing air by the nostrils, there is an increase in each of the factors of galvanoid force or strength, inasmuch as saccharine and farinaceous matters have been deprived of oxygen, and then converted into spirits, thereby increasing their affinity for combination; and, thus, the appetite, each for the other, is mutually increased, and a double cause of intoxication induced.

We have now fully shewn, that the operation of alcohol, when taken into the human system, is not only not injurious, but is, in many cases, positively beneficial.

We have proved, both in this, and in our last communication, that it primarily produces galvanoid force or *strength*, and not *heat*, as attributed to it by Liebig and his supporters; and we have shewn the circumstances under which its moderate use is beneficial. We have also pointed out a species of non-azotized food which, while it is easiest of digestion, also furnishes the largest amount of nutrient principle: and have alluded to the effects of air, stagnant and in motion, on the constitution in various parts of the world. In our next, we will offer a few considerations on the distribution of the galvanoid force.

* See Dr. Prout on "Stomach and Urinary Diseases."—*Chapter on Raising the Aliments.*

ON THE APPLICATION OF THE PLUG IN CASES OF UTERINE HÆMORRHAGE.

By CHARLES CLAY, Member of the Royal College of Physicians, London, Graduate of Edinburgh, Author of "Peritoneal Sections," and Lecturer on Medical Jurisprudence, &c., Manchester.

There are many circumstances of considerable interest, as well as of great importance, in the different departments of medical science, concerning which a contrariety of opinion exists, and on which no settled rule of practice has hitherto been pronounced. This observation applies to midwifery more particularly, as it abounds more freely with unsettled points of practice, than any other department of medicine; this is the more to be wondered at, as it is more purely practical than any other, and therefore ought to be less liable to error or dispute. It is my intention to canvass the arguments, pro and con, of some few questions connected with midwifery, endeavouring as far as I am able to present the opinions which have led to the plans of practice adopted from time to time,from the earliest recorded obstetrical facts to the present period. I am not sanguine enough to suppose that any arguments I am able to use will ever unite two points of proceeding diametrically opposed to each other, or point out which opinion should give way, so as to ensure the best mode of practice for application; but I am desirous of making a few brief observations in a form, though condensed, yet sufficiently extensive to present the opinions of many of our most esteemed authors and best practical accoucheurs, on the questions under examination, and thereby enabling us to weigh the matter fairly, so as to arrive at the safest and most warrantable conclusion.

In the practice of midwifery, much will ever have to depend, not only on the peculiar circumstances of the case itself, but on the presence of mind, information, and discretion of the party employed. There is scarcely any unsettled question in midwifery practice, on which much has not been said or written, and sometimes with more prejudice than benefit to the matter con-

sidered. It will be my endeavour to state fairly the opinions of others in reference to peculiarities in practice; having done so, and added my own views, I shall leave it to the reader which course to pursue.

The first question I propose to examine, is the propriety or otherwise of using the plug in cases of uterine hæmorrhage, before, at, and subsequent to parturition; a subject on which a great diversity of opinion has been expressed; time and experience do not, however, appear to give the usual solution in this case, as in many others. It will be necessary to preface this subject with some historical notices. If we turn to the earlier writers on Midwifery, and compare them with the more modern, we find a singular contrast presenting itself in those parts assigned to the consideration of the subject of uterine hæmorrhage. In many instances, some never mention the subject at all; others very slightly, and then only in reference to hæmorrhage after delivery. On the contrary, modern writers dwell very lengthily upon hæmorrhage, and consider it as a matter of the very highest importance, requiring as great a degree of professional skill and energy as any subject in the department to which it belongs. I am almost at a loss how to account for this; as it is not possible to suppose that hæmorrhage, both before and after delivery, did not exist formerly as now; but the natural inference to be drawn is, that in all probability such cases are of more frequent occurrence now than they were formerly, and therefore of greater importance for the authors of the present age to dwell upon;—but why? is a question not very easy of solution; yet if it is the fact, no wonder the ancients said so little, and the moderns so much on the subject. If hæmorrhages are more frequent now than formerly, may they not be attributable to the increased luxury of modern living in the higher, and the deficiency of food and the debilitating employments in the lower ranks of society, producing that laxity of fibre so prone to extensive hæmorrhage, but particularly of the uterus, whether before, during, or after confinement! Perhaps, too, early marriages, being more frequent now than in the olden time, lead to great debility, and consequently increase the prevalence of hæmorrhages. One thing is very certain; experience points out that uterine hæmorrhage is the scarcely ever failing attendant of constitutional debility; and, therefore, we find it most frequent in those females who have had many births, married early, contending with the difficulties of life, engaged in laborious occupations, the miseries of poverty, or, on the contrary, debilitated by excess of luxurious food, and indolent habits of life; under such circumstances, we find few cases of puerperal convulsions, which depend on opposite causes: namely—a sound, vigorous constitution, a tense fibre, young, and generally connected with first or second, and but seldom with third or fourth, labours. Some of the Ancients, Mosehion, Eginetus, and others, speak of uterine hæmorrhage, and the use of the plug, but which at that time went under the name of a pessary, made of mineral and vegetable astringents. The state of practice at that time would, no doubt, naturally suggest a plugging up of the passage from whence the blood flowed, as a means of staying it; so that the plug may be esteemed of very early origin in medical practice. Towards the end of the sixteenth and the commencement of the seventeenth centuries, very little information is to be gleaned (of a satisfactory nature) respecting uterine hæmorrhage or its treatment. In the "Expert Midwife" of "James Rueff, edit. 1637," *not a single sentence occurs* on this very important subject;—this author's observations are confined to profuse menstruation, in which cases he speaks of pessary plugs made of astringents;—the mere catalogue of materials of which they were composed would occupy more space than can be here allotted to them, yet would certainly be a curiosity. In Pechey's "*Compleat Midwife's Practice, enlarged in the most weighty concernments of the birth of man, edit.* 1694," embracing also the practice of Mayern, Chamberlain, Culpeper, as well as the writings of the celebrated Midwife to the Queen of France, Louise Bourgeois, he speaks only of profuse menstruation, and that very briefly. And in Sir Theodore Mayern's "Rare Secrets brought to Light, edit. 1696," nothing whatever is said of the treatment of uterine hæmorrhage, in the great mass of receipts he gives for parturient females. In coming to a much later period, we find the celebrated French author "Dionis, edit. 1719," pointing out the distinctive characters of the floodings of menstruation from those connected with pregnancy, as well as the required difference in the treatment, in which he is not only very judicious, but comes very nearly to the most generally approved modes of the present day; Dionis, however, does not mention the plug or pessary as a means of cure. In the work of the celebrated "Daventer, edit. 1727," we find no mention of the application of the plug in hæmorrhage. In that truly excellent volume of two hundred and twenty-five cases of difficult midwifery, by "Wm. Gifford, edited by Dr. Hody, 1734," we find many cases of flooding before and after delivery recorded, yet the plug is treated with contemptuous silence. The treatment of uterine hæmorrhage by this last author, is so nearly that of the modern "Rigby," that I am convinced if the work of Gifford had been more generally known, that of Dr. Rigby would only have been necessary as confirming the views of a writer, very many years before his own time. The work of Fielding Ould, which was published in 1742, does not mention the plug in his treatment of uterine hæmorrhage, but relies on other and very effectual means. Dr. Exton in his "New System, 1751," is also silent in respect to the plug treatment. Nor is it in the least advocated by that celebrated practical writer, Chapman, whose work appeared in 1753, and went through many editions. Dr. Moore, in his "Elements of Midwifery, 1777," takes a new course of treating uterine hæmorrhage, viz:—cold bath to the feet, and cold astringents per vaginam by injection, pressure, &c.: a system that was proposed as *new* many years after by Dr. Leake. Dr. Moore is also no advocate for the plug. Dr. Mobray, in his "Female Physician," treats it with silence. We now come to the period of the celebrated Wm. Smellie, whose writings are a lasting monument of his industry and ability, and yet many of his practical principles have been since found to be erroneous; his works contained many errors, which, however, were counterbalanced by very many fresh truths; he scarcely mentions the plug, and then only as an astringent pessary:—this is one of his errors; for it was an error to suppose the astringents, of which the plug was composed, could have any direct effect on the mouths of vessels giving out blood, situate far distant from the application; again, he only speaks of the plug in hæmorrhage after delivery (another serious error); for, if it is more objectionable at one time than another, it is certainly in hæmorrhages after the uterine contents have been expelled. For a further list of the errors of Smellie, I refer the curious reader to the next author that falls under consideration, namely—"Dr. Burton, in his Letters on Smellie's System of Midwifery, 1753." Dr. Burton is not only a severe critic on the practice of Smellie generally, but condemns the plug practice in very strong language. (Vide page 213.)

To be continued.

PARISIAN INTELLIGENCE.

(FROM OUR OWN CORRESPONDENT.)

Paris, May 16, 1844.

On Diseases of the Eye.—Having in the preceding lectures recapitulated the symptoms by which the different varieties of blepharitis may be distinguished, I will now, after briefly passing in review their causes, describe the most appropriate remedies.

Causes:—Blepharitis Furfuracea: It has been asserted that this disease was produced by an insect; this is, however, far from being proved; it will however, probably, soon be ascertained whether such is the fact or not, now that microscopical observations are so much in vogue. Nightmen and gravediggers are also very subject to this species, probably on account of the irritating vapours to which they are constantly exposed.—*Blepharitis Ciliaria:* The causes of this species, whether it be partial or general, are, if possible, still more obscure. It may be observed in a variety of circumstances very different from each other; for it attacks the higher as well as the lower classes, persons who gain their livelihood by manual labour as well as those whose life is passed in their study in sedentary occupations; in short, it is met with in all ranks, in all classes of society, without being influenced by the difference of diet, habits, constitution, &c. The only cause which appears to have a manifest action over its apparition is some sudden atmospheric change, as it developes itself with great facility in the season in which these changes are most frequent.—*Blepharitis Conjunctivosa:* As it is in general consecutive to other diseases of the eye, the secondary inflammation is far more frequent than the primitive.—*Blepharitis Granulosa:* It does not unfrequently happen that, when a patient is threatened with ophthalmia purulenta, this species makes its appearance.—Having thus endeavoured to elucidate as much as possible a question enveloped as you may have perceived in great obscurity, I will now proceed to enumerate the different remedies.

Treatment.—It is not so simple as may be supposed, when we consider the disease itself, which appears to be a local inflammation, and limited to a very small space. It seems as though in acting upon the seat of the affection it must soon be cured; indeed, it appears so evidently to depend upon a local cause, that it is with difficulty we can divest ourselves of this idea, or admit the possibility of a general one. It presents an analogy in this respect with certain diseases of the skin, so tenacious and so stubborn, which, when apparently cured, break out afresh, and may, in this state, last for several years. It is on this account that it has been considered as produced by a general cause which is but little known. And it is the apparition of this disease without any appreciable cause, its appearance and disappearance, its tenacity and resistance to every species of treatment, which make me say that there is an analogy between blepharitis and certain cutaneous diseases. If, as I suppose, blepharitis is not only produced by a local, but likewise by a general cause, evidently the treatment must be modified, and to local remedies must be added such as act on the whole economy. In a word, I shall have to examine the general as well as the topical means useful in this disorder. In ordinary cases, the latter certainly are preferable; but whenever any symptom seems to indicate that a constitutional cause exists, by which the local lesion may be influenced, both must be employed simultaneously.

Topical remedies.—They may be divided into—1° Solid compounds or ointments. 2° Liquid ones or collyria. Powders ought never to be employed in blepharitis; but they are useful in another species of disease of the eye, to which I will, in a future lecture, call your attention. 1° *Ointments.*—As a general rule it may be asserted, that the preference ought to be given to these preparations: and this is worthy of attention; the more so as a great number of practitioners prescribe ointments in diseases of the eye itself, and collyria in those of the lids. In acting thus, they show that they are ignorant of the mode in which these disorders ought to be treated. For, with a little reflection, you will soon be convinced of the truth of this assertion. If you prescribe a liquid, you employ a substance which, by its nature, cannot remain long on the diseased part, and consequently can produce no material change. But you will say that these lotions may produce beneficial results on the diseased part, by merely touching it; in many cases this is impossible, owing to the presence of concretions, scabs, &c., which adhere to the part, and are interposed between it and the remedy. Ointments, on the contrary, may be allowed to remain on as long as is requisite; besides which, the fatty substance which contains the active principle of the remedy, softens the scabs and causes them to fall off, thus permitting the ointment to be applied directly on the seat of the disease. It may, therefore, be established as an axiom, that in the treatment of blepharitis, in general, ointments are preferable to collyria.

The ointments employed in these affections may be divided into—1° Those which are applied to the part, or *direct topical remedies*. 2° Those which are applied to the neighbourhood, and act after having been absorbed, or *indirect topical remedies*.

1° *Direct topical remedies.*—In general, they are astringent or substitutive. Certain precautions must be observed before their application, if you wish to obtain all the benefit they produce; thus you must wipe the lids, remove the scabs, &c.; this last may be obtained by rubbing them with fresh butter, simple cerate, &c., allowing these substances to remain on an hour or two, after which the eye must be washed with a mild lotion or water until the scabs fall off, and the sores are laid bare. This obtained, you will next apply the ointment which will thus be enabled to act on the part itself, and produce the desired effect. These details, however puerile they may appear, are still highly important; for, in neglecting them, the ointment, instead of being placed on the seat of the affection, is put on the scabs, and consequently is of little or no use; it cannot, therefore, be too strongly impressed on your minds. But this is not all; you must not content yourselves, after removing the scabs, with rubbing in the ointment negligently, for then it remains fixed to the extremities of the lashes alone, whilst their roots, which are the seat of the disease, are hardly touched by it. Care must, therefore, be taken to make it act on this part especially. It is natural to suppose these precautions are more or less essential, according to the nature of the disease; thus, they are principally indicated in blepharitis ciliaria, and exulcerosa, whereas in the other species they are not so necessary. These remarks are sufficient to prove how indispensable these details are, and that in neglecting them you deprive yourself causelessly of the means of curing the disease. As to the various ointments indicated in the treatment of this disease, their number is considerable; thus Weller and Caron du Villards have enumerated upwards of one hundred different formulæ, more or less efficacious, which owe their healing qualities to the presence of styptics, escharotics, or caustics, combined with butter or hog's lard. Among these, the most commonly employed are: the *pommades de Lyon, du Regent, de Desault, de Farnier* (*), *de Janin* (2), and that so vaunted by Madame de Montebello. From experience, I have been led to conclude that those of Desault and Janin are most efficacious in blepharitis furfuracea, and that of Madame de Montebello in blepharitis accompanied with a considerable degree of exudation. All these different ointments, though more or less useful, may be replaced by the following, which is far more certain, and of which the nitrate of silver is the active principle. It is employed in England, where it was advocated by Guthrie, combined with opium and the acetas plumbi; but, for the last 15 years, I have prescribed it without the addition of these two substances. The proportions likewise differ in my formulæ and those proposed by Guthrie. Thus, that distinguished surgeon recommends grs. vj. grs. viij. grs. x. and even grs. xij. in ʒj. ʒiss. ʒij. and ʒiiss. of butter; whilst my prescription is, for ordinary cases, ℞, nitrat. argent. grs. ss.—gr. j. adipis præpar. ʒj.; and in more serious ones, ℞. nitrat. argent, grs. iv. —grs. viij. adipis præpar. ʒj. The efficacy of this ointment is considerable, but it acts more in some species than in others; in blepharitis furfuracea it is very useful; whilst in blepharitis ciliaria it seldom succeeds, when the disease is acute or complicated with hypertrophy of the follicles, which last may be recognised by the presence of a small swelling at the root of each lash; it may, however, be advantageously employed when the exudation is considerable. In blepharitis exulcerosa, it acts powerfully, and seldom fails, after having been made use of for seven or eight days, in producing the cicatrization of the small ulcerations present in this species.

But in what way, and in what quantity, ought this ointment to be employed? With the precautions before mentioned, a piece about the size of a grain of wheat, or a pin's head, may be rubbed in morning and evening. This done, different lotions may be used; but as collyria are chiefly employed in inflammation of the conjunctiva, they will be enumerated on a future occasion; at the present moment, I will merely mention as curious specimens several which are now deservedly forgotten. Thus, formerly the following were recommended: boil an egg until quite hard; while still hot cut it in two; remove the yolk and replace it with different substances, such as sulphas zinci, sulphas ferri, murias ammoniæ, oxydum zinci. This done, the two halves are to be re-united; the whole put in water, and pledgets dipped in the liquid to be placed on the eye. Sometimes, after allowing the remedy to remain some time in the egg, it was removed, and the two halves were put on the eye. Another remedy consisted in mixing with the white of an egg q. s. of powdered alum to form a paste, which was to be applied to the eye. Finally, besides the ointments just mentioned, numerous others have been recommended which owe their qualities to the presence of hydrargyri submurias, hydrargyri oxymurias, cuprum aluminatum (*pierre divine*)* sulphas aluminis, sulphas zinci, &c.

Variola Developing Itself on Vaccinated Persons.—In the *Annali Universali di Medicina*, M. Lassetti published the following remarks made in the *Hôpital Majeur de Milan*, in 1838. Of 420 cases of variola after vaccination, three classes were established:—those in which the cicatrices were normal;—those in which they were somewhat incomplete;—and those in which they were very imperfect. The first contained 231 cases; the second 124; and the third only 65. The variola presented the following varieties:—

Eruption.	Confluent.	Distinct.	Very Distinct.	Total.
Normal Cicatrices	83	91	57	231
Incomplete	53	49	22	124
Very Incomplete	18	28	19	65
				420

As to the result according to the number of pustules.

Eruption.	Confluent.	Distinct.	Very Distinct.	Total.
One Cicatrix	30	30	16	76
Two Cicatrices	36	35	22	93
Three "	40	38	20	98
Four or more do	48	68	40	153
				420

As to the age, in 1411 cases observed in 1837 and 1838, after vaccination, the result was: under 5 years old, 130; from five to ten, 101; from ten to fifteen, 151; from fifteen to twenty, 303; from twenty to twenty-five, 282; from twenty-five to thirty, 216; from thirty to thirty-five, 160; from thirty to forty and above, 68; total, 1411.

On a glandular swelling of the cheek.—This case, which occurred in the wards of M. A. Berard, at the Pitiè, furnished that Professor with an opportunity of making several remarks on the subject. A middle-aged man, of weak constitution, and somewhat lymphatic, had, in general, enjoyed good health; no member of his family had ever offered a tuberculous or scrophulous diathesis. This individual, who lived in a low and damp room on the ground floor, surrounded by very unfavourable hygienical conditions, perceived some months back that his right cheek was the seat of a tumour, which had developed itself insidiously and without any known cause. At first, he paid no attention to it, until it became so considerable as to constitute a deformity, and was painful. Examined on his entry, he presented the following symptoms:—

Tumour occupying all the right parotidian region, extending vertically from the angle of the *maxillare inferius*, to the zygomatic process; and transversely from the *meatus auditorius*, which it compressed and pushed somewhat backwards, to the anterior edge of the perpendicular portion of the *maxillare inferius*. It was uneven and bosselated, as if formed by several hard elastic lymphatic ganglions united together; easily circumscribed; slightly mobile; adherent to the deep seated parts but not to the skin, which retained its normal colour. After passing in review the different diseases which might produce similar symptoms, such as cancer, hypertrophy of the parotid gland, &c., the Professor concluded that it was produced by an enlargement or chronic *engorgement* of several lymphatic glands; and then discussed whether it ought to be submitted to a discutient treatment, left to the *vis medicatrix naturæ*, or removed by an operation.—*Discutient remedies.*—Doubtless, as the immediate danger is not great, they might, if employed for a considerable length of time, be followed by resolution. But as this is very doubtful, it would be imprudent to attempt it, for several reasons: for, when tumefied ganglions exist in any part of the body, all the neighbouring ones are susceptible of being similarly affected; also it may degenerate into cancer, or, at least, become the seat of an inflammation, followed by abscesses or ulcers, which leave after them indelible and frightful cicatrices. Now, if by delaying thus, this cancerous degenerescence should be allowed to take place, would the operation then be successful? and ought we not to fear a relapse?—2° *Vis medicatrix naturæ.* The foregoing remarks are equally applicable here.—3° *Operation.*—What are the counter-indications? Similar tumours in various parts of the body, symptoms of phthisis, a cachexia. Now, none of these exist; on the contrary, the constitution of the patient is good; consequently, there is every probability that the operation will be successful. But of the different methods recommended, which is the best? Setons; destroying the texture of the organ by instruments introduced under the skin; crushing the tumour by violent pressure. The two first seldom succeed and consequently have been abandoned; and who would dare perform the third, even in admitting for an instant the possibility of its succeeding, on a tumour similarly situated. Three other methods, then, remain to be considered. *Cauterization* with caustic potass, chloruret of zinc, or Vienna caustic. These cannot be employed on account of the serious consecutive accidents they may produce in a part in which important organs exist; besides which, the skin, being perfectly sound, ought to be preserved.—*Ligature.*—This method was recommended principally by M. Mayor, of Lausanne, who performs it thus: after dividing the skin, he dissects the tumour to its base; and then, if it be not too large, surrounds it with a ligature; should this be impossible, he passes through the tumour several threaded needles, and applies thus separate ligatures. This method presents but few advantages and many inconveniences; if the tumour is superficial, it had better be removed at once; and, if deep seated, it is with difficulty we avoid wounding the vessels, and the hæmorrhage is stopped with less facility than when extirpation is performed; finally, the portions of skin may become inflamed, and, therefore, the cicatrization be considerably retarded and, perhaps, rendered impossible.—*Extirpation.* The foregoing remarks led to the conclusion that this operation was the best plan to be adopted; it was consequently performed as follows:—A curvilinear incision was made on the tumour, its convexity towards the ear, extending from the zygomatic arch to the angle of the lower jaw, and the swelling removed from below upwards; the arteries (most of them were branches of the temporal) were tied as divided. On account of the presence of the external jugular and other large veins, into which the entry of air might be productive of serious, if not fatal accidents, an assistant was requested to press the venous trunk, should it be necessary; fortunately this was not requisite. After a long and laborious dissection, during which the back of the knife was kept constantly turned towards the parotid gland, so as to avoid as much as possible wounding it, the tumour was

* These *pommades* owe their healing properties principally to the deutoxyde of mercury. *Lyon.* ℞. unguent rosæ ʒj. oxyd. hydrargyr. rub. ʒss.—*Regent.* ℞j. butyri ʒv. (well washed in rose-water) oxyd. hydrargyr. rubr., acetat plumb. crystal. āā ʒiiss. camphor. grs. xviij.—*Desault,* ℞. adipis suillæ (washed in rose-water) ʒviij., oxyd. hydrarg. rub., oxyd. zinci, alumin. usti, oxyd. plumb. semi-vitrificat. aa ʒj.

† *Pommade de Janin.*—℞. hydrargyr. submur. ʒiss. oxydi zinci, pulv. Boli Armen. aa ʒiij., adipis præpar. ʒix.

* *Pierre Divine.* ℞. Sulphat. Cupri Crystal., Nitrat. Potass., Alumin. ā. ā. ℈iv. Camphor. grs. iv. Melt the salts, and when nearly cold add the camphor.

removed. It was, on examination, found to be composed of a number of small lymphatic glands, hypertrophied and degenerated; to which here and there adhered small particles of the tissue of the parotid, which was so closely united to the swelling, that, notwithstanding all the precautions taken, it was impossible not to remove some of it. The operation finished, the patient was requested to move his lips and cheeks so as to ascertain whether the facial nerve had been divided. This, as expected, was the case, but it is to be hoped that the paralysis will gradually disappear, when the two ends of the divided nerve shall be re-united. Eight days after, the wound was more than one-half cicatrized; the paralysis had diminished, and there were no traces of salivary fistula. On the fifteenth day, the cicatrix was entire; the paralysis had not completely disappeared, and it is to be feared that it will persist in the zygomaticus major; as to the other muscles, they contract tolerably well. No salivary fistula, although a portion of the parotid had been removed. This fact said the Professor, in conclusion, is not unfrequent, and is owing to the pressure exercised by the fleshy excrescences of the wound on the small canals, by which their obliteration is produced.

Prizes.—The Medical Society of Berlin (*Deutsche Verein fur Heilwissenschaft*) will award the sum of *fifty gold frederics* (somewhat more than £40) to the best memoir on the following question: "Comparative researches on the pathology of diseases of the nerves of motion in man and domestic animals." The Society desires that, to the knowledge already acquired on this subject, the candidates will add other practical observations. Memoirs must be addressed p. p., and in the customary way, on or before the 1st of July, 1844, to the direction of the Society of Berlin.—The German union for the propagation of Medical Sciences will award a prize of £16 to the best memoir on the following subject:—"Pathological researches on caries of the teeth, with chemical and microscopical observations of this morbid state." Memoirs must be addressed on or before the 1st of March, 1845, p. p. to the "*Union allemande pour les Sciences Medicales*, Berlin." The prize essay will belong to the union for five years, who will insert it in its memoirs, and will give twenty copies to the author. The five years elapsed, the manuscript will be at the disposal of its author.

Academy of Sciences.—Sitting of the 13th May.—M. Elie de Beaumont, V.P., in the chair. M. Mathon writes to claim the priority of the invention of the method of embalment described by M. Després in a previous sitting, and which consists in causing the vapours produced by the distillation of organic vegetable and animal substances to penetrate into all the parts of the body.

On the Epithelium of Mucous Membranes, by Dr. Mandl.—From the researches of M. Flourens, and contrary to the opinion expressed by many anatomists, it is now proved beyond a doubt that not only does this tissue exist, but that it is formed by two layers. Those of the author of the memoir have led him to conclude:—1st. That all the mucous membranes of the intestinal canal are furnished with an epithelium formed of two layers; 2dly. That the first, which is on the surface of the intestine, is composed of elementary molecules twice or thrice as long as they are wide, formed of a granular, transparent, and greyish substance, which I call with Henle, *cylinders of the epithelium.* 3dly. That the second layer situated under the first, between it and the dermis of the mucous membrane, is composed of cylinders of various degrees of development; 4thly. That the second layer is composed of elements which develope themselves, and form the germ of the perfect elements of which the first is formed; 5thly. That there is a continual renewal of the epithelium as with the epidermis; for, as M. Flourens indicates, the second replaces the first when it falls off and is expulsed in the fæces, where its elements are always to be found; 6thly. That in certain diseases, such as dysenteria, chronic inflammation, &c., this renewal takes place very rapidly, and the first layer is found in the evacuations under the form of whitish shreds, hitherto supposed to be coagulated mucus.

On the Heat disengaged, when Water is added to Sulphuric Acid, by M. Abria.—From his researches, the author concludes, that when water is added to monohydrated sulphuric acid, the degree of heat decreases as the atoms of water increase in quantity; that the proportions of the quantity of caloric disengaged when atoms of water are added to anhydrous sulphuric acid, are as follows:—

Atoms	1	2	3	4	5	6
Proportion of the Caloric.	1	1-3d	1-6th	1-12th	1-16th	1-24th

On the Retraction of Albuginous Tissues.—Professor Gerdy, M. A. M., surgeon at the Charité, addressed a copy of his memoir read before the Academy of Medicine, (sitting of the 16th April). After giving the detailed account of the case which gave rise to the memoir, the author states, that the seat of these retractions are the fibrous and fibro-cellular tissues, the tendons of the muscles, the aponeuroses, the sub-cutaneous, and the interstitial cellular tissue, the skin, the mucous, serous, and synovial membranes, &c. That the causes are *external:* cold or heat, which by producing mortification of the skin cause the sub-cutaneous tissues to retract; repeated frictions; inflamed and suppurative wounds, burns;—*internal:* acute or chronic, local inflammations in the part itself, or in the neighbouring ones; local mechanical excitation, frequently repeated, or continued for some time, by which a sub-acute irritation is kept up in the tissues. That the symptoms are *local:* tension; rigidity; hardness; indurations; but none of the characteristic signs of inflammation, and very seldom thickening or hypertrophy;—*functional:* constraint or inability of motion; or sometimes disturbance in internal organs, when the retraction is such as to prevent their performing their functions; thus, the retraction of the muscles of the jaw, in preventing the mouth from opening, renders digestion impossible. Those observed in the parts surrounding the retraction, differ according to the seat of the affection; thus, the retraction of the muscles of the neck may draw the lips downwards, and cause an involuntary flow of saliva, &c. That their development varies according to the cause; being more or less rapid according as it is acute or chronic. That the diagnosis, easy when the disease is visible, becomes more difficult when it is deep seated, and especially when it affects the tendons of the muscles or their sheaths; in the former, the non-contraction of the muscle when stretched will enable the surgeon to establish the diagnosis; but in the latter, should the mode of development not clear up the doubts, the diagnosis is impossible. That the prognosis, though it is not very serious, may become more or less so, according as the retractions cause a greater or less amount of disturbance. That the treatment is, in some cases, to remove the cause; to employ antiphlogistics when the cause is an acute phlegmasia; baths of tepid and mineral waters, when it is owing to a chronic inflammation, or feeble and obscure irritation; finally, when the disease has reached the second or third stage, orthopedic means must be employed so as to obtain the rupture of the contractions.

Academy of Medicine.—Sitting of the 14th May.—M. Ferrus in the chair.—M. Leroy d'Etiolles writes to state that what Messrs. Mercier and Guillot suppose to be valves of the bladder, are simple folds which form themselves in the first stage of the *engorgement* of the prostate; at the same time, he presented an instrument by which they might be divided.

M. Rochoux read two reports:—1° *On the treatment of Epilepsy*, containing a formula which the author wished not to be made public.—M. Nacquart remarked that a report could not be made, ere the formula was made known publicly; consequently, he proposed sending the memoir to the *conseil d'administration*, to decide what course ought to be adopted.—2° On a memoir of M. Naudot, "*Observations of bilious pneumonia followed by some considerations on this phlegmasia in hot climates.*"—M. Martin Solon observed that a distinction ought to be made between the varieties of pneumonia, in the bilious form, where the tartar emetic is given as an evacuant, or an emetic, and in the inflammatory form complicated with slight bilious symptoms, in which, after venesection, this remedy is employed as an antiphlogistic, on the Rasorian principle; and that the errors arose from the two being confounded.—M. Louis said that in his opinion there was no doubt but that tartar emetic had a specific action; and that he had found it exceedingly useful in many cases, where, after 3 or 4 bleedings, the patient grew worse, but got better as soon as this medicine was administered, and was ultimately cured. The conclusion of the report, that thanks be returned to the author, was adopted.

M. Joly read a report on a case of death, observed on the 30th July, 1842, at the lazaret of Malta, at the request of the *Ministre du Commerce.* The Lyeurgus, a French packet, arrived at Malta on the 14th July, 1842, from Alexandria, having thirty-two passengers and fifty-six men on board. Among the former, was a gentleman returning from India, who had with him two boxes of musk; being obliged to open them, he found one spoiled. This accident vexed him considerably, and from that instant he became taciturn, and was taken with intense cephalalgia, which he attributed to the smell of the musk. A physician called in diagnosticated simple synocha, and prescribed rest, diet, and a purgative. The next day the inflammatory symptoms had increased; V. S. was proposed but declined; delirium in the evening with fever; remission towards morning, but return of the fever and delirium, notwithstanding which the patient constantly refused to allow blood to be drawn. Examined, no bubo nor glandular swelling was observed; a few pétechiæ only pereeptible. All the symptoms seemed to be those of synocha. The quarantine finished, he rose and paid his expenses, when all at once he staggered, fell, was put to bed, and died soon after. On examining the body after death, several tumours were discovered; one at the superior and anterior third of the right thigh; three on the left thigh; and several smaller ones on the right fore-arm. The five physicians present, therefore, concluded that if it were not a case of plague, at least it ought to be considered doubtful. Several omissions, added the reporter, exist in the observation. 1° The autopsy was not performed with sufficient care, since neither the thorax, abdomen, nor head were examined: a circumstance essential, pestis being a *gastro-entero-cephalitis*, complicated with bubos. 2° No mention is made of the day on which the packet sailed, of the sanitory condition of Alexandria, Constantinople, Smyrna, and Syria, or of the day on which the packet touched at the three last places. But, however incomplete, it is still deserving of attention; consequently, the reporter proposed answering the *Ministre du Commerce*, that though the case cannot be quoted by the partizans of contagion or non-contagion in favour of their opinions, it may be considered at least as suspicious, though no other individual on board the packet was affected with the disease, nor any one in the lazaret attending on the patient.—M. Nacquart remarked that the case was one of diffused phlegmon rather than of plague.—M. Rochoux said, a Member of the English Parliament once asked how many grey horses were necessary to make a white one, and I will now demand how many doubtful cases are requisite to establish a real one? In my opinion the case is of no value, and I propose answering the Minister to that effect.—M. Dupuy remarked that similar symptoms might be observed in animals, to whom camphor, cantharides, and other substances had been administered. In his opinion, death was not produced by the plague, but by the absorption of the altered muscle.—M. Desportes:—In the works published on this disease, numerous analogous observations are to be met with; thus, a person, apparently quite well, feels all at once a pain in the groin, axilla, &c., and on touching the part discovers a bubo, followed soon after by other symptoms of the plague; at other times, it is preceded by a slight disturbance of the digestive organs. In his opinion, when no predisposition exists, the contagious nature of the disorder has no effect; and as to the observation contained in the report, he considers it as suspicious.—M. Gueneau de Mussy proposed suppressing the words *at least*, contained in the reply.—This proposition, seconded by M. Dubois d'Amiens, was adopted.

M. Laugier read part of a memoir on the escape of a serous liquid from the ear, after a smart blow on the head;—it will be continued in the next sitting.

Professor Blandin presented a patient, on whom he had performed the *resection* of the upper part of the humerus, on account of a deformed callus.

M. Desprès presented a body embalmed by his method.

GARLAND DE BEAUMONT, D.M.P., B.L., & S., &c.

Honorary Physician to the Spanish Embassy.

ERRATUM.—Page 110, col. 3, paragraph on myotomy; after the words "In answer, Dr. Guerin" continue thus "stated:—In the statistical table published by me of the patients received in my wards at the children's hospital, I mentioned 155 deviations of the spine, which were divided into five categories, viz.: 24 cured, 38 ameliorated, 4 not ameliorated, 1 death, and 98 in which the treatment was interrupted. Now, the author of the memoir mentions 24 cases without knowing in which category they had been placed by me; and subsequent examination has proved that it was in the last, and that some had not been operated on. But, in order to be able to form a correct judgment on the efficacy of my method, it is necessary: 1° to know the exact condition of the patient before the treatment was commenced: now, this is impossible, as no documents have ever been published on this subject. To fill up this deficiency, the author was obliged to content himself with the details given him by parents, relatives, friends, &c. 2° To conclude only after an attentive examination, and not as the author of the Memoir did, in many cases, at a distance, the patients being dressed, or even without seeing them at all, but only on hearsay. Finally, the two following facts are proofs of the inexactitude of the information obtained. 1° A child mentioned as still alive and not cured, was taken with typhoid fever, while under treatment in my wards; removed to Necker Hospital, she died there. 2° Another quoted as having become lame, after leaving the children's hospital, was affected with congenital luxation of the femur, complicated with deviation of the spine, before her entry." "As to the letter writer, &c.," as in the text.

A REPORT UPON SOME LATE STATEMENTS IN THERAPEUTICS.

By W. HUGHES WILLSHIRE, M.D., M.B.S., Physician to the Royal Infirmary for Children, and to the Surrey Dispensary, &c.

(For the "Medical Times.")

(Continued from page 130.)

Spermatorrhœa.—The therapeutics of this affection have been much canvassed; and, although accounts have been pretty generally spread though the various periodicals, I think it right to make a *resumé* of the late statements upon it here. Lallemand, Ranking, Packman, Dangerfield, Chatto, Magendie, Balls, Ryan, and others, appear to think that continence may be a cause of the disease, and, therefore, perfect abstinence is to be avoided. They differ, however, as to the *frequency* of perfect chastity being its origin. Others, like Dr. Bell, &c., maintain that "the laws of physiology are not contrary to the laws of morality," and that advising a patient to get married for its cure or amelioration is improper, as it will not effect either; and to say to the patient: "sexual intercourse is necessary to your cure," would make some gentleman "shudder," as it would be likely to make the patient think of a Cyprian. All writers agree that excessive coition and masturbation are very frequent causes of it; hence is indicated one part of the cure in certain cases.

Lallemand cauterises the space from the neck of the bladder to the membranous part of the urethra, but sometimes brushes over the internal surface of the bladder itself to a greater or less extent. He cautions us strongly against repeating the operation too soon, and advises us to wait two or three weeks before the caustic (nitrate of silver) is reapplied.—Mr. Curling, Dr. Ranking, Mr. Phillips, &c., also cauterise, whilst Civiale is strongly opposed to it; others have used caustic injections, instead of the armed bougie. The daily introduction of an unarmed bougie, and retaining it for a longer or shorter time in the urethra, leeches and blisters to the perinæum, tartar emetic frictions at that spot, cold ablution, and cold clysters, are strongly advised by some. Some have found opiates useful: others have found that in particular cases they aggravate the disease; conium is said to be the safest to employ. The mineral tonics, abandonment of alcoholic and malt liquors, early rising, sleeping upon hard mattresses without curtains to the bed, walking until fatigue is felt, the continual company of a second person, &c., are advised, either as prophylactics or curative in their effects. In relation to the removal of one cause of this affection, I consider the remarks of Mr. Ryan as especially valuable: "Treating the case according to its cause, whether arising from irritability, inflammation, atony, &c., &c., it will be of little use to enjoin fatigue the day before, provided the person lolls a-bed the next morning. The morniug orgasm is, as is well known, the most intense, and, as long as the person subject to the complaint remains an hour or so in bed after awakening, so sure is he likely, no matter how fatigued the day before, or how resolute his intention, to stoop to this passion;—this is the Scylla upon which he splits. *Early rising*, then, is of all things to be enjoined; or rather, the moment a person awakes, *that moment* let him be up. This is the first great step; let him be master here, and much of his battle is won, as at no other part of the day is he even one-tenth so exposed." It is not to be forgotten, however, that, in the words of Lallemand, the most efficacious of coercive measures cannot perfectly succeed, except with infants. After puberty the secretion of semen cannot be suspended, or even sensibly diminished, by any means compatible with health; the accumulation of this fluid in the seminal vesicles must accordingly produce importunate erections, inevitable relapses, or else nocturnal and diurnal pollutions, all which cannot be entirely prevented, save by sexual intercouse. This means, chiefly it is, that can recal to the normal state the deteriorated functions, and modify the perverted sensibility of the organ. It is the sole really effectual means, both for the present and the future,—the only one that can completely reform unnatural tastes, by making the patient perceive the immense distance which separates his melancholy pleasures from those physiologically procured.

Gonorrhœa.—Mr. C. Chowne, Mr. Annan, and some others, have stated their belief that cubebs, if given in a concentrated form, early in the disease, may give rise to local inflammations, or even according to one writer, to something like an "ephemeral synocha."

Dr. O'Shaugnessy recommends "the gurgan balsam," (the produce of the *dipterocapus lævis*), as a cheap and efficient substitute for the balsam of copaifera, and states some cases of chronic gonorrhœa and gleet, which had long resisted copaiba and cubebs, which have been cured by this remedy. The essential oil may be given in the dose of ten to thirty drops in mucilage, milk, rice water, or thin gruel, and repeated thrice, or still more frequently, in the day. It communicates a strong smell of turpentine to the urine, which it increases remarkably in quantity. It is stated also by a writer in the *Medical Times*, that when combined with cubebs it is equally as efficacious as copaiba, while it does not produce the distressing nausea and eructations so frequently caused by that medicine.—Mattico has been used by Dr. Lane in gleet, but it was of no avail.

Leucorrhœa, &c.—Aliquie, Baron, Payen, and St. Ange having strongly advocated the use of *monesia* (a crude extract from a supposed chrysophyllum), in the above and allied affections; Dr. Hunter Lane was led to make trial of its virtues, and he states that having exhibited it in cases where leucorrhœa co-existed with diarrhœa, it has not appeared to exert any influence over the former, though the latter proved obedient to its action. Its medicinal properties are said to be very analogous to those of catechu and kino, nor does it exhibit any very decided superiority over those pharmaceutical preparations.

In *chronic, uterine and Vaginal Leucorrhœa*, Dr. Hunter Lane recommends an infusion of *Mattico* as an exceedingly efficacious injection, being more rapid in arresting the discharge, more certain in its action, and more cleanly in its application, than the solution of the nitrate of silver. Notwithstanding the high reputation which this vegetable had acquired for its *aphrodisiac* virtue, the above gentleman did not observe the least manifestation of any such property, nor even of any emmenagogue operation. I believe, to Dr. Jeffrey the profession is indebted for the introduction of this new drug.

Dr. Chowne states the tincture of cantharides to be a very useful remedy in some cases of vaginal discharge; and, according to Dr. Allnatt, *creosote* as an injection is of very high avail, and he proposes the same in obstinate cases of gleet, occurring in flabby, leucophlegmatic males; his formula for adults is: R. Creosote mxx. liq. Pot. ʒij. Sacchari. alb. ʒii. Rub together in a mortar; afterwards add by degrees 8 ounces of water; make an injection to be used three times a day.

Mr. Atkinson speaks well of *lotio nigra* in the vaginal catarrh of children; as also Mr. Mackinlay, even when there is considerable extent of foul ulceration.

The Author has found that either the sulphate of zinc or the nitrate of silver is always equal to the overcoming of this very common and troublesome affection.

Chlorosis, &c.—According to Brierre de Boismont, practical experience affords us unequivocal evidence that, in certain young females, menstruation is solicited in vain by tonics, steel medicines, or emmenagogues, and that it occurs after marriage or pregnancy. The direct stimulation of the genital organs suffices to dispel the symptoms. Young females with all the signs of chlorosis are cured by sexual intercourse without any medical agent.

A reviewer in *Dr. Johnson's Quarterly* makes some excellent remarks. "Menstruation, says he, in the one sex has its analogous function (although this is not periodic) in the other; and certainly no one would ever think of administering any aphrodisiac medicines to a chlorotic boy for the cure of his green sickness; let but the system once have a due supply of healthy blood permeating all its parts, and stimulating all its organs, &c. Such will be the effects of a judicious hygienic treatment by steel, and other tonics, by exercise in the open air, and a generous diet, not forgetting Falstaff's sovereign remedy for male green sickness.—"The second property," says the old rogue, "of your excellent *sherries* is the warming of the blood." The less that emmenagogues are used in all cases where the uterus is, or has been recently suffering, the better. We are the more induced to insist upon this point, as it is still a very prevalent opinion that whenever the catamenia are absent, we should, as a matter of course, endeavour to provoke their return by the use of emmenagogues.

Raciborski deprecates strongly the idea that chlorosis is the result of congestion or engorgement of the uterus re-acting on the various functions of the economy; and hence the treatment so often followed on the Continent is highly prejudicial. He goes on to state that, when he was chief clinical clerk at La Charité, scarcely a week passed over without some poor exsanguine chlorotic patients, who had been drained of the little good blood that was in their bodies by leeches and bleeding, being admitted.

Dr. Golding Bird with regard to dysmenorrhœa makes two distinctions, one where pain is felt over the pubes, the other where it is experienced in the loins, and there is a third variety where the pain is a compound of both. When the pain is over the pubes, belladonna, combined with the sulphate of zinc, if the girl be pallid or chlorotic, and with ipecacuanha if she be florid or plethoric, is stated to be of most admirable avail. In the other variety this drug is of no use.

Dr. Waller has found the application of leeches, within the vulva, afford more relief than any thing else in certain forms of painful menstruation, and a *belladonna* plaister upon the loins is of great use. Dr. Theophilus Thompson speaks well of *veratria* ointment upon the sacrum.

The author has brought about menstruation in a girl, after it had ceased for seven years, by the use of *iodide of iron*. During this period she had been subject to various forms of treatment, but in vain.

Chailly affirms that the ergot of rye has the power of causing uterine contraction, when it has not been before manifested; when rejected by vomiting, it should be given in a clyster, and it is thus even more rapidly absorbed than when given by the stomach, and acts more directly upon the uterus. In irregular, ineffectual, and exhausting uterine contractions, much confidence is placed in repeated enemeta or injections of a quarter of a pint of warm water, and 15 drops of laudanum, gradually increasing the quantity to 60 or 80 drops, and thus repeating them every quarter of an hour, if necessary; but, in general, a few minutes after the first injection the pains diminish, a calm succeeds, refreshing sleep, and a return of more regular and effective pains occurs.

Gilbert, in *rigidity of the os uteri*, was induced to make trial of the tartrate of antimony, in doses of half a grain, the first potion, and then a quarter of a grain every fifteen minutes, until emesis came on; and as soon as retching commenced, the uterine contraction strengthened, and the labour terminated speedily. He has frequently used it since, and always with the most satisfactory results; but was not then aware that this remedy had been used by Ramsbotham, who, speaking of rigidity of the mouth of the uterus, says, "antimony, in doses sufficient to keep up a feeling of nausea, has been exhibited in these cases with marked effect."

Chailly states that he has in the above cases seen the application of the extract of belladonna successful. It should be used of the consistence of soft wax; a small portion of it should be placed upon the nail of the index finger, and carried within the cervix. The heat and moisture dissolve it, and it will be spread easily over the natural uterine surface. When it is successful, it generally acts very quickly; the cervix softens and dilates in ten or fifteen minutes.

In certain forms of *uterine tumours*, Dr. Ashwell believes, from his own experience, that iodine has some effect upon them, and that the small, hard tumours of the cervix may be "melted down and cured by it." Dr. Lever does not speak so sanguinely of this remedy, although he states that he has seen a stop given to their growth after its exhibition.

PRACTICAL MEDICAL REFORM.

To the Editor of the "Medical Times."

Sir,—I beg to enclose you a copy of a Petition from the Medical Practitioners of Warrington, to the House of Commons, relative to the assessed taxes to which they are liable: the honourable member who presented it, has kindly promised to pay every attention in his power to the subject, when it comes before the House.

Another honourable member, who was requested to support the prayer of the petition, says, in reply,—"I wish I could think that there was a prospect of some relief being obtained for the profession, in the manner which you suggest, but experience leads me to think, that the thing is next to impossible. I have long been convinced, that no body of men in this country have greater difficulties to contend with, if they wish to become eminent, than medical men, and I would willingly lend a feeble hand in promoting a measure of relief; but I very much doubt the power of any one to persuade either the House of Commons, or a Chancellor of the Exchequer, of the fact, that they do deserve a separate consideration. I have already had some conversation with members who take an interest in the subject, and am bonnd to say, that they agree in the above opinion.

"I should not be surprised, however, if the state of the medical profession should be well gone into on the discussion of the Poor Law Bill, and some good may possibly arise from it."

This, as giving the opinion of the highest class of our legislators, deserves close attention, and I should say, that the thing is almost in the hands of the profession, and that it is at once its duty and interest to set the matter right, with every individual member of the House. It is not the *becoming eminent* that is the point of importance. One in an hundred may become eminent, but where are the ninety and nine? The great town physician may care little for a few pounds of taxes extra, it is the large body of hard-working, ill-paid country practitioners who suffer.

Perhaps the Provincial Medical Association might have done something in this matter, had they really wished the good of the profession. After years' of meeting, and dining, and talking, things are pretty much as they were.

But the profession still has the power, if it will use it, to get free from a most unjust tax. Every member of the House of Commons has his medical attendant; every practitioner has his representative. The Chancellor of the Exchequer himself, will, if properly and assiduously applied to, find out, as Pitt did, that it does deserve a separate consideration, and there is, in the introduction of the New Bill, an opportunity afforded to get quit of the burden.

That it is not very probable that any *one* could persuade the House of Commons to remit these taxes, may be admitted, but the injustice of these impositions may surely be proved to every member of the House, if the profession will really bestir itself. X.

PETITION TO THE HOUSE OF COMMONS,

Presented May 1st, 1844.

Sheweth,—That your petitioners are legally qualified medical practitioners in the town of Warrington.

That in the practice of their profession they are frequently obliged to make long journies into the country by night and day, in cases of emergency and danger.

That your petitioners are under the necessity of keeping horses, at a very great expense to themselves,—and in particular instances close carriages or gigs—not as articles of luxury, but to enable them to discharge the duties of their profession, and to protect themselves from the inclemency of the weather.

That as members of the medical profession your petitioners are at the call of the poor as well as rich, and that in very many instances they have to make such journeys without the slightest prospect of being remunerated.

That your petitioners believe that when the assessed taxes were first imposed upon horses, medical men were exempt from the payment of them.

That your petitioners are informed that it is the intention of her Majesty's ministers to introduce into your Honorable House a bill for the regulation of the medical profession, and they humbly request that your Honorable House will make such exceptions in their favour as may be thought due to the members of a profession, who afford gratuitous relief to the poor in town and country, to an extent which is done by no other class of her Majesty's subjects.

And your petitioners will ever pray.

OBSTETRIC CASE.

(To the Editor of the "Medical Times.")

Sir—Should you consider the following obstetric case worthy a place in your valuable Journal, it may be the means, through its medium, of eliciting the practice and opinions of accoucheurs on the subject, having myself attended several thousands of labours, yet never having met before with a similar one. I am, Sir,

Your humble Servant,
JAMES ANDERSON.

Leicester, 30th April, 1844.

On the 16th September, 1831, Andrew Ferguson, M.D., Aberdeen, called on me to accompany him to see a patient of his, a Mrs. S——n, Netherkirkgate, (pregnant, if I am not mistaken, with her third child); the Dr. and a mid-wife had been in attendance upwards of two days; the parturient pains had been regular and strong; nevertheless the os uteri was but little dilated and rigid; the pains on my visit suspended. Feverish—pulse 98. On passing the hand over the abdomen, two distinct tumours were felt, one superior, and the other inferior, divided transversely by a deep contraction, as with a circular band, at the umbilicus; the inferior feels elastic; no motion in the other; the fœtus in utero was distinctly recognised through the abdominal parietes. I abstracted blood from the arm, emptied the bladder, exhibited an enema, and administered some cordial medicine; applied a roller moderately tight below the epigastric region; the pains soon returned; the os uteri gradually lost its rigidity, and dilated, so that I could introduce my finger, and assist in the dilatation; the inferior tumour began to descend, which we conceived to be the amnios; however it proved not to be the case, for as soon as I gave over the dilatation and examination, a discharge immediately followed, of purulent matter, to the amount of about seven pounds' weight; the bed-room became so impregnated with noxious gas, that neither the patient nor attendants could have withstood it, if immediate means had not been resorted to for its purification; the liquor amnii discharged, and I delivered her of a fine healthy female child, at full time; there was little uterine hæmorrhage; the placenta came away without much trouble, bringing along with it the cyst of the tumour—*this was an encysted tumour within the uterus;* no disease could be detected in the uterine cavity—no leucorrhœal discharge, &c.; no pain in coitu, notwithstanding purulent matter is indicative of previous inflammation; yet, during the whole period of gestation, she was in her usual state of health, and had a good recovery.

THE MEDICAL TIMES.

Saturday, May 25, 1844.

Good thoughts, though God accept them, yet towards men are little better than good dreams, except they be put in act; and that cannot be without power and place, as the vantage and commanding ground.
Bacon.

Before we shall again have addressed ourselves to our readers, the public will be probably in possession of Sir James Graham's plan of adjusting the multitudinous disorders of our unfortunate Profession. The fact, though of more consequence than we have ordinarily to chronicle, yet impresses us with no overweening notion of its importance. Good or bad, Sir James Graham's Bill cannot be carried this session. A measure which vitally affects that largest of professions, extending equally but varying in characteristics largely, through each division of the empire—which deals with the honours and pecuniary interests of Heaven knows how many colleges, universities, and corporations, lay and ecclesiastical—which affects the practice and position, the vital comforts and necessities, of all grades of medical men carrying on their useful avocation in all manner of good or ill customary ways—which involves the due care of the health of the whole community—and on which so many personal or party questions may be so agreeably and profitably engrafted by political ingenuity—such a measure, even if Sir James Graham were, what he is not, a Moses—or the House of Commons what, save in barrenness of produce, it equally is not, a Mount Sinai—would inevitably be postponed for further consideration to some "early day next session." However, it will be something to hear the Ministerial exposition of policy: though with such a vista behind it, our readers

will do well to take our example, and await it with just that philosophic amount of impatience which allows digestion to go on undisturbed.

The great defect in point of omission which we anticipate, will be the non-suppression of Quackery. Such a *hiatus* is the loss of the *most* practical benefit the measure could confer on either the profession or society. It will be a national declaration that the Law, which is so ingeniously active in placing every description of property beyond the reach of illicit rapacity, will leave health and life wholly unprotected. It is saying, that, on the most important of all human possessions, the Law will abdicate its highest functions; will not think for the ignorant, or see for the blind; but, abandoning its protection of the weak, will expose their best interests to the daring frauds which ignorance can tempt, or impunity can encourage. The practice of the attorney is confined to the attorney, that of the barrister to the barrister. The man infringing on either's functions would soon be taught that he must not so defraud them, or injure the public, Is it more necessary that the lawyer's client shall be assured of skill and honesty than the physician's patient? Are the lawyers' rights to exclusive practice founded on greater claims of policy, or supported by higher pleas of justice? To be short: by such an oversight, medical men will be unprofessionalized—soeicty injured. And to serve what purpose?—that scoundrels may be allowed to do what they know nothing about, and live luxuriously by perilling the lives of others! Sir James will do well again to ponder on this point, so worthy of a Statesman's attention,

The Council Board to be constructed for *superintending* medical education and examinations throughout the empire, will depend for much of its excellence on the selection of its members. With a due proportion of General Practitioners, and appointments originating from an unsuspicious source, we shall gladly acknowledge here an important amelioration. It will clear off at one blow a mass of excrescent anomalies, which at once deform and fatally injure our Profession.

The Charter of the College of Surgeons *must* be revised, not *confirmed*. It cannot be worked in its present state. Above all, and before all, the whole Council should be made eligible by the body of Members, as the ruling bodies of all other learned societies are. Having a General Board of Control, even if the Members did not make a wise selection of Councillors, there would arise no mischief. No *fragment* of an argument, therefore, remains for the continued exclusion of the members from a share in the management of *their own* College. The transparent reason for all remaining opposition *must* be that the Councillors feel no pang of conscience in postponing the comforts and rights of ten thousand gentlemen to their own *caprices* or *interests*. Will they consent—or, if they *will*, shall they be allowed—to lie under such an imputation?

The great feature, however, of the new Bill will be the change in the functions of the Apothecaries' Company. Sir James Graham has not honoured the Worshipful Society by a consultation on one provision of his forthcoming measure, and the ugly rumours afloat have not without reason aroused these worthy gentlemen's apprehensions. The tug of war will after all be here. We are much mistaken if the superseded, discarded Apothecaries—backed as they are by funds not their own, and which, therefore, will be spent the less ungrudgingly—will not prove the noisiest and most troublesome of the Home Secretary's opponents. For ourselves, we *have* no sympathy with men who have shewn in their day of power the least possible sympathy with their members,—and *shall* have none, unless we are unwisely taught that General Practitioners are likely to fare worse under new masters than they have under the old. It would be odd, indeed, if other men's loins could press on us as hardly as these men's little fingers,—but we must not be too sanguine, nor oversurprised at any forthcoming oddity.

The Apothecary Corporation form the most undistinguished scientific body in Europe. Their license costs, perhaps, more labour and study to obtain than the diploma of Physicians in many Colleges and Universities,—yet so low are they in repute, that thousands of their members, so ostentatious of their connection with the *College of Surgeons*, carefully abstain from announcing themselves as the Hall's Licentiates. "Surgeon" is respectable—but "Surgeon and Apothecary" is felt to be approximating to the Druggist: an acknowledgment of a low kind of practice, and an inferior grade in society. Thus worthless (in scientific note, or social respeetability,) to the candidate whose funds they have so largely drawn on, they have hitherto licensed him only to treat him as a cipher in all that concerns the management of the institution. In one word—they have given us immense labour and expense, returned no benefit, and then insulted us as alien members! Yet we are told that this is preeminently the General Practitioner's corporation! that he should stand by it as by part of his order! We know the Hall gentlemen will be mueh obliged to us for standing by them—they would, indeed, have much cause—but will they be good enough to say when they stood by us? Will they explain why, under their degrading policy, the words, "Apothecary," and "Druggist," are popularly held to mean the same thing? The answer would give us the sum of their utility to medieal men. For our parts, we ean offer the Company no great hopes of professional aid. Called to aeeount for their stewardship, we diseover that they have not made that liberal use of their large powers which, in wisdom as in goodness, they should have done; and they will call to us in vain for help, so long as the Minister does not, by greater injustice, make it our luckless policy to save them. If the mammon of iniquity, which has been so largely confided to them, had been better bestowed in their days of prosperity, friends now, in the hour of need, would not have failed them. As it is, the great pleasure, as the great interest, of medieal men will be, emancipation from their trammels, and the concession of a new corporate eonnection which may reward our labours by reflecting on us in the eye of society, not lowness, but elevation.

REVIEWS.

Practical Observations on the Prevention, Causes, and Treatment of Curvatures of the Spine, with an Etching and Description of an Apparatus for the Correction of the Deformity, and engravings illustrative of the Cases. By Samuel Hare, Esq., Surgeon. Second Edition, 1844.

We are inclined to speak favourably of this work, for although with one exception, to which we shall immediately allude, there is nothing absolutely new either in the theory or practice adduced; yet from the simple, sensible, and unpretending manner in which the subject is described, the book is worthy of commendation.

Our author eommences very properly with an investigation into the causes of curvature of the spine, but confines himself chiefly to the *exciting* causes, and views *tight lacing* in young and delicate females, as the principal cause. From this point our author diverges to the general management of infants and children, and then proceeds more immediately to spinal curvature, and arranges his subject under four heads, viz.:—lateral curvature, angular curvature, excurvation and incurvation.—As lateral curvature, excurvation and incurvation, are mere modifications of the same disease—arising from similar causes, and amenable to the same treatment, our author's primary classification might have been simplified by reducing the curvatures into two kinds—the angular and non-angular;—the angular arising uniformly from a morbid state, accompanied with a solution of continuity in the textures of the spine affected, while in the non-angular curvatures, whether the bend be in one direction or another, solution of continuity in any of the spinal structures is never found, but the curvatures generally arise from causes that induce debility of a local or constitutional kind.

The treatment of *angular* curvature proposed by our author is, we think, judicious—consisting of early attention to the symptoms, the recumbent posture, local antiphlogistic means—particularly a succession of blisters, and the use of those means that tend to improve the natural secretions. In the treatment of *lateral* curvature, the chief novelty is to be found;—a novelty, however, in the details of treatment, rather than in principle. Our author makes his patients lie on an inclined plane, somewhat in the form of a table, and by means of extension and counter-extension, produced by weights acting over pullies at the opposite ends of the plane, an unintermitting elongation of the spine is thus effected during the whole progress of the cure. The apparatus is ingenious, and along with the other means prescribed—tonics, friction, and proper

training of the muscles of the back, is calculated to be extremely useful. The book, upon the whole, is creditable to the author, and we can recommend it to the profession.

PENCILLINGS OF EMINENT MEDICAL MEN.

BOURDOIS DE LA MOTTE;

(Being a Panegyric pronounced at the Sitting of the Academy of Medicine, on the 30th of April, 1844; by M. Pariset, *Perpetual Secretary of the Academy of Medicine, Officer of the Legion of Honour, &c.*

Edme Joachim Bourdois was born on the 14th of September, 1754, at Joigny, a small town now in the department of the Youne, but formerly comprised in the province of Champagne. Belles-lettres and sciences had long been cultivated in his family, and one of his ancestors wrote the History of the Town of Joigny. His father was a distinguished physician, and—higher merit—an honest man. He communicated to the Academy of Sciences the observation of a fœtus, which had hardened and withered in the body of a female, where it remained twenty-two years; was ranked by the Royal Society among its correspondents, and had his worth extolled by Vicq d'Azir. His talents, his probity, his charity, caused him to be so loved and venerated, that, attacked one night by thieves, his *name* protected both his life and purse. What Aristotle did for the political constitutions, he did for the medical; for he united the history of upwards of one hundred and forty epidemics, by which he was enabled to compare these affections the one with the other, and to discover—like Hippocrates, Baillou, and Sydenham—the differences sometimes so extraordinary, which characterize them. His remarks were consigned to a register, which he named—*my justification.*

Disciple of such a father, Bourdois, well disposed by nature, found no difficulty in directing his mind to serious studies. His college education finished, he chose his parent's profession, and came, in consequence, to Paris. He underwent all the examinations necessary to obtain his diploma, and these trials were numerous and severe. May I be permitted to recapitulate them:—The degrees of bachelor were conferred on persons aged twenty-three, possessors of degrees as A.M., and after seven years' hard study legally proved. At certain epochs of the year, the students were examined for four, five, or six days successively, on various medical, anatomical, and surgical subjects, and on materia medica. An aphorism being given, they were requested to expound it: four theses were required,—three called *quolibetaires*, because they were forced to reply to all the objections made by their opponents during the argumentation; a fourth called *cardinale*, because among the legates sent from Rome to reform the universities of France, was the Cardinal d'Estonteville, who in 1452 decided that there should be a thesis on a question of hygiene. Finally, came the last examination, entirely practical, which continued for four days; a number of diseases were named by the examiners, and the candidate was required to indicate their causes, symptoms, progress, and treatment; if the replies were satisfactory, the ceremonial for the reception was performed,—but on the eve of this imposing solemnity, the obligations the candidate was about to contract, and the duties he was about to fulfil, were recalled to his mind; so that, to a certain degree, it was under the auspices of religion that the lives of their fellow-creatures were committed to their care.

This noble discipline was the glory of the ancient faculty. In it were formed Fernel, Baillou, Duret, Houllier, and many others not less illustrious, among whom I do not hesitate in placing de Jussieu, Corvisart, Halle—the contemporaries of Bourdois. But these theses short, substantial, written in Latin, were indifferently the work of the candidate or of the president. The first that Bourdois composed was on the following question: Is the colour of the blood produced by a vital force? As you know, the blood has been from the time of Moses down to the present day the object of the researches of physicians, naturalists, philosophers, and legislators. Notwithstanding the opinion expressed by Aristotle and Harvey, the blood is not the part of our frame which appears the first, but when once formed it is, to employ the phrase of Buffon, "the whole man." All his physical, all his intellectual, and even all his moral attributes, originate in the blood. "The life of the flesh is in the blood," said the Jewish lawgiver. "It is by the blood that man receives his intellectual qualities," said Hippocrates. But in these transformations, what astonishing variety! All is changed into blood, and is changed by it. It has been said, according to the food so is the chyle, according to the chyle and the air so is the blood and the nutrition—*i.e.*, the composition of our solids and liquids; but we must add, according to the nutrition so is the blood, for, in its circulation through the economy, whilst it yields to the different parts of our frame the materials by which they are renovated, it takes up such as are no longer necessary, and which render its composition different as it progresses; and it is on this account that we meet every day new elements or new combinations. In order to follow these perpetual transubstantiations, it was necessary that medicine and chemistry should multiply their investigations and analyses. Those performed previous to Rouelle were complete failures, and, notwithstanding the admirable researches of modern experimenters, they are very little, if at all, better, even now. I can but compare them to what a rhetorician may perform on the poems of Homer and Virgil, in decomposing these immortal works into vowels, consonants, commas, full stops, and who then boasts of having analysed the Iliad or the Eneid. But where is the unity? the order? the idea? the harmony? the emotion? the movement? the fire? And for the blood, are there not certain principles which will constantly escape our modes of analysis? Is it not moved, agitated at every moment of our existence by our passions? Is anger, which turns the nurse's milk and the saliva into a poison, without action on the blood? is it not enervated by castration, which weakens the frame? What difference is there in its composition before and after variola? before and after typhus and yellow fever? and I will add but one word more:—sentiments and ideas, that is to say, the only realities of whose existence we are certain, since they form part of our being, possess none of the attributes of matter; they have neither form nor colour. The power by which they are formed is inherent to the blood, although that fluid acts only on and with solid matter; but notwithstanding, this power has nothing common with matter, and will never be discovered by the different tests, for they can but destroy its work and disperse the various elements. It alone creates, it alone unites, it alone co-ordinates, it alone organises, it is the *mens* of that poet who, before being an eminent poet, was a distinguished philosopher, Virgil, and as long as it is unknown, all the analyses performed on the blood will seize but the shadow—will be but a mere phantom. It is now upwards of two centuries since the colour of the blood has been the object of the studies of different authors. By what is it produced? Is it owing to a peculiar principle? Is it the phlogiston of Stahl and Moscati? the iron of Haller and Morgagni?—But the phlogiston is an imaginary being, and according to Bourdois, iron is to be found in every part of the human body. Is it produced by a peculiar disposition of the particles of the blood? a mode of arrangement of its globules? Has the excess of light here engendered obscurity? Has not the blood been found white, blue, pale, and odorous as broth? the red tint may, therefore, be considered as not an essential part of that liquid. Not long ago, the colouration was supposed to be produced by hæmatosin—a substance discovered by Chevreul, whose component parts are but little known, but which is thought to be formed of fibrin, albumen, and peroxide of iron. Still later, according to two distinguished chemists, it is owing to the presence of an acid, and contains no iron. These divergencies of opinion prove that the veil is not yet raised, and that we are still ignorant as to the precise cause. But as to that hidden, though real, wise and all powerful divinity which Bourdois causes to intervene, and which he calls vital force, how can it be excluded, since it is every where? It is that force which causes and directs all the changes which take place in us; it makes the blood, and still more so the principle, be it what it may, which colours it, as well as the poison of the viper; it adapts itself to the different wants of our economy, even future ones; it changes the blood of the mother so as to facilitate the secretion of milk, and as this fluid possesses nutritive qualities according to the red globules contained, it causes them to abound in the blood of the placenta, in order that the fœtus may find more nourishment and develope itself better,—designs of an unity, and of a future irreconcilable, it must be confessed, with physics, mechanics, or chemistry!

This first thesis was presented on the 11th Feb. 1777, and on the 6th May, Bourdois defended his second, the *cardinale*, on a question of hygiene. He examined whether it is not injurious to remain during winter exposed to the rays of caloric, emanating from an ardent fire, and concluded affirmatively,—from the advantages derived from exercise taken in the open air, even in very cold weather; from the bad effects produced by an excess of caloric, which dilates the blood and causes a dry hot air to be inhaled into the lungs, which are thereby deprived of the humidity necessary to constitute their normal condition. What is peculiary striking in this thesis, is, the pliability of mind which enabled the author to attribute to a cause apparently so futile (abnormal plethora) the most serious diseases, such as cerebral and pulmonary congestions, hypochondriasis, asthma, impaired digestion, insomnia, catarrhus suffocans, diminution or loss of the natural heat—a loss which, as Hippocrates remarked, may prove fatal should the patient be exposed on a sudden to intense cold. This thesis proves that all causes, even those which seem to be of little moment, are important in medicine; and that no error can be considered trifling, for the equilibrium which we call health is so mobile, that the slightest shock is sufficient to destroy it, and extinguish the vital principle.

After these two theses on Physiology and Hygiene, Bourdois defended two others on Practical Medicine. One of them was on a disease which, like the plague, has been known in France upwards of thirteen centuries, and which, also like the plague, is said to have originated in the East, but which appeared spontaneously some years back in New Holland, and existed in China upwards of five thousand years ago—I mean, the variola.

Benign at first, it became suddenly very intense,—and why? On account of the overthrow of a dynasty! So great is the influence exercised by political shocks on the life of man! The study of variola would form, according to Bourdois, a complete lecture on pathology, as every symptom, however extraordinary it may be, which is to be seen in other diseases, may bo observed in this. Besides, it is well known with what facility the cause of variola acts on a sensitive and susceptible organisation, and it is on this principle that Bourdois asks whether tepid baths are, or are not, useful in variola? He answers affirmatively; founding his opinion,—on the usages of certain countries, Germany, Hungary, island of Java—on the example given by the most eminent practitioners—and on the authority of the most learned universities. This method, however, cannot be considered as absolute: Bourdois, himself, limits it to certain cases. Two facts mentioned in this thesis are deserving of record, and of being constantly borne in mind. Galen diagnosticated a disease from the changes in the complexion; Franco from the attitude; Corvisart from the physiognomy; Theodore Zwinger from the odour, from those invisible corpuscles which exist in the blood, which chemistry will never be able to discover, and whose only test is our nerves. Each individual, it is well known, presents an odour *sui generis*, and as a woman while nursing, so certain maladies, especially typhus and variola, offer a peculiar smell. A man in falling, struck his head, and presented all the appearance of cerebral effusion: the operation of the trepan was proposed. "Take care; do no such thing," said Vernage,

"the patient offers the characteristic odour of variola." In fact, that disorder soon after appeared; appropriate remedies were administered, and the patient recovered. A young man, strong and hale, on a sudden swooned, and was thought to be dead. His friends affirmed that he had had variola. "You are all mistaken," said Thiery; "he has not had variola, but ere long he will be affected with it." The next morning, variola appeared. It is difficult to conceive that a disorder can develop itself in so sudden, so abrupt, and, I will add, illogical a manner.

Besides these three theses, Bourdois sustained a fourth, of which he was not the author. Composed in 1742, by Louis Réné Dubois, it was defended by Sabatier in 1774, and by Bourdois in 1778. The theses of the ancient faculty present numerous instances of this species of plagiarism or second-hand. One written in 1769, by Bucquet, was sustained by several candidates. Caillè, in 1772, contented himself with that composed in 1759, by Lebègue de Presle; and, in the same year (1772), Vicq de Azir defended two written long before, one by Linguet, the other by Guilbert. To what end?—with what intention was this done? Was it in order to save time? Was it to ascertain how far opinions differ on the same subject? Be the reason what it may, this thesis of Bourdois was a mixed question; a medico-chirurgical one, *on Tumours*, an immense subject, in which are included affections of a different, and even a contrary, nature. After reading the works of Galen, Plenck, and Boyer, we cannot but find it astonishing that the author of the thesis should have taken as his motto the following maxim:—"A tumour being given, let its nature be what it may, the physician ought, in general, to endeavour to obtain its resolution." The more so, as he confesses himself, that, in many cases, this is impossible,—that, in others, it is very dangerous,—and that in those which are the most favourable, as a phlegmon, an erysipelas, the substance by which it is composed, after being absorbed, may cause a disease far more dangerous than that which previously existed. Therefore, the treatment of tumours is special rather than absolute, and resolution is nothing more than an accessory, and even doubtful, mode of treatment.

Named M.D., Bourdois was nominated physician to the *Hôpital de la Charité*, but the weakness of his chest did not permit his performing his duties very long, and a violent and reiterated hæmoptysis obliged him to quit his post. But his learning, wit, and good breeding, caused him to be remarked by a member of the royal family, *Monsieur*, afterwards Louis XVIII., who gave him a place in his household, naming him physician of the Luxembourg, and of the Chateau of Brunoy, and created in his favour the place of Intendant of his Cabinet of Physics and Natural History. *Monsieur* did for Bourdois what the Duke of Orleans did for Bertholet. It is in spending their fortunes in behalf of talent, and, I will add, of misfortune, that princes shew themselves worthy of their riches. In 1788, the aunt of the unfortunate and excellent King Louis XVI., Madame Victoire, named Bourdois her chief physician, instead of Malouet. But these favours were as short as they were brilliant, for sinister events were preparing, and soon the social edifice was shook to its foundations. In replacing disorders by ruins, the downfall of the monarchy was accomplished, and a host of calamities burst upon France. Bourdois, from his position near the royal family, was one of the first victims. Men who courted popular favour never forgave his having served his princes, and, thrown by them into prison, he was delivered by the courage and devotedness of his wife. Immediately after, he left for the army of the Alps, with the rank of physician to the right wing. On his arrival, he found that typhus reigned in the army, sparing no one. The dead, unburied, were allowed to rot in the hospitals. Directly, in spite of the murmurs which he suppressed by his firmness, Bourdois ordered the dead to be buried deep, tents to be raised in the open air, and the soldiers to be transported there. This done, he caused the hospitals, barracks, effects, equipages, &c., to be cleaned, purified, washed, ventilated, presiding over all, conducting all, with an indefatigable activity. A month after, the disease had ceased its devastations, and he was proclaimed the saviour of the soldier. Thus, the physician has also his victories. In that army there was an individual, at that time a simple lieutenant in the artillery, who raised himself above kings, and who filled the world with his renown. Buonaparte and Bourdois became friends, were constantly together, and every day the latter admired the bursts of genius which escaped from the former; on the other hand, Bourdois related to Buonaparte the recollections he retained for princes so unhappy, and so worthy of being respected. Buonaparte had not for liberty that suspicious and cruel fanaticism which renders it so odious, and which formed the character of these deplorable times. He applauded and partook of the sentiments expressed by Bourdois, and listened to his words as one who felt himself capable of inspiring them. They were both in Paris during the disturbances which ended on the 4th October, 1795, when the convention confided to Buonaparte their defence, and through whom it triumphed. Bourdois resided then in the Rue St. Honoré. The day after the bloody victory of which this street was the theatre, the conqueror, anxious to learn whether any accident had happened to his friend, dispatched a messenger to enquire how he was; and this action rendered, if possible, their union more intimate. Named, soon after, Commander-in-Chief of the Army of Italy, Buonaparte asked Bourdois to accompany him, with the rank of chief physician. To accept this was to leave Paris; abandon his affairs; quit his wife, then in indifferent health, to whom he owed his life, and to whom he was devotedly attached; expose himself to the hazards of a campaign which the genius of its chief might render glorious, but which his youth and boldness might render unfortunate. This was asking too much; Bourdois declined. This refusal offended Buonaparte, and threw a damp on his friendship which lasted some time; for neither on his return from Italy, nor from Egypt, would he receive Bourdois. But long resentment could not exist in so generous a heart, and, on the birth of the King of Rome, Napoleon remembered his friend, and having sent for him, —"You are the physician of my son," said the Emperor to Bourdois. "I cannot give you a greater proof of the confidence I have in you. Forget the past, as I myself have forgotten it."—Corvisart, let it be said to his honour, was not foreign to this reconciliation.

Shall I speak of the favours with which Bourdois was honoured? Physician to the King of Rome—Consulting Physician to the Emperor—Physician to the Prince's College, established at Meudon: he had an apartment at the palace, and a carriage at his orders. Inspector of the University, he was created baronet; but whether from indifference or modesty, he neglected to have his title registered. The Prefect of the Seine, Frochot, requested him to accept the functions of physician for the epidemics in the department; and it was under his guidance, in the fulfilment of these functions, that Lherminier and myself had the honour of being his associates. The skill, urbanity, and wit which caused him to be remarked by *Monsieur*, could not fail attracting the attention of Prince Talleyrand, at that time Minister of Foreign Affairs, and of whom he became physician and friend. The influence he exercised on the opinions of the prince was supposed to be very great; consequently, at an epoch in which the politics of the Emperor stirred all Germany, and changed the destiny of all the smaller powers of the Confederation, none of the princes who came to Paris, to defend their interest, neglected to consult Bourdois for real or feigned diseases, and to choose him as their physician, in order to have a supporter near the Emperor and his Minister. It was to this circumstance that he owed the shower of snuff-boxes with which he was enabled subsequently to purchase his magnificent Chateau de Marne. He was likewise physician to the Foreign Office—a post which he owed to the friendship of Prince Talleyrand, and which made him acquainted with the most important personages in Europe. No physician ever existed who had attended more illustrious foreigners, or who ever received more flattering testimonials, than Bourdois.

This was the second phase in the glorious and noble life of Bourdois, ceasing with the empire, as the first fell with the monarchy. To retrace the disasters, which followed this memorable epoch, is foreign to my subject; I will content myself with stating that Bourdois was faithful to his trust. In 1814, he followed the Empress and the King of Rome to Blois: but the instant drew near in which he was to be separated from the royal infant committed to his care in so moving a manner. This was a source of great grief to Bourdois—so true is it, that, in the sentiment which attaches us to our young princes, there is a secret power superior to that inspired by ordinary persons. We accustom ourselves to see in them the future greatness of our country, and it is not without sorrow that we find ourselves obliged to forego our hopes.

Under the Restoration, Bourdois' position, though less bright, was equally dignified, which proved that the consideration he possessed did not depend on the favours with which he was honoured, since, in losing the latter, he retained the former. The loss of our fortune often causes us to be forsaken by those who style themselves our friends—but to Bourdois all were staunch, nay more, he gained new ones among the eminent men who replaced those of the empire; besides which, the equanimity of his temper, and the kindness of his heart, caused him to be beloved by his attendants, so much so, that they all refused to leave him. Gentle, humane, and charitable towards the poor when called in, he attended them with the greatest assiduity. But his patients were principally in the higher classes, among whom not only from his talent was he received as a physician, but likewise, from the noble urbanity of his manners, he was sought for as a friend. He possessed superlatively that tact, or instinct, which enabled him at first sight to distinguish diseases in which the physician ought to intervene, from those which might be abandoned to nature; and his acuteness permitting him to judge to what extent it might be confided in. He showed in all his actions a prudence which was neither temerity nor weakness; and as he had neither the meanness of envy, nor of a misplaced self-love, there were few consultations at which he was not required to assist. There, deferential with his colleagues, he identified himself with them, and sought but to save the patient; listened to their opinions, expressed his own with becoming modesty, and when, after maturely considering the *pro* and *con*, the plan of treatment was adopted, it almost always fell to the lot of Bourdois to make it known to the family. When the danger was great, he had the talent, by his eloquence, of assuaging grief; and in doubtful or desperate cases, of inspiring hope, diminishing fears, or consoling sorrow.

I cannot but praise so excellent a character. I look for shades but can find none. I will even say more; that noble mien; those actions so dignified and still so natural which distinguished him amongst us; that urbanity which we have lost with him; that affability, so familiar and so decorous, were but the ornaments of more valuable qualities and more solid virtues. No man ever had for his wife, weak, infirm, and prevented from mingling in society, more constant, more affectionate care and attention. As pure as his heart, his lips were never sullied by falsehood, calumny, licentiousness, or obscenity. The duties of the physician were, in his opinion, as sacred as those of the priest, for the tranquillity of a family depended frequently on the secret confided to his honour. His conduct, far from being a cause of disturbance or scandal, was a constant example of prudence, modesty and kindness. Had Hippocrates' treatises on the oath, or on medicine not existed, Bourdois would have found the precepts therein contained, and in order to write them, his actions might have been taken for a model. If I recall to mind, and lay such stress upon these actions, it is because, in the eyes of the world, the physician is on their account more esteemed than he would be by the most learned works. It is because in medicine less good is done by the most eminent talent, than by an irreproachable life.

On the formation of the Royal Academy of Medicine by Louis XVIII, one of the first persons mentioned was Bourdois. His presence was needed, for he might be considered as the representative of the former faculty and the late court; that is to say, the noble elegance of the latter, the uprightness, the loyalty, and the science of the former. Several times he was chosen as our president, and the honour here was reciprocal, for in so doing we possessed at our head, one in whom was personified all that was estimable in our profession. Though the number of works published by him were but few, still it is indubitable that to a very refined taste for scientific subjects, he combined the talent of a writer. He gave a proof of this, if not in his translation of Ruiz's memoir on Krameria, at least in the report he presented in 1835, on the proposition made of placing Corvisart's bust in the assembly-room of the Academy. In a simple and polished style, he there recapitulated nobly the services which Corvisart had rendered to mankind, and in rendering homage to the generosity of that eminent practitioner's sentiments, he showed how elevated his own were. He was occupied in composing a treatise on the Passions, principal source of agitation amongst men, and which changes every moment the face of the world. In camps, in courts, in society, he saw them arise and develope themselves under a thousand different forms, great or little, sublime or worthless, noble or ignominious, mild or cruel; amiable, gloomy, or tragical; innocent, criminal, or terrible; an object of pity, admiration, disgust, or horror. It is easy to be supposed that the curious anecdotes, the ingenious and learned ideas which gave to his conversation so much charm, were but fragments of the book which existed in his mind. This work, in all probability, would, like those of Lachambre and Alibert, have been a source of much good for medicine or philosophy. But alas! worldly distractions and affairs, that multitude of serious nothings which constitute and monopolize the life of a man, these trifles have deprived us of the book, in occupying the leisure hours of the author. Bourdois grew old. On commencing his 82d year, he was on a sudden, in the midst of the pleasing life which he had created for himself, surrounded by artists who embellished it, and by friends who rendered it so dear, he was affected with an intense erysipelas of the head, a disease to which he was subject, but which this time proved mortal. Bourdois breathed his last on the 7th Dec., 1835. On receiving the sad tidings, the Academy suspended its sittings, and deputed several members to assist at his funeral. On this occasion, and ere the tomb was closed on the loved remains, a disconsolate voice, that of an old and tried friend, (M. Collot) retraced with simplicity the noble acts of Bourdois, rendering, if possible, still more sensible the loss the profession and society had experienced in his death.

TRANSACTIONS OF LEARNED SOCIETIES

Royal Medical and Chirurgical Society, May 14.—Mr. Stanley, president, in the chair.—*Case of a tumour in the right hypochondrium, occurring after injury, from which a large quantity of fluid resembling bile, was repeatedly withdrawn by the operation of tapping, by William R. Barlow, Esq., of Writsley, Essex.—Communicated by Edward Stanley, Esq. president.*

The patient, a thatcher, aged 54, injured himself, August 28, 1843, by lifting a heavy ladder, and complained of so much pain in the region of the liver, that the author apprehended a rupture of that organ. He was very faint, in a cold perspiration, and the pulse scarcely to be felt. He was bled and purged; on the second day, it was observed that the evacuations were white, and without bile, whilst the urine was dark as in jaundice. As the pain in the region of the liver continued, the bleeding was repeated at different times; he was put upon mercurials, and had a blister applied over the right hypochondrium. On the 15th of September, a swelling of the size of a walnut, was perceived over the seat of the liver; and this gradually enlarged, until it had acquired, on the 9th of October, so large a size, and distressed him so much from its distension, that it was considered proper to tap it. Seven quarts of fluid were drawn off, and he obtained instant relief. This fluid, from its colour and taste, appeared to be pure bile. The swelling gradually enlarged again, and it was necessary to repeat the operation of tapping on the 21st of the month, when six quarts and a half were withdrawn. Upon analysis, the fluid was found to consist almost entirely of pure bile. After this he was tapped four different times, when similar quantities of fluid were withdrawn. On the last occasion, which was on the 26th Nov. only three pints escaped, and the swelling was not emptied, and he suffered considerable pain. On the following day, bile appeared in the stools, and the urine was lighter coloured. The swelling was also much reduced in size, and it gradually subsided after this date. On the 4th Feb. 1844, he was quite recovered, and able to walk eight or ten miles. The author concluded with shortly stating several of the most interesting questions connected with the case, and proposing them for the attention of the society.

Mr. Stanley observed, that the case that had been read, was one particularly inviting discussion, more especially with reference to the part of the biliary apparatus that was ruptured, and the supposed situation of the biliary collection, whether intra or extra-peritoneal?

Dr. Copland remarked, that the case might be regarded as a model for drawing up cases of that description; it was given very succinctly, and yet was sufficiently comprehensive in all its details. He thought it impossible to speak with any degree of certainty as to the nature of the injury that had happened.

Mr. Stanley said that the fact of the absence of inflammation in the abdomen militated against the belief of the effusion being into the cavity of the peritoneum. The swelling not being uniform, and appearing to be more confined to one side, circumscribed and irregular in shape, gave rise to the belief that it was effused into the cellular tissue external to the peritoneum, and in that respect presented some resemblance to cases which he had narrated at an early part of the session, of urinary collections external to the peritoneum, the result of injury.

Mr. Arnott had no personal knowledge of such a case, but he did not regard it as very singular. Several instances had been recorded of enlarged gall-bladder, which had been tapped, and the contents drawn off. Some of the patients had died afterwards from effusion of bile into the cavity of the abdomen, and others had recovered. He could not charge his memory with the name of the journal where these cases were published, but he believed that in one instance, two quarts of bile had been removed by tapping. He did not think Mr. Barlow's case one of ruptured liver, but rather of obstruction of the gall ducts.

Mr. Stanley observed that cases of enlarged gall-bladder were recorded in the Dublin Hospital Reports, and in the Memoirs of the French Academy, but in the case before the society, the collection was the result of an accident, and not of previous disease, and he thought therefore that it was more likely to have been produced by some injury to the biliary apparatus.

Mr. Cæsar Hawkins thought it not impossible that rupture of the liver had taken place, and yet that the effusion of bile was external to the peritoneum. A case somewhat similar to it was published in one of the early volumes of the Transactions, that of a boy, a patient of Mr. Fryer's, who was supposed to have had rupture of the liver, was tapped several times, and ultimately recovered. Rupture of the liver might undoubtedly be recovered from, but when the effusion of bile takes place into the cavity of the peritoneum, fatal inflammation follows. He had seen altogether three cases in his own practice, one of which terminated fatally.

Dr. Copland remarked that in consequence of a case of rupture of the liver having been narrated to him, he had referred to all the cases that had been placed on record, and in no instance had he found the accident unattended with hæmorrhage. In this case there was not any hæmorrhage, and he could hardly conceive the possibility of the occurrence of that lesion, unaccompanied by hæmorrhage as well as effusion of bile. In cases of distended gall-bladder, when tapping has been performed, the bile escapes afterwards into the cavity of the peritoneum, and a fatal termination ensues from peritonitis. The absence of hæmorrhage militates against rupture of the liver, while the non-effusion of bile into the abdomen, and the non-occurrence of consequent peritonitis told against the opinion that it was an enlarged gall-bladder.

Mr. Streeter could not allow the discussion to drop without throwing out a suggestion that had crossed his mind while the case was being read. He did not regard it as a case of rupture of the liver, but rather of one of the biliary ducts. He was desirous to learn the result of the consultation between Messrs. Stanley and Lawrence, and to know what decision they came to as to the nature of the lesion. He thought it bore some analogy to the cases of rupture of the excretory duct of the kidney, and if it were an injury accruing to one of the biliary ducts, the slow effusion of the bile, and the non-occurrence of hæmorrhage, might be readily explained. An important suggestion might be drawn from the narration of this case, not to abandon too hastily cases of injury to the abdominal viscera. A case had occurred to him some few months since, of a gentleman who had been thrown while hunting, and who presented symptoms of injury to the intestines, and who ultimately recovered. In treating these cases, it was of importance not to give anything but cold water for several hours after the accident, and to exhibit opium to arrest the peristaltic action of the bowels.

Mr. Stanley stated the opinion of Mr. Lawrence and of himself to have been that the extravasation arose from a giving way of one of the biliary ducts, and that the extravasation was external to the peritoneum.

Mr. Lloyd confirmed the observations of Dr. Copland with respect to the diagnosis of rupture of the liver.

Table of the cases of strangulated hernia operated on at St. George's Hospital in 1842 and 1843; to which have been added the details of some of the interesting cases, and the *post-mortem* examinations, with observations, by Prescott Hewett, Esq., Curator of St. George's Pathological Museum.

The author began by giving a statistical table of thirty four cases operated upon for strangulated hernia. The result of these operations was twenty-five recoveries, and nine deaths. The sac was opened in every case, and in six cases a portion of the omentum was removed. Five of these cases recovered, and one died of disease of the brain, a few hours after operation. The author then gave at full length some of the cases which presented marked points of interest, and the *post-mortem* examinations. Among the cases may be noticed "Case 2," in which the gut, after having been strangulated for seven days, was by the taxis reduced with the sac. The symptoms of strangulation continued; the hernia fortunately reappeared in the groin during a fit of vomiting; the operation was performed, and the patient was discharged from the hospital eighteen days afterwards. Reference was then made to four cases, in all of which the gut was enveloped by a complete sac, with a narrow neck, formed by the omentum: in relation to these interesting subjects, some quotations were given from Sir A. Cooper's and Mr. Lawrence's works, proving how very rarely these cases are met with. The author then proceeded to make some detailed observations on these omental sacs, and on their formation, which he referred to three principal varieties. In three of the cases, the hernial and the omental sacs were more or less extensively united to each other. In the fourth case, the omental sac was lying loose in the cavity of the hernial sac. Large quantities of adipose tissue were, he said, sometimes deposited in the folds of the omentum, forming the second sac; and he referred here to one of the cases, in which the walls of the omental sac were more than an inch thick, as shewn by the preparation exhibited at the meeting. The

neck of these omental sacs, the author remarked, sometimes becomes the sole cause of the stricture. Of this, a well-marked example was given at full length. This circumstance was mentioned as an additional argument against the practice of reducing the hernia without opening the sac. The author concluded his observations upon these cases by adverting to the possibility of an alarming hæmorrhage taking place *into the cavity of the abdomen*, after the division of the neck of these omental sacs. After some remarks on the relative frequency of strangulation of femoral hernia, the numbers of which were given in the table, he made some observations on the opening of the sac, which he, on various accounts, strongly advocated in the majority of cases. The paper was concluded by some remarks on the removal of the omentum, and the various modes of applying ligatures in these cases.

Mr. Henry Lee alluded to the cases mentioned by Mr. Prescott Hewett, where a double sac involved the intestines, one formed by the peritoneum, the other by the omentum. Such cases proved a great source of difficulty to young surgeons. In illustration of this remark, he narrated the case of a blacksmith, who had had an inguinal hernia for many years, which he had never experienced any difficulty in reducing, until about two years ago. When he (Mr. H. Lee) was called in on that occasion, he found him with a tumour of large size in the right groin, lobulated in texture, and tender on pressure, but more so in some parts than in others. The symptoms of strangulation having existed for twenty-four hours, he proceeded to perform the operation in the usual manner, and attempted to reduce the hernia without opening the sac; in this he was partially successful, a portion of the rupture being returned into the abdomen; but not succeeding in reducing the lobulated tumour, he incised the peritoneal covering, and came upon a mass of diseased omentum, which formed the hard lobulated tumour alluded to, and was adherent to the sides of the sac. The symptoms of strangulation continuing, he separated the omental sac down its centre with his fingers, and discovered in its interior a healthy portion of omentum which had recently descended, and which he accordingly reduced. The adhesions of the diseased and lobulated omentum to the parietes of the sac were next divided, and the mass was cut away altogether, and the incised parts were brought together in the usual way. In the portion of the omentum which he had removed, he found a cavity as large as a walnut.

Mr. Lloyd observed that Mr. Hewett's paper was very interesting, and there were several points of importance connected with it. With reference to the case in which fæcal extravasation had taken place, a question arose as to the propriety of dividing the stricture without oponing the sac; and it had been suggested that had this been done, inflammation would have followed; but he thought that if the division of the stricture had been so effected, the intestine would not have been disturbed, and the adhesions that had formed between the ulcerated intestine and the peritoneum would not have been interfered with, and consequently extravasation would not have occurred in the abdomen. He did not consider that this was a case which militated against the division of the stricture without opening the sac. He had not met with a single case in which this operation was performed which had terminated unfavourably. By returning the hernia without opening the sac, the patient is placed in a position similar to that he would have held, had the hernia been reduced without having recourse to an operation. Another point to which he wished to allude, referred to the adhesions of the hernia to the sac, and he thought it an important question whether these should be left as they were, or the gut separated and returned into the cavity of the abdomen. His own experience was in favour of their being divided and then returned; and he thought that if the parts which were adherent were left *in situ*, that inflammation would in all probability come on, and extend to the general cavity of the peritoneum, and the case would terminate fatally. Another point for consideration had reference to the removal of the omentum. Under what circumstances was the surgeon justified in cutting away any portion thereof? He thought that he was only warranted when the omentum was so altered in structure, and had been so long out of the abdomen, that if returned, it would act as a foreign body. In such cases he always removed it, and had never found any bad consequences either in cases of inguinal or femoral hernia. When hæmorrhage occurred, he took up each vessel separately, which he considered the best plan to pursue; for if a ligature were thrown around the entire omentum, it would be placed in very nearly the same condition as if subjected to a return of the strangulation. He then narrated a case, in which he had himself operated for strangulated hernia, and had returned the protrusion into the abdomen. The patient died, and on examining the body afterward, the intestine was found strangulated in the abdomen, contained in a pouch formed by the omentum. He afterwards alluded to another case in which he operated for femoral hernia, and the patient died. After death, the intestine was found to be strangulated by passing through an aperture in the mesentery.

Mr. Stanley said there was one circumstance which had occurred to him rather frequently of late years, and respecting which he should like to learn the opinion of the Society. In some cases, after the return of the rupture, the patients have discharged a good deal of blood *per anum*. As the first time he had noticed this was after an operation, he feared that some injury had been done to the intestine; but he had found it occur equally after the reduction of the hernia by taxis, and as much as five and eight ounces of blood had been discharged. On reflection, he had been led to attribute the occurrence to a congested state of the mucous membrane, resulting from the strangulation, in consequence of which some vessels had given way internally. The patients were not subject to hæmorrhoids.

Mr. Cæsar Hawkins had met with the same occurrence himself. It had followed the use of taxis in the first instance, and when strangulation occurred, the operation was performed, and the hæmorrhage from the bowels re-appeared.

Medical Society of London, May 20—Dr. Thompson, president, in the chair.—*Labour, complicated by Ovarian Tumours, and Sphacelus of the Vagina.*

Mr. Headland narrated a case of complicated and difficult labour, from ovarian tumours. About three years ago he was called to see a young woman, 24 years of age, for amenorrhœa. The abdomen was enlarged at the same time, and there was a tumour of considerable size in the left iliac region, which was evidently formed by the left ovary. She was out of health, pale, feeble, and emaciated, but improved very much under the administration of steel medicines, and he (Mr. Headland) did not see her again until a few months ago, when, having married in the mean time, she came to engage his services in her accouchement. She was then about eight and twenty. He was called to her accordingly, on Friday, the 11th of May, when, the pains being uncertain, he did not make an examination *per vaginam* until the evening, by which time the character of the pains had improved. On the introduction of his finger, he ascertained that the circumference of the vagina was much diminished by the presence of a tumour, situated between the posterior paries of the vagina and the rectum. It was slightly elastic on pressure, and gave rise to the opinion that it was either fungoid, or a cyst containing fluid. Within three inches of the external orifice there was another tumour, of firmer texture, resembling bone or cartilage. This offered another impediment to the completion of labour, &c. Mr. Headland experienced considerable difficulty in reaching the os uteri, on account of the presence of these tumours, and because the uterus was situated high up; but he ascertained that the process of dilatation had commenced, and that the os uteri was open and large as a half-crown, the head presenting. Under such circumstances, three alternatives presented—either that the size of the child should be reduced by craniotomy, the swelling diminished in size, or else returned into the abdomen. On making a second and later examination, the finger became covered with what appeared to be fæculent discharge, of a yellow colour, and certainly not meconium. This continued to flow as long as the labour continued, that is for twenty-four hours, during all which time the tumour diminished in size. As it was evident from the discharge, that something had given way, and as Mr. Headland was of opinion that ulceration had been going on for some time, and that an opening had formed between the vagina and rectum, he deemed it requisite to have further assistance, and the patient was consequently seen by Mr. Stedman, who came to the same conclusion, that the discharge was fæculent, and also as the tumour was evidently lessened, that the labour should be allowed to proceed. The head descended, and such reduction of the size of the tumour took place, as to lead to the belief that craniotomy would not be required, and that after a time, delivery could be effected with the forceps. This was afterwards practised successfully, but the child was born dead, it having been alive to a certainty at an early period of the labour. The uterus having been ascertained to be fully contracted by placing a hand over the abdomen, the fingers were passed along the cord; but as its insertion could not be reached, it was determined to wait awhile. While this manœuvre was practised, an opening could be felt at the upper and posterior part of the vagina, near the os uteri, large enough for two fingers to be passed through in among the bowels. After waiting some time, the hand was introduced, and the placenta removed, but with great difficulty, on account of its firm adhesions to the uterus. The patient, after this, felt comfortable for a time; but repeated vomiting and great depression came on, and she sunk twenty-four hours after the termination of labour. The post mortem examination was made sixteen hours after death. On opening the abdomen, the diseased left ovarium was found extending high into the cavity, above the contracted uterus; its size was that of a cocoa-nut, distended with fluid, one third part of the organ being converted into scirrhus. The broad ligament of that side was affected with melanosis. On laying open the uterus and vagina by an incision, the ulceration in the latter organ was discovered, but no distinct communication with the bowels could be traced. The texture of the part was of a deep brown colour, and it presented the appearance of sphacelus. The fundus of the right ovary was turned over towards the sacrum, and the organ was fixed in the pelvis, between the rectum and vagina, where it constituted the tumour which had been felt during labour. It was larger than the other ovary, and was wedged down so low as to be within two inches of the anus. On examining it, it was found to have given way at a part opposite the ulceration in the vagina, and that from it had exuded the discharge which had been supposed to be fæculent. A considerable portion of this ovary was scirrhous, and it was that part which formed the cartilaginous tumour felt in the anterior part of the vagina. The intestines were sound, and there was no other disease discoverable, except that in the uterus; where the placenta had been wholly taken away, there were membranous flocculi which could not be detached from the parietes. There was not any tubercular deposit.

Mr. Headland observed, with respect to this case, that he was not acquainted with any instance where both ovaries were so diseased. In a somewhat similar case that occurred to Dr. Merriman, and which is recorded by Dr. Ramsbotham, the ovary was returned, but no mention was made of the condition of the other ovary. Other writers who have alluded to the subject, appear to have copied each other; they do not seem to have met with the occurrence. He thought that the right ovary had become diseased after impregnation had taken place, as otherwise it would not have occupied the position it did. Becoming diseased after conception, the enlarged uterus prevented its rising out of the pelvis.

Mr. Stedman having seen the patient during her accouchement, and having been present at the

post-mortem examination, could bear witness to the exceedingly accurate manner in which the case had been detailed. There had however been one point omitted, which he considered of importance. In searching for the placenta, the shape of the uterus was found to be very peculiar; it was not a large cavity, but appeared to be a long narrow tube, into which the hand and arm were inserted up to the elbow before the fundus could be reached. He was sure it extended up as high as the stomach. With respect to the tumour, it was not possible to say at first what it was; as the discharge was evacuated, the tumour diminished rapidly—so that the space which was at first exceedingly small, increased, and little difficulty was experienced in applying the forceps. There was considerable lateral space throughout. He thought that it was an interesting question, how conception had taken place, with so much disease existing in the ovaria.

Mr. Headland was anxious to learn the experience of the Society, as to any cases having occurred where one of the ovaries occupied a similar position to that of the same organ in the present case, where the other was equally diseased. It is difficult to imagine it being found in such a situation, unless after impregnation had taken place, when the usual space for the enlarged ovary is occupied by the ascending uterus. This he thought a very interesting point, immediately connected with the question mooted by Mr. Stedman, respecting conception.

Mr. Pilcher remarked that the case illustrated the lighting up of disease in an ovary predisposed to it, by the excitement of sexual intercourse, and it called to his mind two or three instances in which a similar result followed the same stimulus. In Mr. Headland's case the disease had been apparently caused, or at least greatly increased, in the right ovary by the impregnated condition of the uterus. It reminded him of a fact connected with the last operation for extirpation of diseased ovary performed last week by Mr. Lane. The patient was a lady who had had ovarian disease for many years, for which she had been repeatedly tapped. After the last tapping the disease had apparently subsided, and was forgotten. She married again, and although she did not become impregnated, the ovary returned to its diseased condition, and was finally extirpated. It generally happens that both ovaries are implicated in the disease, although not to the same extent. There may be some vesicles in a healthy state, one of which may become impregnated, and then the others, already predisposed, may become diseased. He thought that the ovary had become enlarged after impregnation, and was kept down by the ascending uterus, but it was difficult to account for the formation of so large a scirrhous mass during pregnancy. He wished to ask Mr. Headland if such a case were to occur to him again, would he, as the child was living in the early part of labour, and yet was born dead, think it a proper case for the Cæsarian section?

Mr. Headland had asked the question respecting the diseased condition of the ovaries with a view to diagnosis in future cases. He did not in the least suspect the diseased mass which could be felt through the parietes of the vagina to be the right ovary, because the left ovary was so much diseased; and he did not think it likely conception could have taken place, if both ovaries were diseased, especially as, anteriorly to that tumour, he had discovered another of cartilaginous feel, which, although it proved to be the scirrhous part of the right ovary, nevertheless led him away from the opinion that it was a case of ovarian disease. With respect to Mr. Pilcher's suggestion, it certainly did occur to him when he discovered the great firmness of the tumour, and the small space that existed between it and the symphysis pubis, that craniotomy might be required, but certainly not the Cæsarian section; but it should be remembered that at the second examination a discharge of what appeared to be fæculent matter took place, and the tumour diminished so rapidly in size, as to lead to the belief, which was ultimately verified, that the head would be able to pass. He thought that the operation of Cæsarian section was only admissible when delivery could not be effected by craniotomy, or any other proceeding.

Dr. T. Thompson enquired if there was any tendency to hereditary scirrhous disease?

Mr. Headland had made enquiries, but he had not been able to ascertain that fact. The parents of his patient died when she was very young, and nothing was known of their history. After her death had taken place, he told the friends that he considered marriage on her part a very imprudent event. He thought that the large mass of scirrhous disease which was found in the right ovary, and which was as hard and as firm as a stone, had formed during the nine months of utero-gestation.

Mr. Pilcher was of opinion that the disease in that ovary had existed prior to pregnancy, but had been exasperated by marriage. Some of the Graafian vesicles were probably healthy, and in those, conception had occurred, but he thought it was impossible that such extensive disease could have originated in so short a time.

Mr. Dendy wished to call the attention of the Society to the practical part of the case under discussion. It appeared to him astonishing that the nature of the fluid discharged from the vagina should have been regarded as fæculent, instead of being the viscid contents of a cyst. As far as his own experience went, he should have thought it not possible to make a mistake, supposing there was sufficient matter to take cognizance of. He thought that it was a very interesting question to know why the woman died. He did not consider that there had been mentioned sufficient cause for death. There have been many cases of very large cysts and tumours between the rectum and vagina, which have been either punctured, pushed aside, or pressed down during labour, and the patients have done well. There could be no doubt but that she must eventually have died from the existence of such extensive disease, but he did not consider that there had been assigned a sufficient cause for her dying when she did.

Dr. Chowne thought that so long as a portion of either ovary remained sound, impregnation might take place. When there is extensive disease of the ovary, the Fallopian tube is generally adherent to it, so as to form one mass, as is frequently the case with women of the town, the bodies of several of whom he had had occasion to examine. In such a case conception could not occur. With respect to the question put by Mr. Headland as to the occurrence of such tumours, the other ovary being diseased, it has certainly happened so, but the cases are rare. Cases of disease in both ovaries are met with, but we do not usually find one ovary diseased, and the other also changed in structure, and occupying the same situation as the right ovary in this case. It is to be regarded as a singular coincidence. If disease form in one of the ovaries, the other is generally affected, though in a less degree. It is usual to find the ovaries studded with little vesicles, and when that is the case with one of those organs, the other almost always participates. As respected the rapidity of growth of the tumour, speaking from general principles, that only illustrated the very rapid growth of every thing connected with the uterus, that takes place during pregnancy. He had in his possession a preparation of a fibrous tumour connected with the uterus: the patient died three days after delivery, and on examination there was a fibrous tumour in the interior of the uterus, as large as a fœtal head, enclosed in a substance resembling bone. Now he had very little hesitation in saying that this tumour had increased to that size during pregnancy, it might have existed previously as large as a hazel-nut, perhaps—of which indeed he had met with several examples—but it could not have been as large as it was after delivery, as it was then considerably larger than the unimpregnated uterus itself. With respect to the situation of the right ovary, the author was of opinion that it had been pressed down in that position by the uterus, but he would suggest that it had fallen down there. It is not unusual for parts to fall down in that position: cases of recto-vaginal hernia, formed by omentum or intestine are met with now and then, and both the ovaries have even formed hernias at the external abdominal ring. The attachment of the ovary to the uterus is such that unless it were kept down by some cause, as the uterus enlarged, the ovary would rise with it out of the pelvis. He thought there had been some preparatory process in the vagina, by which its parietes were placed in a state to give way readily, prior to the occurrence of death. As regarded the cause of death, there was not merely the rupture of the tumour to account for it, but there was also a laceration of the peritoneum, and probably effusion of some of the fluid into the cavity of the abdomen. The case was altogether one of great interest.

Mr. Headland did not wonder at Mr. Dendy's surprise at the discharge being regarded as fæculent, and that there was any difficulty in discovering that it came from a cyst, but, setting aside the strong fæculent odour, which it possessed only in a minor degree, there was nothing else in its appearance to distinguish it from the fæculent discharge which follows the action of castor oil, a dose of which she had taken the day before. He was, however, surprised at his (Mr. Dendy's) difficulty in accounting for death, considering the rupture of the tumour, the great discharge, the large laceration of the vagina, resulting from previous disease, and that canal being in a state of sphacelus at the time of labour. The woman appeared to die from the shock the system had received, rather than from any especial disease. There was not any escape of fluid into the cavity of the peritoneum, nor were there any symptoms of peritonitis. The cases that have hitherto been recorded of ovaries found between the vagina and rectum are unsatisfactory, as far as the diagnosis is concerned, because the state of the other ovary is not mentioned. Mr. Headland, in concluding, enquired of Dr. Chowne if the ovary had ever been found in the position occupied by the right ovary in this case, where the uterus was neither impregnated nor enlarged?

Dr. Chowne had certainly seen instances of the ovaries lying down in that position between the uterus and the rectum, but not so low down, not so near the anus, as in Mr. Headland's case. He had also seen the enlarged ovary, whether the enlargement was solid or fluid, in the cavity of the true pelvis; and he believed that it is only when the ovary is too large to be contained in the cavity of the true pelvis, that it rises out of it. He had examined a lady at Bayswater a few days ago, and in her the ovarian tumour was low down in the true pelvis, where it will probably remain for some time. When he alluded to the laceration of the peritoneum as the cause of death, he did not mean to imply that it occurred by peritonitis, but by the strong depressing influence it would exert, added to the previous sufferings of the patient. The mere laceration of the vagina, even if it had been to its entire extent, would not have been so instrumental in causing speedy death. Cases are on record in which the vagina had been split up throughout, and yet the patients have survived, dragging on a wretched existence.

Mr. Headland drew attention to the attachment of the placenta, which he remarked was not a common case of adhesion, as it was absolutely glued to the uterine parietes, and he thought that such a state not unfrequently occurred in strumous subjects.

Mr. Dendy explained his observation as to the mistake respecting the nature of the discharge, and added that he thought the cause of death was yet undecided.

Mr. Stedman stated that at the time this discharge took place, the patient said that a similar one occurred from the bowels, from the action of castor oil, and she was of opinion that the discharge altogether proceeded from the anus. It was impossible to distinguish between the two. He referred the cause of death to the state of the upper part of the vagina, which had given way before much manual examination had been instituted.

Statistical Society.—May 20, Lieut.-Colonel Sykes, F.R.S., Vice-President in the chair.

The subject for the evening was entitled "A third contribution towards a knowledge of the influence of employments upon health, by Dr. Guy." On this occasion the attention of the

members was confined to the disease known unfortunately too well in this country, viz.—pulmonary consumption. The deaths from this dreaded and dreadful malady occurring in every year in England and Wales is in round numbers 36,000, being rather less than one-ninth of the mortality for all cases at all ages, and one in less than six of the total deaths occurring above 15 years of age. Dr. Guy classed his patients under three heads: gentry, tradesmen, and artisans; and found, as the result of great labour, that the per-centage proportion of deaths was far less in the gentry than in the artisans, the tradesmen holding an intermediate place. Dr. Guy inquires, "is it possible to place the tradesmen and the artisans in the same favorable circumstances as the gentry?" It would be a great stretch of imagination to suppose that it could be done at once. In all great ameliorations, time is an essential element—time for the reformation of bad habits—time for the widening of streets, the enlarging of houses, the re-construction of workshops, the shortening of hours of labour, for draining and ventilation, for the more abundant supply of water, for public baths, for the increase of open spaces for exercise and recreation. Habits of intemperance will not suddenly grow into disease, nor will a desire for puro air be created in a day. As in the case of temperance, so in that of ventilation, the example must be set by the higher classes before the contagion can be expected to spread to the lower. So long as the rich shall be content to endure the stifling atmosphere of crowded places of assembly, whether public or private, the poor may be expected to remain indifferent to the foul air of their workshops, and to submit without a murmur to the manifold inconveniences of their places of residence. It is only, then, after the lapse of years that the condition of the tradesman and artisan can be expected to be so improved as to reduce their present fearful mortality from consumption to the low level of the more favoured classes. Much, however, may be done at once. Some provision at least may be made for the ventilation of houses and workshops, and for the shortening of hours of labour. Such a provision would save, in the metropolis alone, many hundreds of lives every year. This is not a matter of conjecture, or a loose estimate merely, but admits of demonstration." A very spirited discussion followed the reading of the paper, and the meeting, which was very numerous, separated at a late hour.

ON THE STATE OF MEDICINE IN ANCIENT EGYPT.

By J. CLARKSON, Esq.

(For the 'Medical Times.')

(Continued from p. 91.)

It has been argued that the customs of the Egyptians were as hostile to the practice of anatomy as those of the Greeks. In a country where the bodies of the dead were embalmed with so much religious care, the practice of dissecting them, it is observed, could hardly have been permitted. Even the embalmer, who was employed to open the body of the deceased, was (if we believe Diodorus Siculus) considered with abhorrence, and was compelled to fly for his life, after having performed an operation enjoined by the law, and sanctioned by the religion of the country. Little credit is to be attached to such a statement. According to Porphury the embalmer proceeded in his business without molestation, opened the body of the defunct, took out the entrails, placed them in a chest, and after having offered a prayer to the sun, threw the chest into the Nile. Diodorus states that the embalmer was assisted by slaves, but the practice could scarcely have sustained itself for many ages in a country where it was the custom to stone the embalmer! The Egyptians we know, were in the habit of placing their dead bodies in the sepulchres made to receive them, which are sculptured in the rocks on the western side of the Nile, and the beautiful Greek mythos with regard to Charon, the passage of the Styx, the Judges, Elysium and Tartarus, has been thence explained by Diodorous. It has been contended that the dissection of human bodies could never have been reconciled to the laws or religious notions of the Egyptians, considering their care to preserve the mummies, and their belief in the soul's return to inhabit its material mould. It is quite clear, however, from the evidence of Diodorus that many dead bodies were never placed in the catacombs; and it is quite impossible to believe (as that historian says) that they were placed upright against the walls in the houses of those who ought to have buried them. May we not suspect that some of these unsepulchred bodies were submitted to the operation of the dissecting knife?

In fact, there existed no law which prohibited the practice of dissection in Egypt. On the contrary, it was encouraged by the authority, and the examples of the kings. The fact is distinctly stated by Pliny (L. 19). It is in vain that M. Gognet, who traces medicine and surgery to Greece rather than Egypt, would have these kings to be Ptolemies. No one ever heard of the Ptolemies holding the dissecting knife; and Pliny clearly indicates that the Pharoahs of whom he speaks, had themselves dissected dead bodies for anatomical purposes. Nichopsus and Athotus have been before named. It would appear then that Herophilus and Eristratus either found or revived the practice of dissecting dead bodies in Egypt.

There is another instance slightly before adverted to, which merits notice, in deciding between the rival doings of Greece and Egypt. The anatomical skill shewn by Homer has often excited the admiration of his readers. In fact this great poet seems to have known more of anatomy than many of the most famous physicians, who flourished several centuries after his time. Did the science retrograde in Greece? An idea may be formed of the gross ignorance of the physicians of Greece before Herophilus, when it is recollected that he was the first among them who traced the nerves to the *brain* and *medulla*; and that even he knew so little of the internal structure of the human frame, as to *believe that the veins had their origin in the liver.*

An attempt has been made to account for Homer's knowledge of anatomy by supposing the dissection of human bodies to have been practised in his time in Asia Minor. But surely the same supposition might have been made with regard to Egypt. Homer, according to Diodorus, had not only visited Egypt, but had been initiated into the mysteries of the sacred or scientific colleges. It should be remembered also that the poet celebrates the medical skill of the Egyptians, but is silent with regard to the people of Asia Minor.

CASE OF OVARIAN DISEASE HOMŒOPATHICALLY TREATED.

By EDWARD PHILLIPS, M.R.C.S.L.

Emma Southward, aged 20, silk winder. Lymphatic, nervous temperament. Has been delicate for some years. Four years past, the menses appeared; —three or four months after, she complained of a dull pain in the right side, which increased; and in a short time, she felt a small hard tumour, with shooting pains, in the right iliac fossa, which gradually enlarged to the size of a hand, when the abdomen became swollen, attended with a uterine discharge, which increased as the abdomen enlarged. In the end of June, 1843, I examined her carefully; she was greatly swollen; abdomen quite hard and tense, measured forty inches round. She complained of the following symptoms:—

Burning pains in the stomach, with nausea after food; fulness in the epigastrium; much oppression of the chest, with difficulty of breathing, and palpitation; flatulence; vertigo; eyes heavy; headache; bowels very costive, kept open by medicine; great soreness of the bowels, with pain in right iliac fossa; urine free, but scanty, and high coloured; catamenia profuse every fortnight, with much pain in the sacrum, and down the thighs; coldness of the back and extremities; has a constant discharge, with a bearing down pain. Took medicines of various kinds, and used ointments to the tumour without any benefit. Abdomen still enlarging.

She was ordered Tinct. chinæ, to be taken everyday for a little while; afterwards hellebore.

On the 17th of July she was reported a little better; swelling same, not increased; passes urine freely; flatulence less; still the pains in stomach continue; catamenia more regular; discharge less; Tinct. chinæ to be taken as before.

24th.—Swelling same; slight nausea after food; bowels quite regular; discharge less. Hellebore.

28th.—Not so well to-day; discharge has come on profusely, with great pain, and clotted black; has pain also in chest and stomach, with a bearing down. Tinct. chinæ. On the next report, two days after, was much better, and continued the same medicine.

August 4th.—Discharge much less, but still continues slight; strength improved. Repeat Tinct. chinæ every morning.

7th.—Has shooting pains all over abdomen, mostly in right iliac fossa; catamenia appeared profusely, with gastric symptoms. Nux. vom. at night; Tinct. chinæ in the morning.

On the 24th was better; bowels costive; took sulph.; gradually improved till the 8th of September, when the menses appeared at the regular time, but more profuse than ever, clotted, with a disagreeable putrid smell; sharp cutting pains in the abdomen, with a violent bearing down. Plat. to be taken twice the first day—after at night.

13th.—Catamenia have stopped two or three days since: skin covered with clammy sweat of an unpleasant smell; urinates more freely; violent pain all through abdomen, mostly in right side. Nux. vomica.

18th.—Has made much more water; abdomen less swollen; pains continue violent, also in back; skin same; C. rem^{d}.

20th.—Abdomen much less swollen, six inches less; pain slight; tumour cannot be felt distinctly; C. R.

25th.—Very much less swollen, eleven inches; makes much more water; pains violent in bowels; cocculus and mercurialis.

29th.—She reported herself free of all pains; feels nearly well, but weak. N. vom. et sulph.

Oct. 6th.—Is now of natural size; still feels weak. Tinct. chinæ.

On examination, per vaginam, the os uteri is found perfectly natural; she rapidly improved, and gained strength from this time till the 25th of December, taking occasionally n. vom. and mer. for slight symptoms, complained of when she ceased taking medicine. I have seen her several times since she has returned to her work; several times since she has returned to her work; menstruates regularly; complains of no discharge; and is in perfect health.

PERISCOPE OF THE WEEK.

Pregnancy and cancer uteri.—Dr. Miller, jun., narrates, in the *London Edinburgh Medical Journal*, a melancholy case of this complication, in which the poor woman died undelivered. On examination of the body, the fœtus was found to have been dead several days; the uterus was deeply involved in the carcinomatous degeneration, and partly destroyed by ulceration. The ovaries were also altered in structure, having a soft caseous consistence, and breaking down easily under the finger. The left ovary was nearly twice as large as the right, which was about the normal size. Dr. Miller suggests the induction of premature labour in future in cases of scirrhus uteri as soon as the existence of pregnancy can be ascertained, as the best means of prolonging the life of the patient.

Chancre in the Urethra.—The *Provincial Medical Journal* coutains a clinical lecture by Mr. Parker on chancre in the urethra, illustrated by cases. The first of these alluded to by Mr. Parker, is that of a Scotch hawker, twenty-nine years of age, who contracted seven years previously sores on the penis, and a running from the urethra, from the same connexion. The discharge from the urethra became permanent, and constitutional symptoms also shewed themselves, and his wife also became affected therewith. Three of his children died a few months after birth, presenting symptoms of secondary syphilis. When the man came under Mr. Parker's care he was in the following state:—the head and face were covered

with foul blotches, consisting of incrustations or scabs, concealing deep, irregular, and ill-conditioned ulcers; there was superficial redness of the fauces, but no ulceration, and he was feeble and emaciated from long continued disease. The skin disease was evidently pustular in its commencement, as one or two freshly formed pustules were on the face; these were situated on an inflamed base, and when they broke and discharged, run into ulcers, covered with flat or conical crusts, thus constituting a variety of disease, to which the term "pustulo-crustaceous" has been applied. On examination, a sanious oozing was perceived from the urethra, very different from that which characterizes chronic gonorrhœa, or gleet. About an inch from the meatus, immediately behind the glans penis, existed a circumscribed induration, about the size of a hazel-nut; this was painful when pressed between the fingers, and the pressure occasioned some blood and portions of white tenacious sloughs to issue from the urethra. On separating the lips of the meatus urinarius, by means of a small speculum, made for the purpose, the commencement of the ulceration, which appeared to extend deeply into the urethra, could be perceived. This case Mr. Parker rightly considers to be interesting, from the great length of time that the chancre existed in the urethra as a primary venereal sore, and from the fact that the external sores, and the secondary symptoms, were subjected to repeated treatment, apparently successfully, while the ulcer in the urethra remained totally unaffected by the remedial measures which were employed. The result of this case is not mentioned by Mr. Parker, who proceeds in lieu thereof to describe the symptoms presented by chancre in the urethra. These are heat, itching, or irritation in the canal, occurring after a suspicious connexion, unaccompanied by discharge; pain or tenderness in a particular part of the urethra, when it is rolled between the fingers: the presence of a distinct induration at the point where the pain is complained of; pain also increased during micturition, and referred to the same point. Discharge from the urethra occurs at various and irregular periods after the setting in of the first symptoms: it is very different from the discharge of gonorrhœa; it may be sanious, bloody, or of a sloughing character, and commonly does not flow unless the indurated portion be pressed forcibly between the fingers. The only disease for which chancre in the urethra may be mistaken is gonorrhœa, from which it may be distinguished by the history of the case, the character and quantity of the discharge, the presence of a distinct circumscribed induration in some part of the urethra, most commonly seated in or immediately behind the glans penis. This circumscribed induration must not be mistaken from that general induration of the corpus spongiosum urethræ which accompanies acute gonorrhœa, and results from an effusion of lymph, &c., into the cells of the spongy body. This state in gonorrhœa is generally accompanied by chordee, a symptom absent in chancre of the urethra. The prognosis of chancre in the urethra is not always favourable: two cases are published by Ricord, in which a fatal termination took place by extension to the bladder. The prognosis is again unfavourable as regards the integrity of the organs of generation, since, however carefully they may be watched, severe mutilations are occasionally produced. The following are the principal evils produced by chancre in the urethra:—contraction of the orifice by the cicatrix of the chancre, or of the canal itself from the same cause; perforation of the canal, or its destruction to a greater or less extent. The orifice has been so contracted, as not to admit the bulbous extremity of an ordinary silver probe. Perforations are variable in extent and situation, but are commonly found immediately behind the glans. A very common seat of chancre is the fossa navicularis, and the glans is sometimes scooped out as it were by the spreading of venereal ulceration in this situation. The destruction of a portion of the canal takes place when the disease assumes a phagedenic form, and spreads by rapid ulceration or sloughing. It is not however so likely to happen, if the disease has been at once diagnosticated and properly treated from the commencement. With respect to the treatment, Mr. Parker lays great stress upon absolute confinement of the patient to bed, and the recumbent position. He says it is the most powerful adjuvant in the treatment of all primary and even constitutional syphilitic diseases. The diet must also be of the most simple kind. With these aids the treatment becomes easy, and is very generally successful. Mild opiates and mercurials, with simple astringent injections, will in almost all cases effect a cure, but it is next to impossible to cure these sores while the patient goes about and pursues his ordinary occupations, even in a minor degree.

Adulteration of drugs.—Mr. Lloyd Bullock, in an interesting lecture* (printed for private circulation) on the state of pharmacy in England, gives some pregnant examples of the inefficiency of drugs, and their sophistication by some unprincipled dealers. The adulteration of morphia, so as to be reduced in strength one-half, is, he says, of frequent occurrence. He remarks that there doubtless are many wholesale druggists and chemical manufacturers, most honorable and upright men, incapable of practising deception, or taking advantage of the ignorance of their customers, but there are some few who deem such practices as diluting with an innocuous substance, a costly drug, no crime, and therefore practise it without remorse. Besides, there are many causes which may bring into the dispenser's bottles a substance so weak as to be inefficient, or so different to the one intended to be kept there, as to be more than worthless, positively mischievous, in cases wherein it is usually prescribed. Many substances are manufactured in large quantities, and these must be prepared by workmen who do not understand the processes which they practice. A few years ago a physician in one of the great Metropolitan hospitals—a bold experimenter—among other things began to examine the effects of the iodide of potassium. He commenced by prescribing a few grains, but not perceiving any result, he increased the dose; still, as no effect followed, he added more and more to his prescription, until he reached several drachms. At last it occurred to somebody to enquire whether the substance given in such large doses was pure or not, when it was found that it contained more that 75 per cent. of carbonate of potash, and the wonder was then easily explained. The remedy for this state of things is, that *the man who prepares a prescription should be capable of making an analysis—he ought to be a scientific chemist*, the real fact being, that the majority of chemists and druggists in this country are totally ignorant of chemistry, and yet these persons, who are so ignorant of their own business that they cannot detect by analysis an adulterated specimen of the iodide of potassium when set before them, claim the privilege of prescribing for the sick, for which they are equally or more disqualified. They undergo no examination; they are under no restrictions. A grocer may displace his canisters any day he pleases, an oilman his casks, and supply their places with substances, single grains of which may consign to their graves their equally ignorant neighbours. The boy who has carried out the medicine of the general practitioner, learns to spell the names of the bottles in the dispensary, and he is forthwith qualified to be a pharmacien. He takes a shop, writes up "chemist," and the confiding public enjoys the precious boon. Not a few instances have occurred where the errand boy has proceeded a step further, and dubbed himself a practitioner in medicine, or even donned the "professor's" robe.

Sesqui-oxide of iron.—Mr. Lloyd Bullock objects to the indefinite direction in the *London Pharmacopœia* respecting the sesqui-oxide of iron, that, after its preparation by precipitation and washing, it is to be dried, the temperature at which the drying process is to be conducted not being mentioned, although it is a matter of some importance. This preparation was formerly called *carbonate of iron*, because the immediate result of the reactions upon adding the carbonate of soda to the sulphate of iron is the formation of a carbonate of iron. But it was found that the oxygen of the atmosphere displaced the carbonic acid, and converted the product into peroxide or sesqui-oxide of iron. Now it has not been distinctly ascertained whether the medicinal efficacy of this preparation may depend upon a still adhering minute proportion of carbonate of protoxide, or upon a hydrate of the peroxide of iron. If dried at a high temperature, the water is expelled, and the peroxide rendered anhydrous. We know that in this state it resists the action of weak acids, to which it readily yields in a hydrated state; and we can explain an observation of an old practical physician made in the last century, that the drying of this preparation at different temperatures made a most important difference in its therapeutical effects. This form of iron is used in a most painful class of diseases, called neuralgia, of which tic-douloureux is the best known example, and it is prescribed in very large doses. A recent writer upon this class of morbid affections, in estimating the value of iron in neuralgia, mentions the very variable effects of the sesqui-oxide, and says that many cases have occurred where such enormous quantities have been taken, as to endanger the life of the patient by accumulating into masses in the bowels. The unhappy sufferer of nervous pain swallows these prodigious quantities of matter, which, in all probability, owes its property of affording relief, either to a minute quantity of accidentally adhering carbonate of iron, or to a state of the peroxide, in which it may be found in one specimen and not in another, so that relief or failure will depend upon a mere accident, the ground of which is known neither to the prescriber nor the preparer of the medicine.

Formation of butyric acid.—[This, and the ten following articles are the principal matter of the last number of the *Lancet*.] Liebig says that if, instead of yeast, a small quantity of white cheese-curd is added to a solution of common sugar, and kept at a temperature of 76° to 86°, and moreover some chalk added, to maintain the fluid in a neutral state, a lively evolution of gas soon takes place, the sugar totally disappearing. Carbonic acid and hydrogen are given off in a gaseous state; and we find in the fluid a copious amount of *butyric acid*, one of the most interesting of the organic acids, which, until recently, was known only as a constituent of milk or butter. In this fermentation three new substances are produced, *butyric acid*, *hydrogen*, and *carbonic acid gas*. The relation of these two substances to each other cannot be mistaken: alcohol is butyric acid + hydrogen, and the atom of butyric acid is consequently an alcoholic atom from which two atoms of hydrogen have separated.

Lancing the gums.—Dr. Marshall Hall, regarding the phenomena of irritation attending dentition, as resulting from an undue action, not merely in the gums over the teeth, but in the nerves supplying the teeth, recommends free and repeated scarification of the gums, both on the upper ridge, and along the base of the gums. He concludes his paper with the following very modest puff of himself and his works, for the insertion of which in the columns of our cotemporary we trust he has paid the advertisement duty. He says, "*I would refer*," (we state his own words) "*those who wish to prosecute this subject, to my work on the 'Diseases and Derangement of the Nervous System,' but especially to my 'New Memoir,' which contains the most lucid and recent view of the whole subject of the physiology and pathology of the true spinal system, and plates which, for skill in the draughtsman, (Mr. Simpson, of Stamford) both that of the artist and that of the physician, and for interest in a practical point of view, have not been surpassed. Each plate evolves a principle of physiology or pathology of great interest and value.*"

So admirable a hand at puff-making is the learned doctor, that we are led to suspect that he served an apprenticeship to a cook and confectioner. The last paragraph but one is however rather confused, arising from the desire, we presume, to lug in the learned physician, and attest his skill as equal to that of the draughtsman. But what does it matter if the sense be obscure, provided another copy of the work (God save the mark) be sold by the advertisement.

Lactation and after pains.—Mr. Pattison,

* Reprinted from the lecture published for private circulation.

n commenting upon Dr. Smith's paper on lactation, c., observes, that the uterus has in itself a strong ontractile power; at the same time he admits that his power is much increased by the distension of he breasts, and the stimulating effects of the child. Ie is averse to the use of opiates, but advises the arly application of the child to the breast. It onduces, he says, to the well-being of the child, he safety of the mother, and the continuation of ier health to a good old age. His opinions are lirectly opposite to those advocated by Dr. Smith, nd as he writes from experience, and his views re consonant with reason, his remarks are more vorthy the attention of the profession than are the nnovations of Dr. Smith.

Malposition of the aorta, and its thoracic Branches.—Mr. Brent records the following aortic nalposition, which was discovered in the dissecting room of University College. The aorta itself vas in this instance so far transposed from its usual position, that its arch proceeded from left to ight, instead of from the right to the left side of he median line,—originating from the heart, nearly opposite the junction of the fourth left rib vith its cartilage, and proceeding thence upwards, backwards, and towards the right, to reach the left ide of the vertebral column, along which, as customary, the remainder of the vessel descended. From the ascending portion of the arch were given off, first, the right carotid artery, which crossed he thorax behind the first bone of the sternum to ttain the right side of the trachea, &c.; next, he left carotid, which at first sight appeared to ssue by a trunk common to it and its predecessor, hough further examination proved this not to be he case; this branch proceeded nearly straight pwards to its destination; thirdly, arose the subclavian, a larger branch than either of the foregoing, immediately after which it was given off; t ascended at once to about the level of the summit of the first dorsal vertebra, and descended gain as abruptly to pass towards the axilla, forming what may be expressively, if not correctly, termed an acute arch. All these arteries arose rom the ascending aorta: fourthly, at about an nch distant from the last named branch, the right ubclavian originated a little beyond the culminating portion of the aortic arch, by a bulbous nlargement in close apposition with the body of he third dorsal vertebra. It ascended perpendicularly (still on the left side of the body) to the evel of the seventh cervical vertebra, before it ssumed its lateral course across the neck—in vhich course it passed over the vertebral column ehind the trachea and œsophagus. The subject n which these anomalies occurred was deformed; he two sides of the thorax were unequally developed, the spinal column presenting a considerable urvature to the right side. The production of uch a curvature in childhood or after life, and the consequent malposition of the heart, might possibly ave proved adequate to account for the altered position of the arch of the aorta; but the unusual length f the right carotid and subclavian arteries (necessary to enable them to reach their destinations) lead inevitably to the belief that the abnormal distribution of the arteries, together with the deformity, was wholly congenital; and this derives confirmation from the circumstance, that in the case in question the recurrent laryngeal nerve of the right side did not curve round any artery, but proceeded at an angle from the pneumo-gastric nerve directly to its distribution on the larynx.

Neuralgia.—Mr. Chippendale says he has tried the strong infusion of tobacco in frictions, in two cases of neuralgia, and in both of them met with complete success. He thinks an extract of tobacco, mixed with cerate, would be more convenient for friction than the infusion.

Catheterism.—Sir Astley Cooper says that when it is desired to introduce a catheter into the bladder during the existence of enlargement of the prostate gland, an instrument of elastic gum may be selected, which being introduced as far as the obstruction caused by the enlarged gland, the stillette may be partially withdrawn, by which process the point of the catheter will be raised, and then may be pushed on into the bladder. This, Mr. Chippendale says, is a very useful hint, but he would add, as a caution to young practitioners, when the stilette has been thus partially withdrawn, it should not be returned while the instrument is in the passage, for if the gland is only laterally enlarged, the point of the catheter may be so diverted from the straight line, that the eye may allow the stilette to pass outside, and thus lacerate the parts. This happened to him some time ago, and fortunately so, for the point of the stilette punctured an abscess, of the existence of which he had not any suspicion; a large quantity of pus was discharged, and the patient recovered. But it is not every case which might terminate so favourably.

Belladonna in tetanus.—Dr. Hutchinson narrates a case of tetanus, apparently traumatic, treated by Dr. Williams, by his advice, with a large dose of extract of belladonna, (five grains,) with evident benefit. The man ultimately recovered. Dr. Williams says he has not always found belladonna a successful remedy, either in pure or rheumatic neuralgia, and that it must be used with great caution and watchfulness. He has found the influence of belladonna very variable in different constitutions, some being extremely susceptible of it. It ought never to be continued when the pupils become dilated, and a very long experience has taught him, he says, never to prescribe it, internally or externally, if there be any amaurotic disease. He has seen it act as a stimulus to the brain, producing pain in the eyeballs, intolerance of light, and conjunctival inflammation; these symptoms, soon followed by dilated pupils and loss of sight, paralysis of the iris, and the blindness being permanent. A few months since a friend of his painted over the forehead of a delicate lady patient a fluid extract of belladonna, for a severe neuralgic pain in the head. In about three hours the pain was relieved, and on its return the application was renewed. the intervals of pain were longer, and the pain less severe; after the fourth or fifth application it ceased, the pupils became dilated, and vision imperfect, vomiting and purging were induced; there were also perceived great weakness of the left side, numbness of the left side of the face and arm, and a pricking sensation in the same parts. The left pupil remained more than two months dilated, and the sight impaired; the numbness and pricking sensations have subsided, but the left arm has scarcely yet recovered its strength.

Seat of the respiratory murmur.—An anonymous "auscultator" thinks it is a question whether the vesicular structure ever undergoes any alteration of volume during common respiration, and the circumstance of the contractile tissues not having been traced into it, is, he avers, in favor of this supposition. It is much more probable, that the expansions and contractions occur only in the bronchial tubes, where regular currents of air are established, and that the air in the pulmonary cells is renewed by diffusion—a silent process, as friction is out of the question.

Use of gelatine as an article of diet.—Lieut. Walker considers gelatine as an article of diet useful in cases of morbid constitutional irritability, when, if persevered in for some time, it appears to soothe the local irritability of the mucous membrane, and may possibly also improve the condition of the pulmonary tissues. For the former purpose, it will perhaps be found available during the exhibition of steel tonics. It should be eaten slowly with a bit of dry or stale bread; when eaten hastily, and in undue quantities, it passes almost unchanged through the alimentary canal, and often causes derangement of the stomach, and indigestion, in feeble and dyspeptic persons. It is useless, if not injurious, to individuals of the lymphatic temperament.

Medullary Sarcoma.—Mr. Shaw removed a large tumour from the neck of a woman, fifty-four years of age, which, prior to the operation, was supposed to be a fatty or encysted tumour, but which afterwards proved to be medullary sarcoma. The dissection, which was practised for its removal, required great caution and discrimination to avoid injuring the large blood vessels and nerves of the neck, with which the tumour was in immediate proximity. The patient did well.

GOSSIP OF THE WEEK.

The following gentlemen were admitted members of the Royal College of Surgeons, May 10 and 17, 1844:—J. B. Barry, M. H. Higginbottom, R. S. Cobbold, N. S. Hedley, J. Fitzmaurice, E. H. Edge, A. Stansbury, W. S. Walsh, W. Leapingwell, and W. Brown.—H. E. Stuart, W. T. Hardern, W. Cumming, W. Wallford, B. T. Lowne, W. H. Thoreau, F. J. Lilley, T. P. Powell, H. M. Grnggen, J. Bomford.

Apothecaries' Hall.—Gentlemen admitted Members on May 16, 1844:—Christopher Hall, Henry March Gruggen, Thomas Humphreys, William Earengy, Edward Dewes, James Hakes, William Berry Kellock, Arthur Wynne Williams.

Appointments.—J. T. Watson Bacot to be asst. surg., v. M'Gregor, appointed to the Staff-Hospital Staff; Asst.-Surg. James M'Gregor, from the 39th Foot, to be Asst.-Surg. to the Forces, vice Hornibipos, appointed to the 72d Foot, Surg. H. Mansell to Collingwood.

Assistant-Surgs. Salter, Livesay, M.D. (1833) to Sydenham; Andrew Coates (1827) to Snipe; G. Ball (1837) of Snipe to Caledonia; John Spear, and W. Duirs, to Collingwood.

Obituary.—Roger Nunn, M.D., one of the Justices of the Peace, an Alderman of the borough of Colchester, in his 62d year.

The daily papers give an appalling statement of some new malady, resembling a leprosy, which has lately made its appearance among the French population on the borders of the Gulf of St. Lawrence. This visitation first appeared in 1824, and from the imperfect narrative given us, it would seem that comparatively few persons have died from its ravages. It is communicated by either touch or propinquity; is declared to be always fatal; and accordingly the victim is shunned by his friends, and left to perish in loneliness. Some of our Canadian subscribers will probably communicate with us on the subject. The malady may perhaps turn out to be but the yaws. The Canadian Government have granted £500. to have the disease thoroughly investigated.

The father of the Royal College of Surgeons is stated to be Mr. J. Bolger, a man of 110 years, still living, who passed his examination in 1756; and is not included in the list of new Fellows. His son, Thomas Bolger, passed in 1784, and is similarly excluded. We may doubt that Mr. John Bolger is yet living, but, from the principle on which the selection of Fellows was grounded, there can be little doubt that if he were, the College would have excluded him. And thus the long membership of such a patriarch, no more than the talents of a Wharton Jones, can guarantee surgeons' exemption from insulting omission.

Since our pencilling of Orfila, this distinguished toxicologist has written, and published a statement, exonerating himself completely from, among other charges, any rudeness to the Duchess de Berri, on his two visits to that lady. On the first visit he was with three other gentlemen, one of whom was the confidential physician of the Duchess, and the four drew up their report harmoniously together. On the second occasion he was not admitted to her presence, though favored by a letter from the lady, full of expressions of esteem and regard.

M. Jules Guerin, the celebrated orthopædic surgeon of Paris, is about to commence a summer course of lectures on the subject of his special studies and practice.

Our contemporary, the *Medical Gazette*, (unchanged in this day of changes, we are happy to observe, in every thing—but *principles*) reports to us that the Council of the College of Surgeons will take as liberal a view of the unfortunate clauses in the new Charter as they can, and elevate to Fellowship every member of a certain standing, who does not "*trade* as a chemist and druggist." Young members are to be included, on the recommendation of three of the present three hundred Fellows, or on examination. We believe the first part of the story partially correct, the second a hoax.

A *Conversazione* was held at the Sanatorium, New Road, on Tuesday evening. Many eminent members of the profession was present.

Professorship of Chemistry, Edinburgh.—Dr. William Gregory, Professor of Chemistry in the University of Aberdeen, has been elected by the Town Council of Edinburgh, to the professorship of chemistry in the University, vacant by the resignation of Dr. Hope. The votes stood—for Dr. Gregory, 20; for Dr. Andrew Fyfe, President of the College of Surgeons, 13.

Another death has recently been added, to the many that occur, through administering a dose of Godfrey's Cordial to a child 15 days old, at Bradford.

Mr. Burridge, of the Limerick Dispensary, has attended, in the space of three years, 1737 sick members of a temperance society, without administering wine or spirits in any of his prescriptions. The papers state, that of these 26 died.

Dr. O'Loughlin was last week elected Medical Superintendant of the Kilmallock Dispensary.

On Tuesday last, the Mayor of Liverpool laid the foundation stone of the New Northern Hospital, on a piece of land given for that purpose by the corporation.

The Annual Dinner of the Medical Botanical Society took place at the Freemasons' Tavern, at which his Royal Highness the Duke of Cambridge presided. His Royal Highness the Chairman subscribed 20 guineas. Dr. Chambers munificently gave 100 guineas.

Our correspondent, Dr. Muspratt, in a letter from Giessen, informs us:—"Professor Liebig has just completed his researches on urine. The investigation is one of the finest things he has yet done, and the results will be interesting both to the chemist and physiologist. He finds hippuric acid to exist in all urine (it has hitherto only been supposed to occur in the urine of the horse) and the acid properties of this secretion (urine) he deems to result from the uric acid present being dissolved by the alkaline phosphates and carbonates. Acetic acid he has found to be generated in the stale urine owing to fermentation. This decomposes the alkaline carbonates which held portions of the uric acid in solution, and, therefore, a sedimentary deposit of this acid ensues, &c. These are only partial gleanings from his researches which will be speedily published. The treatise is a very long one, and I am sure will be hailed with great delight."

Mr. Borthwick tried, on Monday evening, to force the subject of the Anatomy Bill and its bad working, on the attention of the House of Commons, but the house, thinning down to 31, was suddenly counted out.

We have had submitted to us an invention by Mr. Stidolph for assisting the blind to write. It appears to us at once simple, ingenious, and secures the advantages of straightness, equidistance, and freedom.

[From a Correspondent.]

Exposure of Mr. Vernon's Clairvoyance at the Adelaide Gallery.—This exhibition has been going on here for some weeks; many medical and other gentlemen vainly endeavouring effectually to secure the girl's eyes, so as to prevent vision through the ordinary organs. The girl with extreme cleverness has occasionally baffled all their skill, and managed to read, and has thus made converts of some of the most sceptical. On Saturday, however, after several experiments, Mr. H. Brookes, an experienced lecturer on mesmerism, addressed the chairman, and protested against the further repetition of these experiments, stating that it was impossible to believe in the pretended clairvoyance of that girl. He had seen her first at the Crosby Hall, and had attended daily there, and most patiently and anxiously observed every experiment; and from the very first he had seen that whenever the eyes were not effectually bandaged, she managed to read, but that whenever they were effectually secured, she never had read: on all occasions, however, she had been observed whilst professing to see *without the eyes*, to be making *the most unequivocal and determined efforts to see with the eyes*. His own opinion was that she was imposing, and he had recently heard that she had, whilst a patient of Dr. Collyer's exhibited by him, been detected in her imposition. There were many and valuable truths in mesmerism, totally independent of this clairvoyance. Dr. Collyer (who is now lecturing in conjunction with Mr. Vernon) was called upon to state his opinion, but declined. A gentleman in the audience, however, said that Dr. Collyer had informed him that she was an imposter, and Dr. Collyer then stept forward and confirmed the statement. Mr. Vernon made a sort of attempt to reply and explain, but broke down, and the scrutineers proposed a condemnatory resolution, which on being put to the meeting, was carried unanimously.

A SELECT PRACTICAL FORMULARY,

TRANSLATED FROM THE FRENCH OF M. FOY, PRINCIPAL PHARMACIEN OF THE HOSPITAL SAINT LOUIS, AT PARIS.

(Continued from Page 43.)

LAPIS DIVINUS: a mixture made with the aid of heat, with twenty-four parts of sulphate of copper, twenty-four of alum, and the same quantity of nitrate of potash, and one part of camphor. In solution, two to three grains to the ounce of water, as a discutient and astringent collyrium.

OXYMEL OF COLCHICUM (Codex): one part of the vinegar of colchicum, two parts of white honey, boiled together. Four, eight, and sixteen drachms to be taken daily, combined with the syrup of diacodium, or of opium, and the acetate of ammonia, particularly when it is desired to direct its action on the intestines, rather than on the urinary apparatus. See OXYMEL POTION OF STORCK. Storck recommends the fresh bulbs, gathered early in the summer, to be used. *** The vinegar of colchicum is prepared with one part of the dry bulbs, and twelve parts of vinegar.

OXYPHOSPHATE OF IRON: a salt obtained by mixing together an aqueous solution of the phosphate of soda, and an aqueous solution of the sulphate of iron, washing the precipitate with distilled water, setting it aside to deposit, and then drying it. Dr. Fuzet.-Duponchet speaks highly of this salt in the treatment of cancer, in the dose of from three to ten grains three times a-day. The water with which the salt is washed, is used as a lotion for cancerous ulcers, to destroy the unpleasant odor.

PALAMOND: eight parts of roasted cacao, thirty-two parts of rice flour, thirty-two parts of potato-starch, and one part of red sandal-wood, mixed together. *** Used in the same way as the RACAHOUT.

PANACEA, MERCURIAL: see the PROTO-CHLORURET OF MERCURY.

PAPER FOR ISSUES: ten parts of white wax, five parts of cetine, five parts of resin elemi, six parts of fine turpentine, dissolved together, strained through linen, and then poured on slips of smooth paper, placed between two layers of sparadrap. This paper is used to retain issue-peas in their place, for which purpose it is well adapted.

PARAGUAY-ROUX: one part of the leaves and flowers of the inula bifrons, four parts of the flowers of the Para cress (SPILANTHUS OLERACEUS), and one part of pyrethrum root; these substances are all to be sliced, then macerated for a fortnight in eight parts of alcohol at 33°, pressed, and filtered. An odontalgic remedy, which has been used for many years as a patent medicine.

PAREIRA BRAVA, ROOT: a feeble diuretic, rarely used.

PARIETARY: infusion, one to three drachms to a quart of boiling water: expressed juice, one to three ounces; extract, twenty to sixty grains, in bolus or pills; distilled water, one to four ounces as the vehicle for potions or mixtures. Diuretic and emollient. Used in the acute phlegmasia of the urinary organs.

PASTILLES OF MERCURY, SACCHARINE: one drachm of corrosive sublimate, fifteen ounces of powdered sugar, mixed together, and, with a sufficient quantity of mucilage of gum tragacanth, flavoured with orange-flower-water, made into five hundred and seventy-six pastilles. Mode of exhibition: one or two daily, as anti-syphilitic.

PASTE, ARSENICAL OF ROUSSELOT, or FRERE COSME. See Rousselot's powder.

PASTE. ESCHAROTIC (Canquoin): two parts of dry chloruret of zinc, one part of chloruret of antimony, with a sufficient quantity of flour and water.

PASTE, ESCHAROTIC (Canquoin): one part of chloruret of zinc, two, three, or four parts of flour, with a sufficient quantity of water, according as a more or less active caustic is required.

PASTE, ESCHAROTIC (Dupuytren): see ARSENICAL POWDER.

PASTE OF VIENNA: see Powder of Vienna.

PARSLEY-ROOT: infusion—half an ounce to an ounce to a quart of water. A diuretic of very little power. The juice of parsley (leaves and stems) has been recommended in blenorrhagia, in the dose of two or three drops in a glass of water.

PEACH-TREE: flowers and leaves—syrup of the flowers, half an ounce to an ounce, as a purgative for children. Syrup of the leaves, half an ounce to an ounce, infused in a quart of water. It possesses sedative properties.

PEDILUVIUM, ALCALINE (Formulary of Parisian hospitals): four to eight ounces of the salt of soda of commerce, dissolved in a sufficient quantity of hot water.

PEDILUVIUM, ALCALINE (Formulary of Parisian hospitals): four ounces of the sub-carbonate of potass, dissolved in a sufficient quantity of hot water.

PEDILUVIUM, SALINE: a handful of common salt, dissolved in a sufficient quantity of hot water: for a general bath, two pounds of salt are used. Both these foot-baths are used as revulsives in cases of cerebral congestion.

PEDILUVIUM WITH HYDROCHLORIC ACID: four to eight ounces of hydrochloric acid, added to a sufficient quantity of warm water. Used in cases of sanguineous congestion of the upper parts of the body.

PEDILUVIUM, MERCURIAL: one to eight grains of the dento-chloruret of mercury, dissolved in a quart of pure water. Used in exostoses, unhealthy tumours, ulcerations of the glands of the neck, and of the velum palati, osteocopic pains, &c. The number of baths required to effect a perfect cure, varies from twelve, fifteen, and twenty, up to forty.

PEDILUVIUM, NITRO-MURIATIC ("Scott's: English Journal"): three parts of hydrochloric acid, one part of nitric acid, and six parts of spring water, mixed together, and added to a sufficient quantity of hot water. Used in cases of congestion of the liver and spleen. These pediluvia are to be used at night before going to bed, each lasting from twenty to forty-five minutes, and the same liquid may serve four or five times. They are to be taken in a wooden vessel, the legs of the patient being plunged in up to the knees every day for the first fortnight, but afterwards only every other day.

PEDILUVIUM WITH MUSTARD (Formulary of Parisian hospitals): four ounces of flour of mustard, with a sufficient quantity of warm water.

PERCHLORURET OF IRON: an anti-scrofulous remedy, rarely used in France. Dose—one to four grains.

PEROXIDE OF IRON, HYDRATED: see Hydrated Tritoxide of Iron.

PETROLEUM, OIL OF: an anthelmintic, rarely used.

PEPPERMINT: infusion—one to two drachms to a quart of boiling water; distilled water, one to three ounces in a potion or mixture: syrup, half an ounce to an ounce to sweeten medicines: essential oil, one to four drops on a little sugar, or in a potion, julep, &c. Peppermint is an excellent stimulant; it is employed with advantage in atonic, and nervous affections of the stomach, flatulence, spasmodic vomitings, cardialgia, &c. When fresh, it is said to have been used successfully in frictions, in the treatment of the itch.

PHELLANDRIUM AQUATICUM. The seeds of the phellandrium aquaticum are employed in Italy, in Piedmont, &c., in the treatment of pulmonary phthisis. They are given in the form of powder, combined with gum or some other mucilaginous drug, in the dose of from twenty to one hundred and twenty grains in the course of the day.

PHLORINZINE (Dr. Koninck, of Louvain): a bitter substance, obtained from the bark of the roots and trunks of apple, pear, cherry, and plum trees. It is recommended as a succedaneum for the sulphate of quinine. Dose—ten to twenty grains in bolus or pill.

PLAISTER, ADHESIVE OF ANDRE DE LA CROIX: this plaister prepared with pitch resin, resin elemi, turpentine and laurel oil, is replaced at present by *gum diachylon plaister*.

PLAISTER, BROWN OR BURNT: this preparation, made with olive oil, lard, butter, suet, yellow wax, litharge, and black pitch, is employed to hasten the suppuration of buboes, abscesses, and ulcers.

PLAISTER, CANET'S: see Canet's Ointment.

PLAISTER OF CONIUM AND IODURET OF LEAD (Ricord): eight parts of plaister of conium, one part of ioduret of lead, mixed together, and spread on a piece of skin of proper size. Used in the treatment of buboes, and especially of chronic enlargement of the testicles.

PLAISTER AGAINST THE HOOPING-COUGH (Corsin): two parts of plaister of conium, one part of Burgundy pitch plaister, one part of gum diachylon plaister, mixed together, and spread on a piece of skin as large as a crown piece, over which is to be sprinkled six, eight, or twelve grains of tartarized antimony.

PLAISTER, GUM DIACHYLON: a discutient and dessicative plaister, prepared with simple plaister, gum-resins, yellow wax, &c. *** Spread upon slips of linen, it is employed under the name of *sparadrap* for the reunion of wounds, to cover ulcers, &c.

PLAISTER OF BURGUNDY PITCH: a sufficient quantity of Burgundy pitch melted at a gentle heat, and spread upon pieces of linen or skin of a convenient size. *** The rubefacient and antiarthritic properties of this plaister may be increased by dusting it with from twenty to sixty grains of tartar-emetic.

PLAISTER, DISCUTIENT AND SEDATIVE (Dupuytren): four parts of vigo plaister with mercury, one part of extract of belladonna, mixed together, and spread upon skin or linen, and applied over scirrhous swellings.

PLAISTER, FOUQUET'S: one part of plaister diapalme, one part of white wax, melted together, and one part of powdered deutoxide of lead incorporated, while they are cooling. Used as a discutient on tumours, and as desiccative on ulcers.

PLAISTER, MERCURIAL: see Vigo Plaister with mercury.

PLAISTER, PERPETUAL OF JANIN: six parts of turpentine, six parts of mastic, two parts of powdered cantharides, and one part of powdered euphorbium, mixed together. Rubefacient, stimulant, and vesicant; used in rheumatic affections, and wandering palns.

PLAISTER OF PISSIER AGAINST CANCER: a plaister prepared with linseed oil, minium, cerussa, opium, turpentine, yellow wax, &c. Recommended to soothe cancerous pains.

PLAISTER, PITCH: one part of yellow wax, two parts of Burgundy pitch, melted together, and strained through linen. Used as a derivative in rheumatic affections.

PLAISTER OF THE FOUR DISCUTIENTS: mixture of equal parts of plaisters of gum diachylon, soap, vigo with mercury, and solid conium ointment.

PLAISTER OF TARTARIZED ANTIMONY (Ricord): conium plaister, spread upon skin, sprinkled with tartar emetic, to excite indolent bubocs, &c. The quantity of tartarized antimony should vary from twenty to thirty grains, according as the size of the plaister is larger or smaller than the palm of the hand.

PLAISTER, SIMPLE: this plaister is prepared with equal parts of porphyrised litharge, olive oil, and lard, and a sufficient quantity of water.

PLAISTER, ENGLISH BLISTERING: two parts of plaister of wax, four parts of lard, melted together at a gentle heat, and then four parts of finely powdered cantharides incorporated. *** This plaister acts more promptly than the the ordinary plaister.

PLAISTER OF WAX: this plaister is made with three parts of yellow wax, three parts of mutton suet, and one part of white pitch.

PLAISTER OF VIGO WITH MERCURY: a discutient, which is much employed to disperse glandular tumours, and which has been recently recommended to remove the traces of small-pox.

PHOSPHATE OF LEAD: this salt is preferred by Dr. H. Hoffmann, of Darmstadt, to the acetate of lead, in tubercular phthisis. He gives it, combined with extract of hyoscyamus, in the dose of from two to sixteen grains progressively, in the form of bolus or pill.

PHOSPHATE OF QUININE: Dr. Harless, of Bonn, prefers this salt to the sulphate of quinine. He gives it in the dose of from two to four grains.

A COURSE OF CLINICAL LECTURES ON SOME IMPORTANT POINTS OF SURGERY,

Delivered at St. George's Hospital, by Sir Benjamin C. Brodie, Bart.

Lecture VIII.

Some Diseases of the Breast.—Although, after thirty years' active service, I have resigned my office as surgeon in this hospital, I shall always feel the deepest interest in its success, and that of the school connected with it, and shall feel happy when I can serve either the institution, or the pupils connected with it. I shall always think you have a demand on my attention, and my best wishes for your success will always attend you. And that this may not be mere words, I intend continuing my lectures this season; I have also offered to do so through succeeding sessions, which offer has been accepted; but before I go farther, it is necessary I should explain to you what these lectures are to be, as it is evident they cannot be clinical as hitherto; nor must they be such as in any way interfere with the lectures delivered by Mr. Hawkins and Mr. Babington, but this will be easily managed. Not being limited to time, I shall be able to speak at greater length than on ordinary occasions: again, I shall not be called upon to lecture on any particular disease, so that I shall take up the same disease in different ways, sometimes confining myself to mere symptoms: and although this may appear strange to the scientific pathologist, it will, I am sure, be serviceable to the wants of the students. I shall also endeavour to make up for what is necessarily wanting in the wards of an hospital to complete the practitioner; for it is impossible here to learn all that is wanting for private practice. Persons in different classes of society require different modes of treatment; their constitutions differ; and although you may learn all that is necessary for the treatment of the lower orders, you do not learn the diseases of those in affluence. When I commenced practice, I was often greatly at a loss from this cause. I shall, therefore, call your attention to such diseases as are most frequently met with in the higher classes of society.

In the present lecture, I shall make some observations on the diseases of the breast, no very clear description having been given of them, although of common occurrence. The disease to which I shall particularly refer to-day is one of considerable interest; especially so, because it is quite different from carcinoma, with which it has been frequently confounded. It is not met with in hospital practice, but very often shews itself in private life, and unless I had had the advantage of seeing a large number of private patients, I should not have been able to make out its symptoms and history, as I believe I now can. You will, perhaps, be consulted by a female who has a hard tumour formed in the breast, about the size of a walnut, and moveable; it contains fluid, and you puncture it with a grooved needle, and serum escapes. If the opening be large enough the whole escapes, and nothing remains but the bag or cyst in which it was contained. This fluid varies in colour, being sometimes yellow or straw coloured, sometimes greenish, and at other times of a dark brown. I call it serum because it entirely coagulates by heat, or by the addition of nitric acid; it is, therefore, doubtless serum, with some colouring matter. Sometimes you will find only one of these tumours, whilst at other times there will be several. When this is the case there is generally one large one, and several very small ones; but sometimes the whole breast is filled with them; they frequently occur as large as marbles, but I have seen them as big as an orange. When punctured in the early stage of the disease, there will be no perceptible remains of the tumour afterwards, which proves the cyst to be very thin. It occurs chiefly in single women, or those who have borne no children, but there are exceptions to this rule. It is attended with no pain, except the nervous pain caused by anxiety, and by the attention being constantly directed to the part; it does not affect the axillary glands, and the disease may remain unaltered for several years. Very frequently these tumours form without the patient being conscious of their presence, till accidentally she feels her breast, and finds something like a marble there. In one case of this kind, Mr. Johnson and myself examined the parts carefully, and found several glandular cysts containing nothing but serum. I have said the serum came from cysts, but my belief is that they are only enlargements of the lactiferous tubes; my reasons for coming to this conclusion are these: persons affected by this disease not unfrequently have a discharge of serum from the nipples; and if you press them, you may squeeze out the whole of the serum, so that nothing apparently remains. In one case of this kind, which ultimately I removed by operation, I passed a bristle down one of the tubes, and it went directly into one of the cysts. What I have now described may be looked upon as the first stage of the disease. But although during the early stages of the disease, these cysts contain nothing but fluid serum, if they are allowed to go on, solid matter will be formed in them, and so long as they are neglected this solidity will continue to increase. Where there are several cysts of this kind, you will occasionally find the whole of the breast become solid, excepting a few small portions which appear to remain unaffected.

A question very naturally arises here, as to what change in the part is this alteration of structure to be attributed? A lady consulted me who had one of these tumours in her breast, about the size of a walnut; I punctured it with a needle first, and finding it contained serum, I laid it open with a lancet; a large quantity of fluid escaped. I then dressed it with lint to the bottom, meaning to bring on inflammation; a good deal of suppuration followed, and the wound was two months before it healed, and then the disease was apparently quite eradicated. About a year after this, the patient came to me again, and I found, where I had opened the cyst, a fungous tumour as large as the cyst I had previously opened. I recommended her to have the breast amputated; the operation was performed, and we found it to be entirely made up of cysts containing fluid matter, and one of a large size, as represented in the drawing on the table. From the inner surface of this cyst there projected a solid tumour, which appeared to be made up of numerous folds, giving it a plicated appearance, covered by membranes continuous with that lining the cyst; and when cut into, it looked like very slightly organised fibrine. You have had recently an opportunity of seeing, in the hospital, a case of this kind; I allude to the woman whose breast was amputated, a short time since, by Mr. Keate. When she first came to the hospital, there was a small tumour about the size of a walnut; it was punctured by Mr. Cutler, and found to contain serum; but within a fortnight it regained its former size. She was then admitted as an inpatient under Mr. Keate, who again punctured it, and let out a dark coloured fluid. On the 21st of December, it was found not only to have filled again, but to have considerably increased in size; it was then laid open with a lancet, and a very large quantity of matter escaped; but in a few days, there was found, projecting from its inner surface, a large fibrous excrescence, partly filling up the cavity of the cyst. It was, therefore, deemed advisable to remove the whole of the breast, which, as you are aware, was done early in January. This is the tumour which was then removed (shewing the preparation); some of the excrescences are pendulous from narrow necks; others have broad bases; some look like recently effused albumine; others, like slightly organised fibrine; some are like fatty tumours; and, occasionally, they put on the appearance of *medullary* disease; not that I think they are of this nature, because many other tumours present a similar aspect. Very many years ago, I had the opportunity of witnessing a similar operation performed by Mr. Freeman, of Spring Gardens; and in my written notes of this case, I find I described it as looking like slightly organised fibrine. In this instance, the tumour occupied one-third of the cavity of the cyst. But this is not the only situation in which these solid masses are formed; you will sometimes find them outside the cyst, and these will increase in size, till all appear to be united in one solid mass; but if you carefully examine them in this state, you will find them outside, and perfectly distinct from the inner surface of the cyst. Here is another tumour which I removed from a private patient; it is of a similar character, and the breast, in this instance, weighed between seven and eight pounds. On cutting into it, a cavity was found, holding a large quantity of serum; here are, also, other preparations on the table, of a similar character. I said, in this particular instance, the breast weighed upwards of seven pounds, and I have seen other cases where they have attained a similar magnitude. The skin does not always ulcerate in these cases; but, occasionally, it is so distended that it bursts; a large quantity of fluid matter will be discharged, and an ulcer of an unhealthy character will be left, which, if not speedily removed, will wear out the constitution, and destroy the life of the patient. This disease has been much confounded with carcinoma. Some years ago, a very celebrated pathologist shewed me a case of this kind, and his opinion was that it was carcinoma; and I believe, in many cases of this kind, where amputation was performed for cancer, it has been nothing more than this disease, and not in any way of a malignant character. It is true a patient may be destroyed by these tumours; but this is no reason why it should be malignant. It is a local affection, and does not spring from any evil of constitution; and when the part is amputated, the disease never returns. The private patient, from whom I took the preparation on the table, lived many years after the operation, and had no return of the disease. Another lady, from whom I removed a similar tumour six years ago, is now alive and well. Sir E. Home thought the disease was malignant, and always advised amputation; and I recollect that a patient, on whom he operated, I saw twenty years afterwards, and she was perfectly well. I am therefore justified in saying the disease is not malignant.

In the early stage of the disease it may sometimes be cured without operation, as in the following case:—A lady came to me some twenty years ago, with a tumour of this description, and as I did not understand the disease so well then as I do now, I advised her to have it removed. She consented, and the day was fixed for the operation; but as something occurred which prevented its being done then, I said we would try an experiment, and ordered her a stimulating embrocation, and, in a short time, it had entirely disappeared. The same thing occurred a second time, and in neither case was there any return. From the good effect which followed its application in these two cases, I was led to try it in several others, and it has repeatedly been of great service. Mr. Cutler tried it with the woman now in the hospital, and I suspect its failure is to be attributed to its not being applied properly, or for a sufficient length of time. I dare say I have entirely succeeded in ten or twelve instances. The best application for the purpose is, I think, the following:—

℞ Spiritus vini rect.
Sp. camphoræ, aa ℥iiiss.
Liq. plumbi subacet. ℥j M.

I believe this form was originally employed by Mr. Pott for other purposes; but, as these proportions seem to answer very well, I have never altered them. Flannel is to be soaked in this, and applied over the whole of the part, taking care to wet it with the embrocation seven or eight times in the course of the twenty-four hours. At first, it merely deposits the oxide of lead on the skin; but in a short time the part becomes tender, and if its application be persevered in, the part will become excessively tender and blistered; the patient should then leave it off a few days, and resume it as soon as the parts have a little recovered. In this way, it must be persevered in for several weeks, or even months; but, generally, if it is serviceable, it will be evident when it has been applied six weeks or two months, but it must be persevered with; when the skin has been once stimulated to any extent, it is easily acted upon a second time, so that perhaps the patient will not be able to bear it more than two days in succession. In some cases I tried blistering, keeping the surface open with savine ointment for a fortnight,

and then healing it; repeating this for several successive times, and I think this answered best, but it is more troublesome. I have also employed a strong solution of iodine, but it did not answer so well as the embrocation. When using the embrocation, I have sometimes punctured these tumours, and perhaps this may have assisted in their removal; but my own opinion is, that it did not. When I have examined these tumours, after puncturing them, I have found something like a little kernel, which, I suppose, is the collapsed cyst. If the disease is in an advanced state, stimulants will do no good. Nothing, then, has any power over it, so that its removal by operation becomes indispensable. This disease, as I have said before, is not cancerous; but still it should be removed; because, if allowed to remain, the local irritation will destroy the life of the patient; and, if removed, it will not return. If you operate at all, you must remove the whole of the breast, for it is no use taking away small portions. It is better to perform the operation whilst the tumour is small; nevertheless, you are not to be deterred by its magnitude, because it is not in this disease as in carcinoma: there is, in fact, no danger: and I have seen a great many cases where the operation has been performed, and the disease has never returned. There is one observation, in particular, which you must not forget, viz.: that in amputating the breast, great care should be taken to remove it entirely; it is very possible to leave small portions remaining—I am sure I have done it myself—and although no particular harm results from it, still it may render a second operation necessary. In a patient operated on by Sir E. Home, there occurred small cysts about four years afterwards; these I believe to have been left in the operation, being at that time imperfectly formed, and very small. The preparations on the table will illustrate many of the points on which I have been speaking; and a knowledge of this disease will be of great advantage to you, as it will enable you to distinguish a not very uncommon form of mammary disease from scirrhus, and sometimes to quiet the fears of your patient, without resorting to an operation.

ON THE PHYSIOLOGY OF HEALTH AND DISEASE.

APPLIED TO ANIMALS AND VEGETABLES, BUT MORE ESPECIALLY TO MAN.

By M RASPAIL.

Second species: Ascaris Lumbricoides, Lumbricus.—The lumbricoid *ascaris* acquires colossal dimensions, as compared to the vermicular species. At the adult age, it assumes so much the forms and movements of the earth-worm, that many of the early observers seem to have mistaken the one for the other. It differs, however, from the vermicular *ascaris* by the absence of the caudal point, as well as by the greater development of all its organs; the dermis offers a similar undivided character in respect to the length of the body, the transverse direction of its cellular interstices, which are arranged as rings or wrinkles around the body, forming an obstacle to the action of cutting instruments. The intestinal canal is rectilinear, as in the smaller species, distended into a stomach and a pylorus, and opening at a small distance from the extremity of the tail; the organs of generation, and consequently the peritoneal cavity, occupy nineteen twentieths of the entire length of the body. Some naturalists pretend to have distinguished the male from the female in this species; according to them, the male may be known by two *cornua* which project from the insect near the anus. For my own part, I believe the larger *ascaris*, like the smaller species, to be hermaphroditical; that the individuals, in the act of copulation, act reciprocally as male and female; that, in fact, the pretended males are but hermaphroditical and unfecundated individuals, whose male sexual organs may happen to be in a state of erethism.

The *buccal organ of the lumbricus* is, by reason of its dimensions, more capable of description than that of the vermicular *ascaris*; we may remark within it three protuberances, dividing it into three equal and projecting parts—a sort of triple cupping-apparatus, which enables the worm to apply itself upon our tissues; the buccal orifice is at the point of union of these three apparatus; and it is in this hollow or cavity that the three perforating blades are concealed, of which we spoke when describing the leech.

This worm, in its adult state, has been at all times familiar to the physician; of its earlier stages, however, nothing seems to have been known. But, although it may attain even two feet in length, it certainly could never have been born with such dimensions; where then shall we find the ovum or the insect in its earliest state? In no part of our tissues has it been met with, at least under the form of the lumbricoid *acaris*. It often occurred to me, while considering this question, that the vermicular *ascaris* might be identical with the *lumbricus* in its earlier stages, and that the latter may have acquired its peculiar characters by passing through certain changes or transformations, such as we find to be the case in the superior insects. Some recent facts, however, observed by Owen, seem to explain the enigma, and to clear up the early history of this worm. The body of an Italian, 50 years of age, who had died in St. Bartholomew's Hospital, London, was brought into the dissecting-room before Professor Owen. Paget, one of his pupils, perceived that the muscles were covered with small whitish spots, a circumstance which had previously been noticed in other bodies, but which had hitherto been regarded as merely slight deposits of cretaceous matter. The great impulse recently given to minute anatomy, however, led Professor Owen to examine these small granulations with the microscope, and he discovered that each of them was a species of oval sac, in which was enclosed a small worm. Owen considered this to be a kyst, while the worm he regarded as the type of a new genus, and which he designated as the *trichina spiralis*, inasmuch as the insect, being scarcely so large as a thread, was rolled up in a spiral form within the sac; each sac contained but a single worm, and was about half a *millimetre* in length, and a quarter in breadth; the worm itself was in general a *millimetre* in length, and a thirtieth part of a *millimetre* in breadth. These facts were subsequently noticed, on several occasions, at the same hospital. Prof. Owen, in consequence, described this worm as a distinct genus, though in the following somewhat loose phraseology:—*Animal pellucidum, filiforme, teres, posticè attenuatum; os lineare; anus nullus; tubus intestinalis, genitalisque inconspicui (in vesicâ externâ, cellulosâ, elasticâ, plerumque solitarium).* Now, in the list of these characters, there is not one but may be equally applied to any worm of this size; and, for my own part, I see no reason for erecting into a new genus a worm which could be ranked without difficulty along with one or other of the previously known *genera*. In fact, after carefully examining the drawings of this insect, as published by Owen,* and also by Leblond,† I have become fully convinced that the *trichina spiralis* of these two authors, is nothing more than the young *ascaris lumbricoides*, while still enveloped in the coverings of its ovum. If we take the trouble to make a comparative measurement of these ovoid bodies as found in the muscles, and of the ova of a large *lumbricus*, we shall find them perfectly identical in form, and in dimensions.

The ova of the *lumbricus*, which we had in vain sought for in the alimentary canal, are then confided by the parent to the incubation of the muscles; but either this must take place by means of some intestinal perforation (which would most probably be fatal to the patient), so that the *lumbricus*, once having entered the peritoneal cavity could thence insinuate itself, by means of new perforations, into the sheaths of the most distant muscles; or else we shall be forced to admit that the ova arrive at their *focus* of nutrition, through the vehicle of the circulation, into which they must have passed, in consequence of a species of inoculation performed by the maternal *lumbricus* upon the walls of the intestinal canal. The two sexual processes or *cornua*, which the *lumbricus* is enabled to protrude at will from its *vulva*, would serve admirably to create an opening in the flesh wherein to deposit its progeny. In a word, the *lumbricus* propagates itself by ova; it does not, as we have already said, deposit them in the excrements; it must then inoculate them in the flesh of the animal to which it is parasitic; this much is evident; the only point then which remains for our consideration is to discover the tissue in which the nutrition of these ova is accomplished. The researches of Professor Owen have indicated to us one of these structures;—others will be shown by ulterior observation. But long before the time of Owen, Redi observed the same anatomical phenomena, and has very accurately described the so-called kysts of the *trichina* of Owen. In fact, in the African lizard (*Lacertolini Africa*) he has seen all the muscles of the abdomen covered with innumerable small glands or tubercles, similar in colour and size to grains of millet seed, or to large dry peas, each of which contains a worm. In the four lobes of the right, and in the three lobes of the left lung of a fox, he saw with similar glands enclosing a worm; also in the lungs of a weazel, &c.

Daily observation proves to us that the *lumbricus* may emigrate into all parts of the human body.—1°. *Into the intestines.* The *lumbricus* traverses at will or takes up its abode in any part of the intestinal canal, from the rectum to the duodenum *exclusively*, along the latter of which it can never pass, by reason of the alkaline and bitter taste of the bile, so as to reach the stomach.* The signs of their presence augment according to the number of these worms. When the *lumbrici* attain a certain size, they give rise, by their crawling as well as by their clustering together, to characteristic sensations. They produce a pricking when they attach themselves to the surface; a distinct noise or *bruit de pif* is heard on their quitting their hold. The presence of these worms leads to constipation; the belly becomes blown and distended; the blood is repelled towards the superior parts; the patient experiences a disagreeable sensation in the intestines, as of some body passing upwards through the hardened excrements towards the stomach or the œsophagus, and returning again into the intestines. The worms are very commonly met with in the colon and the small intestines of the horse, the ox, the pig, &c.

2°. *Into the stomach.* From the intestines they may pass into the stomach, and ascending along the œsophagus, be ejected by a species of vomiting. Hippocrates was acquainted with the fact that women, especially young girls, and more rarely men, are liable to attacks of vomiting arising from the presence of the lumbricoid *ascaris* in the stomach, and he has seen these worms in the ejected matters. (*Prædict.*, book 2, Ed. of Van der Linden.)

3°. Arrived at the pharynx, they may, as I have already said, glide behind the *velum* of the palate and escape by the nose, or else mount upwards towards the frontal sinuses, or even descend along the trachea. The fact of this migration is incontestible; every dependancy of the alimentary canal, even to the Eustachian tube, may serve as an asylum to these insects, when driven by particular circumstances from their chosen abode; the only difficulty is to ascertain whether they may not introduce themselves into other organs, the interior of which can be accessible to them solely by means of perforation. We will now, then, come to the proof.

4°. *Perforation of the intestines by the lumbrici.* What are the views which the Faculty of the present day adopt as to the mode of nourishment of these insects in the human body? If we take as our guide the nosological theories now-a-days put forth, we must come to the conclusion that worms live in our intestines, as in a medium, a

* *Description of a Microscopic entozoon*, &c., in the *Trans. of the Zoolog. Soc. of London*, vol. i, 1835.

† *Atlas du traité des vers intestinaux, de Bremser*; Paris. 1837.

* *Quò enim fermentum fellis non attingit, ibi lumbricorum est patria.* Van Helmont.—*Sextupl. gestio alimenti humani*, 82, page 214. Edit. 1707

t as on a prey; that they swim in the ocean of uids, and through the fæcal matters, without er touching the intestinal walls; that at most cy do but graze against them; simple complica- ons which are but accessory to diseases that may developed without them; complications, in fact, hich are inoffensive in themselves, being merely mptoms or effects, but by no means causes, of the testinal derangement. Now, such a doctrine is ot only opposed to analogy and observation, but even a century and a half behind our actual nowledge.* Lecuwenhoek, in fact, experimentally ettled this question many years ago; he dis- overed worms so firmly attached to the intestinal alls of some fish, which he dissected almost alive, hat the influence of the strongest medicines could carcely detach them from their hold; and who- ver will dissect living animals may assure himself f the same circumstance. In a word, all these orms die out of the human body, a fact which ould not take place provided they lived only in he chyme, the chyle, or the fæces; for, if such ere the case, nature is not devoid of substances hich could offer to them the same kind of ali- entation, and in which they could live with equal cility; as we find with the *larva* of the intestinal y. What the lumbricus requires, is a healthy nd elaborating surface from which it may suck up he juices; as soon as the tissues of the subject re altered by disease, the parasite abandons its old; if their vitality be destroyed, it flies from hem as from poison. The *lumbricus* is, so to peak, an intestinal leech; now, as the suction of he leech leaves traces on the surfaces to which it as applied, so should the suction of the *lumbricus* eave equally durable marks. We may readily magine that this action, being constantly applied pon tissues so soft and so ready to impression as he mucous membranes, will produce a gradual isorganization of their walls. The suction of the vorm will then give rise to a phlegmonous spot, hich, like every other form of phlegmon, will ass through the stages of inflammation, tume- action, and purulent decomposition, eventually eaving an eschar. But if the process of decompo- ition extend to a certain depth in the tissue of the ntestinal walls, and if there be not sufficient sound ubstance left at this spot to repair, by degrees, he loss which has been sustained, it is evident hat, the mortification spreading from point to oint, the intestine will eventually become per- orated at this locality, and thus establish a com- unication with the peritonæum. Bonnet, Pa- azzi, Carron, Roux, Lebeau, and others, cite ases which fully illustrate this opinion.

7°. *Invagination of the intestines; ileac passion and volvulus.*—Were it possible, with impunity, to ntroduce two of our fingers into the peritoneal avity, it would seem an easy matter to entangle or wist together the various folds of the small intes- ine, to cause an artificial knot, or *volvulus*, and, consequently, to produce or dissipate at will all he symptoms of *ileus!* Now, the lumbricus and he leech, by means of the double organ of appre- ension placed at their extremities, are enabled to perate after the manner of two of our fingers, to not and unknot our intestines, or to produce nvaginations, the length of which will be governed by the distance of the two extreme points of the ntestinal surface, on which the two extremities of the worm shall be applied. In fact, suppose that a lumbricus, thirty *centimètres* in length, extend itself in a perfectly straight direction along the internal surface of the small intestines; that it affix its head by its organ of apprehension, and its anus by the two copulative hooks or processes, against the intestinal surface; and that this being done, it twist itself up, or roll itself around in a spiral form, so as to bring its anus into approxima- tion with its head; it will of necessity happen, in consequence of this movement, that the intestinal ring to which the head is affixed will be drawn forcibly within that upon which the tail is applied, or *vice-versâ*. In this way should we have intes- tinal invagination produced; that is to say, the one knuckle of intestine would be drawn tightly within the other, somewhat on the principle of a glove which is partly turned inside out. But if this invagination continue, the invaginated knuckle will, in consequence of the inflammatory action induced by the prolonged contact, quickly form adhesions with the constricting portion, at that spot where the contact shall be most perfect. It might further happen, from the inflammatory action thus set up, that the constricted portion would be detached by sphacelus; and the patient would then render by stool a portion of the intes- tine, which may be readily recognised, provided its anatomical characters be not entirely effaced by disorganization. Here is a case of what would be denominated, in scholastic language, *spontaneous* invagination, produced solely by the action of the *lumbricus*.

The transition from this state to that of *ileac passion* or *volvulus* is simple enough. Imagine, in fact, a worm of a certain length rolling itself up, after having fixed its buccal apparatus upon the surface of the intestine; is it not evident that this living ball may thus obstruct the passage of a por- tion of the small intestine, or even of the large one, and so force the fæces to take a retrograde direction, and be returned by the mouth? Again, if the lumbricus draw together the two extremities of a knuckle of intestine, this may readily become the occasion of volvulus, by the introduction of another portion of intestine within the ring thus formed, and the consequent strangulation which would be induced.

8° *In the lungs.*—When *lumbrici* of a large size become introduced into the lungs, we cannot long be deceived as to their presence; the symptoms of asphyxia, as well as the tortuous movements of the worm, indicate sufficiently the cause of these morbid effects. The worm must be very young indeed, to lead to any misapprehension in such cases. An instance is recorded in the *Recueil d'Observations de Medicine, &c.*, 1758, where the patient vomited a cyst, containing about twenty of these worms floating in pus.

9° *In the uterus.*—The *lumbricus*, like the *ascaris*, may readily pass from the anus, within the genital organs, especially while in the young state. Now, the uterine surfaces will afford to the worm the same conditions of existence as the mucous mem- brane of the intestines; they will offer it the same facilities of development as the alimentary canal; but the prolonged presence of the insect in the womb cannot fail to lead to various morbid symp- toms, such as uterine discharge, perversion or sup- pression of the menstrual function, enlargement of this organ or the signs of false pregnancy, ulcera- tions or abnormal developments upon its surface, &c. Now, in these species of tumours may be found the germ and the type of all organic super- fœtations, as scirrhus, cancer, &c. If we admit the possibility of the introduction, or of the stay of these insects within this organ, we must of necessity acknowledge the realization of these effects; and who knows but that the greater part of those cases, in which serpents are said to have been expelled from the womb, may have been owing to the spontaneous escape of a lumbricus, which had acquired its largest possible dimensions in the uterine organ.

10° *In the urinary apparatus.*—When the lum- bricus introduces itself within the canal of the urethra, it there gives rise to the most varied effects, according as it may affix itself at a certain distance up the passage, or as it shall glide within the interior of the bladder, and thence pass along the ureters even up to the kidneys. The effects induced on the canal of the urethra, would be dis- charge and priapism; towards the prostate gland, satyriasis and involuntary ejaculations; in the bladder, ulceration of the walls, as well as the for- mation of calculus; the ovum of the worm here acting as a nucleus to the deposition of the salts with which the urine may abound. It might be objected to these views, that the lumbricus would be unable to live in a fluid of so irritating a nature as the urine; such objection, however, cannot be maintained; for, from the harmlessness of the salts of which it is the vehicle, this fluid will be less re- pulsive to the worm than are the fæces themselves; and the silicated nature of its skin must form a sufficient protection against the caustic action of a liquid, to which the delicate tissues of the bladder and the ureter are enabled to accommodate themselves.

11°—12° *In the heart and the blood-vessels.*—The larvæ of flies and other insects have been found in the pericardium and in the substance of the heart, there undergoing their complete metamorphoses; what, then, is to prevent the vermicular or lum- bricoid *ascaris* performing the same ravages? We have, in fact, already shown that every or- ganized tissue is permeable to those *helmintha* that are endowed with organs of perforation. Now, when once arrived within the circulatory system, they may with facility be carried to all parts of the body. *Strongyli*, several inches in length, have been found living in the blood-vessels of the porpoise, without causing any apparent injury to the animal. Why, then, should not *lumbrici* exist within the veins and the arteries of animals, when once they have found their way into these vessels? Such, in truth, is really the case. Their presence, however, in the circulatory system, is sometimes productive of mischief. We have seen them give rise, on the surface of the intestines, by the mere application of their organs of suction, to ulcerations, tumours, and abnormal developments; now, the same cause will necessa- rily determine, on the walls of the veins and of the arteries, similar effects. At the termination of some diseases, we meet, here and there, implanted on the internal surface of the larger vessels, bodies of various forms and dimensions. Anatomists have explained this phenomenon, by supposing them to be albuminous deposits; this opinion is, however, irreconcilable with the most common laws of physiology or chemistry. In fact, albu- minous deposits always maintain upon their sur- face a flocculent and shaggy appearance; they have not a tedinous or smooth exterior, nor do they ever become ingrafted or implanted upon organized surfaces. Organized surfaces repel instead of attracting them, and if they commence to be disorganized, they are immediately expelled under the form of pus or as an eschar. Now, 1°, we never find the bodies of which we have been speaking free and floating in the current of the circulation; 2°, their surface is never flocculent or shaggy; 3°, their interior is not spongy and heterogeneous, like that of coagula of albumen when precipitated from the fluid in which they were dissolved. On the contrary, their surface is homogeneous, presenting a firm and tendinous appearance, and offers great resistance to cutting instruments; it is also gradually blended with a whitish, lardaceous matter, internally, which, when treated with alcohol, forms an abundant oleaginous product; on evaporating the alcohol, myriads of microscopic globules are deposited on the glass. By minute observation, we may dis- cover that the cortical portion of this parasitic body is perfectly continuous with the tunic of the vein itself; there is not the slightest line of demarcation between them. In a word, these bodies are implanted on the surface of the vein, as the embryo on the internal surface of the placenta, or as the adipose cell on the surface of the cell which has engendered it. These bodies are then created on the wall of the vein; they are developed there; they are not implanted there ready formed, but grow after the manner of organs, commencing by imperceptible granulations. These parasites are, in truth, developed from the ova of the *helmintha*, especially of the *umbrici* and the *strongyli*. Such unnatural superfœtations may, however, by their indefinite development, become the mechanical cause of a host of grave disorders;—intercepting the communication be- tween the larger vessels; producing aneurisms in the arteries, or in the ventricles of the heart; varices in the veins; cerebral congestion, and all the frightful effects of disordered circulation.

Such, then, may be the consequences of the action of the *lumbricus* upon the human body. There is not, in fact, in our whole catalogue of

* It is principally to the writings of Rudolphi and Bremser that we must attribute the scholastic opinion to which we have alluded. But these authors were not sufficiently acquainted with the anatomy and habits of these worms, to be able to form a just idea as to their mode of nutrition, and the morbid effects of their parasitism. It was to the classification alone that their attention was directed.

diseases, a single affection, whether acute or chronic, to which it may not more or less directly give rise.

COURSE OF LECTURES ON THE THEORY AND PRACTICE OF MEDICINE.

Delivered by C. J. B. WILLIAMS, M.D., F.R.S., Professor of the Practice of Medicine, and of Clinical Medicine, at University College.

Treatment of diseases of the heart. (continued.)—We were yesterday considering that form of hypertrophy which arises from extreme contraction—concentric hypertrophy ; but I have now just to refer to another form of pericarditis, which is very rare, and which is called *tubercular pericarditis*, arising from the deposition of certain matters in the texture of this membrane. Now, with respect to the treatment in these cases ; although, as a general rule, it should be of an antiphlogistic as well as of a sedative character, to diminish the increased action of the heart, yet it is always desirable to avoid extremes, with regard to the tendency of the measures adopted. It is necessary to be careful as to the degree to which the treatment should be carried, keeping in view that the object is to overcome the increased action of the heart. There are some cases of hypertrophy of the heart. in which this seems to be a natural provision made to enable the heart to perform the increased task imposed upon it. In these cases, to which I previously adverted,—extraordinary growth in substance, obesity or corpulence—hypertrophy, instead of being a disease, may be a mere provision of nature to supply the increased demands. It often happens that there are occasional symptoms in hypertrophy of the heart,—such as inordinate action ;—and it should be borne in mind, that in treating this disease, we should be careful to guard against those extreme measures which have been frequently recommended of late years. Wherever hypertrophy is accompanied by symptoms of increased action, and that action is not confined merely to the region of the heart, but extends far and wide over the whole frame, then there can be no doubt as to the propriety of depletory measures, in combination with sedatives. So, also, where the system is materially disturbed by the force of the current of the blood, or the brain and the lungs disordered by similar circumstances; whenever hypertrophy appears to excite the circulation to too great an extent, and particularly when it is conjoined with dilatation, then depletory measures may be employed ; but in all cases, their use must be guided by the effect produced on the whole system. The strength of the pulse in the distant arteries, and not merely in the region of the heart, must be considered. It may often be necessary to relieve the heart from the burthen of too great a stimulus, or too much blood ; but depletory measures should be avoided in all cases where the impulse of the heart is not felt in distant parts. In these cases, practical men will be guided by the general symptoms, and not proceed on the principle of many who bring a great deal of knowledge of mere physical signs to bear upon the case, and examining the patient, and finding all the physical signs of hypertrophy, and perhaps symptoms of increased action of the heart, palpitations and violent pulsations in the neck and so on, proceed with certain measures, and ultimately convert mere functional derangement into actual disease, turning partial activity into absolute and general debility. In this way, I have seen many persons who have been reduced from a very moderate state of disease—in which the health was but slightly disturbed—to a dropsical condition, quickly followed by death. More mischief arises from this depletory treatment being carried to too great an extent, by those who depend solely on the signs of auscultation, than is done by others who neglect auscultation altogether. After all, those practical rules which have been confirmed by the experience of ages, are more important, and more to be depended upon, than any partial and one-sided view of the subject. The treatment of these cases is highly important ; but as I shall have to revert to the general treatment of diseases of the heart, not merely hypertrophy and dilatation, but also other diseases of this organ, I shall not now dwell on the subject.

Atrophy of the heart.—I now go on to dilatation of the heart, which may be said to be the converse of hypertrophy, and to atrophy. Its pathological cause is deficient strength of action ; where there is a deficiency of strength of action, and where the quantity of blood in the system is inconsiderable, it may be said that we have atrophy of the heart. And this is manifested not only by absolute feebleness and slowness of the pulse, with signs of general weakness, but there is, in some cases, considerable excitement of the heart. Where it contracts apparently with some inconvenience. where there is much action and much pulsation, with but little force,—under these circumstances we often find dilatation induced in the heart ; and this dilatation is frequently combined with asthenic plethora, feebleness of the vessels, and a low state of the nutritive functions. Hypertrophy and dilatation are very often combined together. This is what I have several times remarked—that there is increased exertion and increased nourishment of the heart ; but with all this increased exertion and excitement of the heart, this organ does not contract sufficiently, so as to expel all its contents In some cases, there is a modification of the nutrition which precedes the dilatation ; there is a yielding, a sort of softening, or diminished cohesion between the fibres of the heart itself. And accordingly, we find in diseases which impair the nutritive functions—in long continued fevers, for example—in which there is a tendency to weakening of the muscular system generally, that there is also a great disposition to weakening and dilatation of the heart. In fact, the pathological causes of dilatation of the heart may be summed up as follows :—When the heart cannot expel its contents, whether from obstruction in the vessels and regurgitation backwards into the cavities, or from want of power, or want of irritability, or both combined. The heart, in fact, becomes distended, and in time, if this condition goes on, it becomes permanently dilated ; and it is thus that dilatation is brought about as the permanent result of long continued defective action, the quantity of blood in the system still being considerable, or at least over-proportionate to the strength of the heart. The exciting causes of this are: various weakening circumstances,—such as long continued fevers, or that form of cachexia in which the quantity of the blood is not much diminished. Where cachexia reduces the bulk of the blood to a great degree, you seldom find the heart dilated to any considerable extent. It is when the blood is not reduced in quantity, more especially in scorbutic diseases, and where there is a bad state of the blood and defective fibrine, that dilatation is found. Again, continued inflammation of the heart impairs the nutritive function and throws it into a wrong direction, and may thus lead to the form of disease of which we are speaking. Altogether, combining these things with the want of irritability or strength, there may be an increased size of the cavities induced, with a thickening of the walls. Hypertrophy means rather an additional nourishment of the heart, than a thickness of the substance ; where there is not hypertrophy, there must necessarily, in such cases, be a dilatation of the walls. There is another condition in dilatation of the heart unaccompanied by hypertrophy : a more than usual paleness of the muscular texture, which is not of that florid, fresh colour, seen in healthy hearts, and to a great extent also in hypertrophied hearts. There is likewise a remarkable degree of softness in the walls. The walls may be so much thinned, and the muscular fibres separated to such a degree from each other, that the two lining membranes of the heart—the pericardium and the endocardium—are brought into contact. There is, in such cases, a deposit of a greyish or whitish matter in the substance of the heart, apparently thrown in to strengthen the weakened walls : this sort of deposit is sometimes found to a considerable extent.

Dilatation is generally globular: the heart is very rarely elongated, but a rounded form is given to the organ. In some cases, however, dilatation is partial, forming a sort of saccular projection in certain parts. The auricles are subject to these changes as well as the ventricles The latter may be, as it were, sub-divided into a great many cavities, and some of these parts dilated to a great extent. In some cases, partial dilatations have led to rupture and sudden death If the orifices are dilated and the valves not, this will produce the symptoms of valvular disease and will cause regurgitation into the heart. I have seen, in dilatation of the heart, a free regurgitation through the veins—the *vena cava*, for instance—causing a pulsation in the veins of an unusual kind. In many cases, the orifices are dilated, and the valves are also dilated, so that the valvular apparatus is kept in some degree complete; and it is remarkable what a large size the semilunar valves, under these circumstances, will acquire.

Now, the *pathological effects and symptoms of dilatation* are those of irregular and defective action. What I have said on the subject of defective action generally, will apply in these cases ; but there is this difference—that the latter are more enduring. A defective action may be produced by a temporary cause, and may quickly cease; but here is a case of permanent dilatation. There may be faintings, accompanied with palpitation or irregular excitement; a languid circulation, and, generally, cold extremities ; congestions of the viscera, and often a remarkable lividity or blueness of the lips, and a livid colour of the hands, with great liability to chilblains, and other affections arising from a very weak circulation. The liver is extremely apt to become congested, and the nutrition and secretions connected with the abdominal viscera very imperfect. In extreme cases, œdema is apt to be occasioned by congestion or obstructed circulation, depending on defective power of the heart. Now, dilatation may affect the right ventricle to a great degree, and then there are not only symptoms of imperfect circulation generally, but of the venous system in particular; an accumulation in the veins, which become unduly distended, and thus cause regurgitation through the valves of the heart ; and it is in these cases that the pulsation in the veins is seen so strongly. In diseases of the right side of the heart, disordered pulmonary circulation, pulmonary apoplexy, humid catarrh, and humid asthma, are apt to take place; and these may be occasionally relieved by bronchial flux or hæmoptysis. These attacks are very common in a dilated condition of the heart. Dilatation of the right side of the heart owes its origin to some obstacle in the passage of the blood through the left side. Dilatation proves fatal either by syncope, in which sudden death may occur, or else by a gradual failure of the proper circulation; in which case, the viscera cease to carry on their functions, and a general breaking-up of the system is the result. In some cases, the patient dies dropsical, not only from an obstruction in the vessels themselves, but from the general effects induced in other organs—such as disorders in the excretory organs—which are as essential to the well-being of the animal as the circulation itself. You find extreme states of languor in the circulation going on for a long time, and occurring again and again; but the patient may recover from these if the excretory functions are not impaired; but should they begin to fail, and they do fail in the long run, there is a perfect break-up in the whole constitution, and dropsy sometimes ensues. Now, in cases of hypertrophy with dilatation, there is a curious combination of symptoms, and this combination is very well represented by what I have said under the head of functional disease of the heart: where there is irregularity of force in the circulation, accompanied with much commotion and violence in the region of the heart, without its extending to the distant parts of the system ; these are some of the effects of a combination of hypertrophy and dilatation. In simple dilatation, there is more weakness, and sometimes occasional attacks of palpitation, but not of so violent a character.

The physical signs of dilatation of the heart require care to be distinguished from those of hypertrophy. If the walls of the ventricles are thin, the contractions take place very abruptly and quickly. The result of this is, that the contrac-

eeases with the first impulse. There is a rt jerk with the first impulse; but it is a very rt one, having nothing of the heaving charae- of hypertrophy. There are several points in ieh the impulse and the sound differ from the ural ones: the impulse is short and abrupt, sessing very little strength or duration. In the ural eondition, it is ehiefly centred at the apex, l extends but a slight distanee around; that of right ventricle is inferior in strength to that of left; but when there is eonsiderable dilatation the right ventriele, so as to make it extend to anterior part of the ehest, you then no longer ve the beating effeet, located between the carti- es of the fifth and sixth ribs. Under these eir- mstances, you have somewhat more of the im- lse under the region of the sternum. It is very ief and slight in its force, and is aeeompanied by short abrupt sound. If the left ventriele is not ated, the natural obtuse sound may still be ard below the left breast. But when the heart is t in direet eontaet with the ehest, you cease to ve the impulse, whieh is naturally communi- ted, beeause the dilated right ventriele pushes ide the left ventriele. Under these eireumstanees, u do not have symptoms of weakness in the eir- lation. There is eonsiderable strength in the pulse of the arteries in the neek, and at the top the sternum, though there may not be the na- ral amount of impulse at the region of the apex. hen the left ventriele is dilated, there is a ehange the eondition of the heart, and its shape is ered. The heart is altogether more globular, d there is a diminution in the natural impulse. is far less distinct, and is diffused over a larger rface: where dilatation is conjoined with hy- rtrophy, the impulse often extends over ten or elve square inches, over the whole of the front of e chest and the left side. The sound is other- se different in its eharaeter. It is a short first und, extremely like the eharaeter of the seeond und; so that the two sounds following eaeh her, are not to be distinguished in eharaeter, but ly by their suecession. On plaeing the hand on e region of the heart, there is found to be an crease of the impulse, as far as extent is con- rned; but it does not lift up the ribs at all. it does that, we may be pretty sure that there is ypertrophy, eombined most probably with extreme latation of the auricles. We have, however, no rtain means of determining this at present, and e are not aequainted with any peeuliar patholo- ieal conditions which it tends to produee. aënnec thought that dilatation of the auricles roduced modifications in the second sound; but e seems to have had a mistaken notion as to the ound produeed by tho contraetion of the aurieles. I have very distinetly seen the pulsation of the urieles alternate with that of the ventricles. ometimes a double pulsation is seen in the veins; his is especially observable in the jugular veins and he superfieial veins of the thorax.

The *treatment of dilatation* is very much the ame as that I have already spoken of, under the ead of defeetive aetion. It proeeeds esentially from veakness; a want of tone and of strength, or, erhaps, of both; and aecordingly, the treatment ost generally applicable to the dilated heart is trengthening by means of tonics. But there are ifferent circumstanees to be taken into aeeount in he application of this form of treatment. Some- imes, the blood is more than the heart can propel, nd we have here to enable the heart to propel his load; it is some time before we can give suffi- ient strength, but we may give temporary relief. When the dilated heart is palpitating mueh, and bviously struggling with a load of blood which it annot propel, we should apply blood-letting and upping, or leeches over the region of the heart. Sometimes, in asthenic plethora, where there is much lividity, or a bloated appearance of the coun- tenance, there is more blood in the system than he heart can propel, and it is useful to withdraw blood to relieve the heart. This is only a tempo- rary expedient. There is another circumstance that indicates the necessity of a modifieation of a general tonie treatment: you must remember that there is a weak eireulation throughout the whole system, and at the same time a weakened state of the secretions; and therefore it is important, while we are using tonies and stimulants, also to employ measures to increase the aetion of the seeretory organs. This is an indication that should always be attended to. Evaeuants, aperients, diureties, and dieteties, may be used at the same time that you are giving tonies and stimulants freely. The treatment should be as strengthening and as nourishing as the patient can bear. Mineral tonies, especially iron, are highly ealeulated to restore the strength of the heart and to diminish the irritability of the system. It is desirable to vary the use of these from time to time, at the same time giving mineral aeids. It is diffieult to say how these tonies aet on the animal frame and the contraetile powers, but it is eertain that some tonies have the effect of tightening up the museular fibres; alum also might be useful in these eases. I have seen this remedy so far useful as to diminish the eongestion of the liver. Tonies however are slow of aetion; and in eases of weak- ness, stimulants may be given, especially where any exertion is required,—ammonia and so forth may be used. It is very desirable to keep down the mass of the blood, and to prevent it beeoming too bulky, at the same time that we improve its quality and make it as rieh as possible. In doing this, we must attend to the state of the seeretions, keeping them quite free, more partieularly those of the kid- neys and of the skin. Warmth of the extremities, and so forth, is useful to relieve the aeeumulation of blood towards the heart, and to promote eireu- lation towards the surfaee; keeping the diet of as nourishing a eharaeter as possible. See that the digestive organs are well managed, and avoid exeess of liquids, as these are often extremely inju- rious, not only by interfering with the digestion, but likewise by eneumbering the organs of secre- tion. When a great quantity of water is taken into the system, it must be absorbed and carried away into the vessels. If the heart is weak, too great a quantity of liquid will encumber it still more. There are many reasons for adopting a diet of a dry nature, though not absolutely so. The diet should be as nourishing as it can be borne, and there should be abundance of animal food taken two or three times a day, if the digestive organs will bear it. A little gentle exercise is highly desirable, as much as can be taken without fatigue, varying the exercise with rest in a reeumbent position. Where the patient is too weak to bear exercise, friction may be substituted, so as to promote the circulation, and thus aid the action of the heart. Great advantage is derived from cold bathing, which tends to improve the eutaneous eireulation, and ultimately increases the vigour of the system.

Slight dilatation of the heart is decidedly curable. I may say decidedly, that is, under eertain restric- tions. Hypertrophy is far from being an incura- ble disease; and I have seen in many instances where the immediate symptoms have been removed, that the physical signs have subsequently, to a great degree, subsided. The same thing may be said with regard to dilatation. A person who has been long labouring under fever, will exhibit not only certain symptoms of dilatation and those of de- fective aetion, such as I have been deseribing, but you will find on examination over the region of the heart, that there really is dilatation; the heart is larger than usual, and its impulse impaired in force. This first sign is evident; and this will eon- tinue for a long time, while the patient is in a state of weak health; and he is just ready in this state, unless care be taken to avoid an increase of that condition, to pass into permanent organic disease of the heart; but if eare be adopted, and a proper mode of treatment practised, this dilatation may be cured, and the heart reeover its natural strength; the impulse of the blood will become more and more energetic, and the heart will return to its normal dimensions. There is much less chance of curing dilatation, where it is combined with any permanent disease, such as that of the valves, or anything that impairs the mechanism of the heart; but even here the amount of the dilatation may be very often diminished, or greatly alleviated. You will bear in mind, that whenever there is any con- siderable aggravation of the symptoms, with dul- ness on pereussion, and the impulse greatly in- creased in extent, it is well to treat that temporary eondition, first of all, by moderate depletion, and afterwards with tonies.

Atrophy of the heart is sometimes eombined with dilatation, or it may be attended by a positive diminution in weight and substanee, and aecom- panied by marked symptoms of a weakness in the circulation. This sueceeds to long eontinued fevers, oeeurring in a caeheetie state. It has been supposed, that smallness of the heart is a cause of serofulous disease; and certainly in a great number of persons subjeet to that disease, the heart is un- naturally small. Whether this is to be regarded as merely the result of a general wasting of the body, of whieh the heart partakes, or whether it is the eause of the disease, we eannot now stop to determine. We have found scrofulous diseases to be eombined with a degraded state of the nutritive funetions; and we know how neeessary the sus- tenanee of these funetions is to an aetive state of the eireulation; and, when the heart is enlarged, and has little power to resist the progress of di- sease, nutrition goes on in a depraved and degraded manner, and there is less ehance of ultimate re- eovery. But it is not only serofula that a weak state of the heart will lead to; where the heart is weak naturally, and there is a feeble eireulation, there is little power given to resist morbid aetion, and sueh subjeets often fall vietims to diseases which they would otherwise have been enabled to resist. The same thing may be said of another diseased state, which is somewhat obseure in its eharaeter,—that is: softening of the heart, whieh is sometimes a eoneomitant of dilatation, and at other times oecurs without it. The heart is, here, paler than usual, and there seems to be a degraded state of nutrition, as though the proper amount of fibre was not deposited in it. Under these eireum- stanees, the sounds are weak, and there is a great tendency to palpitation, without much impulse being transmitted to the chest; the pulse is feeble, and rather irregular. This state of things is ob- served going on for some time, and at last the patient dies. In such eases, on examination, in- stead of meeting with organic disease of the heart, you find only that this organ is very weak, and of a remarkably pale colour. The treatment of this is the same as that of dilatation of the heart.

INFLUENCE OF DIET ON MENTAL AFFECTIONS.—It would be a matter of great interest to decide the influenee of diet on the various classes of mental affeetions. That farinaceous diet alone will induee a perversion of feeling and temper I am fully satis- fied; and when we remember that by far the greater amount of eases of insanity depend upon depressing causes, eauses which, by deteriorating the nervous energy, suspend or pervert the assi- milative functions, and that such cases are curable only by a tonie plan of treatment, I think we obtain an important starting-point for our inquiry. We talk mueh about nervous debility and nervous irritability, but we forget that these are simply overt conditions of a particular strueture; that it is this structure that is diseased in its intimate texture; and sinee it is momentarily undergoing decay and restoration, it must, of neeessity, reeeive modifieations aeeording to the elements present for assimilation.

MODE OF DETECTING THE ADULTERATION OF VINEGAR WITH SULPHURIC ACID.—Feeula, or starch, is recommended as the best and most simple test for the discovery of this cheat. It is well known that dilute sulphuric aeid, by aid of heat converts fecula first into dextrine, and, if the heat be continued, into *glucose*, or grape-sugar. It then loses the property of turning blue with iodine. In the first case this reagent colours it of a vinous violet; in the second there is no colouration at all. A specimen of pure vinegar and another of the suspeeted fluid being taken, to each a smallportion of fecula is added, and heat applied for about ten minutes. On then testing these two liquors sepa- rately by tineture of iodine, in pure vinegar, the colouration is blue, as usual, and in the other it presents a violet tint, which approaches vinous red. If the ebullition of vinegar be continued, and if the testing be repeated with a small quantity, the co- louration seems to become more and more vinous, whilst that of pure vinegar always remains the same. Finally, after twenty or thirty minutes boiling, the adulterated vinegar is no longer eoloured by iodine

LECTURES ON THE ANATOMY AND PHYSIOLOGY OF THE EYE.

FORMING PART OF A COURSE OF LECTURES ON ANATOMY AND PHYSIOLOGY, DELIVERED AT CHARING CROSS HOSPITAL.

BY T. WHARTON JONES, F.R.S.

LECTURE VIII.—March 2, 1841.

Having in my last lecture explained to you the formation of images by radiation, the causes of the indistinctness of the images thus formed, and of their inversion; and having explained the nature of refraction of light, and how that by varying the obliquity of the surface of a refracting body, the rays of light entering it may be, within certain limits, refracted in any degree, and to either side, and how that in order to refract them, so that they shall meet together in a focus, the surface of the refracting medium must be a curve—or convex—a form which I said might be compared to an infinite number of planes; and, lastly, having shown you how that a dense refracting body, say of glass, with two convex surfaces receiving rays of light from the rarer medium air, and transmitted thence again to the air, determines the more speedy convergence of the rays than if it had had but a single convex surface—

I have now to explain to you how by means of such a refracting body, which is called a double convex lens, inserted in the aperture of the card employed in the experiment, showing the formation of images by radiation, whereas the cones of light proceeding from the flame, and passing through the simple aperture in the card, strike by their bases on the screen, and give rise to an image, as if traced by a broad pointed pencil; when a double convex lens is inserted in the aperture, the cones of light from the flame, on encountering it, have their rays so refracted that they converge to points or foci on the screen; the consequence of which is, you see, an image well defined, but smaller than that formed by simple radiation, like which, however, you see, it is also inverted, and for the same reason.

It is to be remarked that, in employing a double convex lens, the aperture in the card, or the camera obscura, may be enlarged without diminishing the distinctness of the image. On the contrary, the image is rendered more vivid in consequence of the greater quantity of rays from the candle being concentrated in it.

But in order that the images thus formed by means of a double convex lens may present the distinctness I am insisting on, you perceive that the screen and the candle must be at certain distances from the lens. If the flame be moved towards the lens, the screen must be removed from the lens. The flame here constitutes what is called the *focus of incident rays*, and the image what is called the *focus of refracted rays;* and in consequence of the relation between these two foci I am new showing you—they are called *conjugate foci.*

If the rays of light, instead of emanating from this candle, which is so near, came from a very distant body, say the sun, the incident rays, instead of being divergent, would be parallel, or as good as parallel, and the focus to which they would be brought by the refraction they undergo in passing the lens, is, as we have already said, called the principal focus of the lens.

The distance of the principal focus of any lens depends on the refractive power of the substance composing the lens, and on the degree of convexity of the surfaces of the lens—the more convex the nearer.

If, instead of being at a very great distance, the luminous body be in the principal focus of the lens, the rays from the former, on falling on the latter, will be divergent, and in passing through it will be so refracted as to become parallel.

Now of *conjugate foci* one must always be farther distant from the lens than its principal focus, and the other nearer than infinite distance.

If the rays, then, do not come from such a distant body as to be parallel, and if they do not come from a body so near as the principal focus, they cannot be brought to a focus at a point corresponding to the principal focus, nor can they be rendered parallel; but they will be brought to a focus at some point betwixt the principal focus and infinite distance. This point will be nearer the principal focus the more distant the body whence they emanated, *et vice versa.* If the surface which should receive the image of the point be not placed at the focal distance, instead of luminous points, there will be larger or smaller luminous surfaces, the section of a curve, and that whether the surface be in front or behind the focal point.

Besides the double convex lens which we have now considered, there are other forms of refractive instruments which I will now delineate on the board, and briefly define, remarking that of them all, besides the double convex lens, the lens glass and the meniscus may be said to be the only other forms met with in the construction of the eye; unless it be perhaps, as we shall see, that the bent glass tends in some cases to assume the form of a *concavo-convex.*

I now direct your attention to this table, which speaks for itself, and renders any description unnecessary.

Forms of refractive instruments, are:

1. A prism.
2. A plane glass.
3. A bent glass like that of a watch.
4. A sphere.
5. A double convex lens.
6. A plane convex lens.
7. A meniscus.
8. A double concave.
9. A plane concave lens.
10. A concavo-concave lens.

A sphere acts as a double convex lens.

The two surfaces of an equally convex lens equally near the central point of these surfaces may be considered parallel. Hence, rays which pass obliquely through the centre of the axis of the lens, called the optical centre of the lens, will be refracted nearly in the same way as if they passed through a plate of glass with parallel surfaces.

When the two surfaces of a lens are irregularly convex, the optical centre of the lens, or the point of the axis of the lens through which the rays must pass in order not to be refracted from the original direction, is not, as in the former case, the middle, but some point in front or behind it, nearer the more convex surface.

Lenses of the Human Eye.—The eye is a dioptric instrument, that is, it gives passage to light, at the same time refracting it. It is, in fact, similar to a camera obscura, which we have just considered as perfected by a dioptric contrivance.

The dioptric parts of the eye are four in number—1st, the cornea; 2nd, the aqueous humour; 3rd, the crystalline; 4th, the vitreous humour.

To estimate with perfect correctness the dioptric effects of these parts, an exact knowledge of their curvatures, proportions, and positions, as well as of their refractive and dispersive power is necessary. In regard to many of these points, however, we possess approximations only.

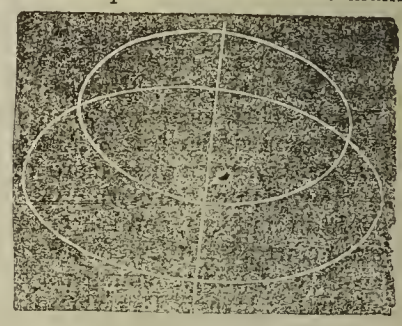
Let us first inquire into the *curvatures of the lenses.* In discussing the anatomy of the eye I assumed that the lenses are spherical, but there are reasons for concluding that they are rather elliptical or hyperbolical.

The curvature of the anterior surface of the cornea is that of a sphere having a radius of thirteen-twentieths of an inch. The curvature of the posterior surface is that of a sphere having a radius of seven twenty-fourths of an inch.

The curvature of the cornea is said to be elliptical or hyperbolical. According to Crousa, the anterior surface of the cornea is spherical and the posterior parabolical, though probably it is not a figure formed of the revolution of any curve. Perhaps its curvature is such as I here represent in an exaggerated manner.

The aqueous humour is, as I have already said of the form of a meniscus, but its curvatures depend on the form of the posterior surface of the cornea, and of the anterior surface of the lens; the latter larger than the former curve.

As to the curvatures of the lens, both surfaces are ellipsoids of revolution around their lesser axis, which is one and the same for both surfaces, as I here have represented in a rude manner.



As we ascertain the form of the aqueous humour from its containing walls, so may we that of the vitreous body from the posterior surface of the lens, anteriorly, and its curvature posteriorly from the retina. This latter, however, is not easily ascertained, and probably is varied by the action of the muscles.

Refractive Powers.—You must observe there is a distinction between the refractive powers and the powers of the curves.

The refractive densities of the different media can with difficulty be ascertained, but we may take the following as a tolerably safe approximation:—

Suppose air to be . . .	1000
We have water . . .	1335
The cornea	1338
The aqueous body . .	1336
The crystalline lens . .	1383
The vitreous body . .	1339

The density of the crystalline lens varies; its densest part is at the centre, and it diminishes as it approaches the circumference.

ASTHMA CAUSED BY IPECACUANHA.

By URIAH TURNER, M.D., of New York.

I inherited from my mother's family, with a slender constitution, a strongly-marked nervous temperament; and with advancing years, dyspepsia, with its long train of attendants, developed itself, but without any disorder of the respiratory organs until my 25th year.

Late in the autumn of 1822, while attending medical lectures, I was seized, after a night of exposure, with a pretty severe pneumonia, which confined me about two weeks. Under the care of the venerable Professor Nathan Smith, I was treated principally with antimonials, bleeding being deemed unnecessary; and after my recovery, which was rapid, my health continued as formerly, until the spring following, when I commenced the practice of medicine in Litchfield Co., Conn. During the spring and summer, I had repeated and severe attacks of spasmodic asthma; arising, as I then supposed, from the exposure incident to my employment, acting on my lungs, rendered susceptible by the previous pneumonic attack. The paroxysms usually came on suddenly, preceded by tickling in the nostrils, and sneezing, and continued from three days to three weeks, during which I was unable to remain in a recumbent position. During a paroxysm, the dyspeptic symptoms were usually mitigated considerably.

In the autumn following, more than six months from the first attack, I was led for the first time, by mere accident, to attribute these asthmatic paroxysms to the irritating properties of ipecac. when inhaled, having never read or heard anything to guide my investigations. I was in the habit of using ipecacuanha freely in my practice, both alone and in combination, which, like most country practitioners, I carried with me and dealt out at the bed-side. Having occasion, during a violent storm, to visit a patient who could not afford the light of a candle, I was obliged to make use of the floor for a table, and the "fire fair blazing" for a lamp; and in the course of this awkward operation a large paper of ipecac. was broken open, and

cattered freely through the room. After the sual preliminaries of sneezing, &c., I found ıyself labouring under an unusually severe paroxsm of asthma, which, as formerly, I attributed to ıe inclemency of the weather; but while pursuing ıy lonely way homeward, amid the pelting of the :orm, leaning forward in the carriage in order to reathe, and obliged to trust my horse to his own iscretion, I became suddenly sensible of smelling nd tasting ipecac., with a slight degree of nausea, nd before I reached my residence, the truth ashed across my mind that all my sufferings ight have been caused by this drug. My attenion once properly directed, I soon established the ıct beyond all doubt by actual and painful expeiment. Yet so new and singular was the fact, ıat it was a long time before I could convince ıyself that even a single grain, floating in the tmosphere of an ordinary room, was capable of ıducing a violent paroxysm of asthma, continuing veeks, preventing a recumbent position, reducing ıe strength as rapidly as an ordinary fever, and nly terminating by cough and expectoration. pecacuanha being so constantly required in prac-ice, I attempted every means to handle it with afety—using extreme care, covering my mouth, :c.; but with all these precautions, accident or aste rendered them not unfrequently unavailing. . bit of paper in which a Dover's powder had een wrapped, stepping into a physician's office, r even coming in contact with his clothing, might nd often did cause a paroxysm sufficient to arrest ıe in the midst of my business, and to render my ervices at all times precarious; although for ears I kept the article in a separate closet, and ı no ease presumed to handle it myself.

Such are some of the effects of inhaling the owder of ipecacuanha—one of our mildest and ıost useful remedies—effects essentially different rom that of any other article with which I have ver come in contact. The fumes of burning sulhur often produce a sudden dyspnœa, but it conınues only for a few minutes, and in severity ears no comparison to that resulting from ipecac.

But, like Dr. R., I, too, have suffered the orrors of taking an ipecac. emetic—the recollecion of which, at a distance of almost twenty ears, thrills through my nerves like some hideous nd long-remembered dream. These effects, howver, differed in some essential particulars from ıose described by Dr. R., as will be seen in the equel.

Early in the spring of 1825, I took half a drachm f powdered ipecac. root, in tepid water, taking ıe precaution to have it weighed and mixed in part of the house remote from my own room, ot dreaming that any other form than dry powder vould affect my breathing. Sad mistake! showıg conclusively that the peculiar deleterious effect f this drug depends on an idiosyncracy, and is in o way related to that usually produced on asthıatics by dust, feathers, &c. To proceed. In bout the usual time for an emetic to operate, here seemed to be a simultaneous effort to breathe, ough, and vomit, while neither of these functions vas performed in any degree of perfection—proıucing a state of suffering totally indescribable by vords. The peculiar *burning* sensation mentioned y Dr. R. is not so distinctly recollected, but the vhole muscles of the chest and abdomen seemed ı a state of violent irregular spasm, every effort to omit being interrupted by an attempt to cough; nd notwithstanding a cold March wind was blowıg, it became necessary to open the windows and upport me in an erect position for nearly an hour, o prevent immediate suffocation—an event moıentarily expected by myself and friends. At he end of about an hour, without any previous nitigation of symptoms, I was almost instantaıeously and eompletely relieved, and at my own equest was laid upon the bed. My breathing was ree and natural, attended, however, with extreme veakness; at the same time a burning heat was liffused over the whole surface of the body, which, on examination, was found to proceed from a kind of erysipelatous eruption covering every portion, imilar to what is seen after exposing the naked kin to a burning sun. The patches were circular, ınd varied from the size of a sixpence to that of he palm of the hand—considerably elevated, with hick rounded edges, and of a fiery colour. Yet so much greater had been the previous suffering, that the burning did not prevent me from falling into a profound sleep, which lasted until morning; and, what is remarkable, there was no return of the asthmatic symptoms; whereas, in every other instance where they were brought on by ipecac. they have continued several days at the least—thus rendering it almost certain that suffocation was prevented by one of those numerous resources which Nature, or, to speak as a Christian philosopher, Nature's God, has always at hand when the puny art of man has failed.

In several subsequent years I experienced numerous attacks without always being able to trace them to any specific cause. On two occasions I took a single laxative pill, without being aware that each of them contained a grain of ipecac.; yet in both instances, after an interval of eight or ten hours, a severe paroxysm of asthma followed their exhibition, and continued several days. In both cases the pill was taken on going to bed, rendering it impossible to attribute the result to any other cause.

With respect to remedies, a large dose of morphine or chloric ether taken at the commencement of a paroxysm, appeared to mitigate the symptoms. Smoking tobacco freely had a similar effect, while smoking the stramonium root seemed rather injurious. Lobelia, in form of tincture, produced an irritation somewhat like ipecac.

I suffered two attacks from exposure to ipecac., of such unusual violence as to deserve notice. Instead of the ordinary wheezing, the muscles of respiration seemed tetanically convulsed, producing a condition not unlike what is denominated "holding the breath," with slight sighs or catches, at intervals, barely sufficient to keep the wheels of life from ceasing altogether. In the first instance, relief was obtained by swallowing two drachms of *eth. sulph.*, leaving instead a singular but pleasing mental excitement. In the other, where the interrupted breathing had continued fearfully long, and where swallowing was impossible, inhaling the fumes of burning paper previously saturated with *nitras potass.* alleviated the symptoms almost instantaneously.

Such are the brief outlines of my own case, which I have reason to believe will be new to a majority of the profession; but my attention having been much directed to the subject, it may be proper to state that four other cases of a similar character have come to my knowledge, rendering it probable that strict observation will discover many others who may have suffered without knowing the cause. With two of the persons alluded to, wives of physicians, I am intimately acquainted, and am informed by them that, so far as they believe, they have never suffered asthma from any other cause than ipecacuanha, either inhaled or taken as an emetic—the latter producing most violent effects on the respiratory organs. The subjects of the two other cases were physicians, from whose medical friends I received the account.

From a long and careful consideration of all the circumstances above detailed, I have derived the following conclusions:—

1. That in my own case, the susceptibility to the irritating qualities of ipecacuanha was entirely created by the pneumonic attack—an opinion which derives strength from the fact that while a student I was in the daily habit of handling it freely.

2. That no asthmatic symptoms would have followed the pneumonia, had I not been exposed to this powerful agent. But that,

3. The habit once established, and the lungs having taken on the asthmatic action, the ordinary exciting causes of the disease, cold, watchfulness, &c., had the power of prolonging, and ultimately of inducing it.

4. That all asthmatics are liable to suffer from coming in contact with, or in any way using, ipecac. Hence physicians cannot be too cautious how they prescribe it for patients having the least tendency to asthma, as distressing and even fatal effects may follow its administration.—*Boston Medical Journal.*

A CASE OF ANOMALOUS HYSTERIA.

By R. H. CUMMINS, M.D., of Wheeling, VA.

Miss ——, aged 23 years, was attacked about twenty months since with pains of a neuralgic character, extending over the sides and breast, and down the arms. They were preceded by a few days' sickness, which, so far as I could learn, consisted in derangement of the stomach and bowels. A dose of calomel had been administered, and this produced salivation. The pains were so severe as to occasion loud screams, which could be heard in the neighbouring houses, and they were constant in the day time, but intermitted during the night. About the same period every evening, they would suddenly cease, and, from a condition of the greatest distress, the patient would fall into a pleasant sleep. In the morning, generally a short time after daybreak, she would be roused by a return of the pain, and a shriek usually announced its accession to her friends. She remained in this condition for probably two months, tortured by pain during the day, but enjoying a respite in the night.

A new symptom then made its appearance. During the day-time the patient began to have intermissions of pain. This of itself would rather have been hailed as a favourable symptom; but when we discovered that the intermissions were attended with complete insensibility, it excited our alarm. She would suddenly cease to moan, and her countenance, from an expression of the greatest agony, would change to one of perfect quietude. Her friends would familiarly say she had a *sick spell.* These intervals of ease would last from five minutes to half an hour. Their termination would be announced by a groan, and at the same instant the pain would return. They would occur sometimes three or four times in a day, and sometimes as often as twenty, and I observed that in proportion to their frequency, was the severity of the pain. When in this state she was insensible, all external impressions. Her eyes would be closed, and the lids would sometimes tremble; at other times they would give only an occasional twitch. Upon opening them, the eyeball had a normal appearance; the pupil was natural in size, and the colour looked healthy. If you spoke to her, she either did not hear or she was unable to make any answer, for no reply, ever escaped her. You might pinch her or pull her still she gave no sign of sensibility. Whilst in this condition, all the functions of animal life were suspended, and those of organic life more or less impeded. The pulse would frequently become weak and fluttering, and the respiration, though generally quiet and easy, would be sometimes hurried or interrupted by sighs.

During the whole of our patient's sickness she had no appetite. In a day she would often not eat four ounces of food, and this she would force upon herself rather as a means of sustenance, than because she had any relish for it.

Her bowels, by the aid of occasional doses of laxative medicine, were kept regular, and her stools had generally a healthy appearance. Her tongue would often become coated, and the coating was usually of a yellow colour. The condition of her tongue, stomach, and bowels, seemed to have no influence over the pain. Their derangement rather seemed consequential to it.

The catamenial function was performed during the whole disease regularly, and differed in no respect, so far as was observable, from its condition in health.

The urinary and perspiratory discharges were carried on with due regularity. That from the skin occasionally emitted an unpleasant smell, and the odour was peculiar, for I never smelt anything either before or since like it. It somewhat resembled that which arises from a dead body.

At times she had an irresistible desire to laugh, and generally this was succeeded by crying, and increased severity of pain. On several occasions she begged us to hold her hands, for she said if she got an opportunity she would certainly bite her fingers off. This was a mere fancy, however, for though she often succeeded in getting them into her mouth, she never had the courage to bring the blood.

A slight review of the symptoms easily deter

mined the character of the pain, and our remedial agents were, of course, directed to the nervous symptoms.

The treatment was commenced by the use of anodynes and antispasmodies. The whole range of these divisions of the materia medica was gone over without any permanent benefit resulting. Opiates had the effect of lulling the pain for a time, but as soon as their stupefying influence wore off it would again return, and often with augmented violence. After taking any preparation of opium (and every variety was tried), she always complained of uneasy sensations in the head, and these were so unpleasant that she herself preferred not using it. Valerian, castor, musk, and assafœtida were tried in all their various forms of preparation without any benefit.

Tonics were employed, but even those from which we were led to expect most advantage proved unavailing. Iron, combined with antispasmodies, in form of Vallet's protocarbonate, and the common precipitated carbonate; quinine and the other vegetable bitters, were each tried, but all with the same unfavourable result. From the analogy that subsisted between the pain and that of tic douloureux, I was induced to try the power of Fowler's solution of arsenite of potash, but this likewise failed to exercise any influence over the disease.

Our medication, heretofore, had all been based upon the supposition that the disease was merely a functional derangement of the nervous system. And indeed all the symptoms of the case seemed to indicate this, for, upon the closest examination, no tenderness could be discovered along the spine, and our patient was at all times free from fever. It was determined, notwithstanding, to try the effects of counter-irritation, and the back was accordingly rubbed with tartar emetic ointment, from the nape of the neck to the sacrum.

This was kept discharging for two months, without producing the least effect in the relief of the pain. It did not even mitigate it. In connection, an application of veratria, in form of solution, was made to the sides, breast and arms; and this, notwithstanding its reputed efficacy in allaying neuralgic pain, did no good.

The case had now run on for about four months, and there was not the least abatement in the symptoms. The patient was suffering extreme agony, and the friends began justly to entertain fears that she could not survive. In this dilemma, I felt like abandoning the case, for I could think of no other means that afforded a reasonable prospect of relief.

It may be stated that the advice of other physicians was obtained; and, whilst all concurred in the propriety of what had been done, none recommended other means that were likely to do good.

I had suggested the use of hydrocyanic acid to other physicians who had seen the case, but it never received the sanction of any one. Its administration was thought to be attended with danger without affording any prospect of benefit. I was, nevertheless, from a knowledge of its powerful influence over the nervous system, induced to try it. I accordingly gave Scheele's preparation in the dose of one-twelfth of a drop. This made a powerful and unexpected impression on her system. It threw her into a condition precisely similar to the state we designated a *sick spell*, with the exception only that all the symptoms were aggravated. She became nearly pulseless, sighed frequently, and was insensible. I tried in vain to arouse her. This spell was protracted so long as to render it alarming. It continued during the whole night, and until the next evening, embracing a period of about twenty-four hours. From the commencement of this attack, I found it necessary to stimulate her, and wine was administered pretty freely. I likewise had sinapisms applied to her feet and arms, and I kept cold applications on her head. She was at length roused, and from that moment she began to mend. She was troubled no more with pain; after a few days her appetite returned, and she gained her strength rapidly

The prussic acid in this case relieved the pain, but why it operated with so much violence I am unable to say. Probably the diseased condition of her nervous system was of such a nature as to render her peculiarly susceptible to its action.

During the space of about six months, our patient enjoyed uninterrupted good health. She had improved in health and appearance, and felt at no time any return of pain.

At the expiration of this period, however, the pain returned in great violence, and with the suddenness of thought. She was pursuing some one of her ordinary occupations, and had to drop it instantly and scream. I was called to her, and though I felt confident prussic acid would relieve her, I was deterred from again administering it. I feared its effects. For two months she suffered extreme pain, alternated every day with *sick spells*, as they were familiarly called, and during this time she again went the rounds of the anodynes and antispasmodies. They afforded no relief.

The friends applied to a quack doctor in the neighbourhood, and he gave her a great variety of *nerve drops*, as he termed them, to take inwardly, and *embrocations* to rub externally, but all to no purpose.

In deliberating further on this case, it was suggested to my mind to give tartar emetic in nauseating doses, and I was induced to try it in the expectation that it would have a favourable revulsive effect, or that a change would be made in the disease, through the intervention of the nausea produced. I accordingly gave it, and had the satisfaction to find that it effected all I desired. As soon as nausea was produced, the pain abated, and under its continuance it vanished entirely. It is now seven months since, and our patient has had no return, but she has been improving ever since. If the pain should return, I feel assured that the tartar emetic will control it at any time, and perhaps any other nauseating medicine would have the same effect.

After the pain subsided it was many days before Miss —— recovered her appetite. Her stomach seemed obstinately deranged. It, however, got better at length, and her health now seems in every respect as good as ever it was.—*Phil. Med. Examiner.*

CASE OF HYDROPHOBIA.

By W. Foley, M.D., of Kilrush.

To the Editor of "The Medical Times."

Sir,—Allow me to trespass on your pages with the recital of the following case of hydrophobia—a disease that has at all times attracted the attention of the public and the medical profession, and in this instance enlisted a degree of general sympathy that reflects honour on human nature:—

James Walsh, ætat. 11, a lad of strong make, dark hair, dark eyes, sallow complexion, was bitten by a dog only three months old on the proximal phalanx of the left ring finger, on Friday, the 23rd of February, and over the fibular ancle of the left foot on the following day. No notice was taken of the wounds; they healed as ordinary scratches do, without any suppuration or inflammatory action.

The boy continued well up to the evening of the 15th of March, when he was seized with rigors and a great drowsiness; he felt tolerably well on the following day. On Sunday, the 17th, he complained of severe pains in all his limbs, headache, rigors, and remarkable drowsiness, and spent an exceedingly restless night with frightful dreams. On Monday morning was very much fatigued and exhausted. About ten, a.m., became greatly agitated and impatient; in a short time, violent spasms of the muscles of deglutition commenced, and rapidly extended to all the voluntary muscles.

He was painfully intolerant of noise and light. The appearance or mention of drink caused a spasmodic action that was heartrending to witness. I saw him on the evening of that day for the first time. He was in a pitiable condition; a glimpse of light—the slightest noise—disturbed him; if drink was spoken of, he suffered violently. He exhibited the following symptoms:—Countenance pale and haggard; eyes brilliant, and very restless; frothy salivation; pulse 112; respiration hurried and remarkably interrupted; severe constriction of præcordia; total inability to swallow even the salivary fluid; and ungovernable jactitation of the entire body. The indication was obvious—to relieve the general spasm. Bleeding I have no doubt would be of service, but such was his terror of it that it was utterly impracticable. Administering remedies by the mouth was out of the question; enemata only remained. I had infus nicotianæ ℥viij (Ph. D.) administered imme diately, which produced great prostration, nausea perspiration, and almost total cessation of the spasm. He could then bear candle-light, the dis course of those around him, and the *mention* o drink as well as ever he did, though shortly befor he was torturingly intolerant of them. He coul not swallow even the saliva, which was secrete in great abundance, and very frothy. He spok with the greatest composure, described how an when the dog bit him, shewed me the marks of th animal's teeth, and during that period of quietnes did not exhibit any apprehension from his condi tion. He continued to be greatly relieved b enemata up to the time I left him, and for som hours after.

I found him on the following morning so over powered with convulsive violence, that furthe efforts at relief were useless. He expired quietl at three, p.m., on that day, twenty-nine hours afte the first unequivocal symptom of the disease.

There was no autopsy.

An exceedingly interesting question naturall presents itself—What is hydrophobia? Muc ingenuity has been expended on the question various theories have been set forth; I have no had the good fortune to meet any that were *con clusive* or *satisfactory*.

Dr. Santer, of Vienna, who appears to hav devoted a good deal of serious attention to th subject, considers it to be "a true specific disea produced by inoculation with a peculiar virus, an in no instance to arise spontaneously, even in th dog."

I have witnessed instances of the disease in dog and a pet fox that afford the strongest *negati* evidence that it will arise spontaneously. I allo that exposure to infection was *possible*, but *not all probable*. The dog that occasioned the melan choly catastrophe forming the subject of th letter was an instance of it.

It has been supposed that the disease could no be communicated by inoculation of saliva from human hydrophobic to a dog; the belief has bee dispelled by direct experiment, at the hands MM. Magendie and Bresehet.

An ingenious contributor to the *Westminste Review*, in an article lately published in th journal under the head "Hydrophobia," mor than hints that there is no such disease in th human subject as hydrophobia—that the mischie following the bite of a rabid dog is nothing mor or less than a modification of "tetanus," an dwells upon the influence of *punctured* wound in producing that malady. I rather think the bul of surgical experience would go to show that *in cised* or *punctured* wounds are *least* calculated t produce tetanus, whilst *contused* or *lacerate* wounds are quite the reverse. I would be als inclined to look upon the bite of a dog as appe taining more to the latter than the former class injuries. Would the wounds produced by th fangs or other teeth of a dog *not rabid* cause th morbid phenomena designated "hydrophobia?" If so, the "tetanic" conclusion must be admitted

The father and mother of the deceased and fiv of their children, together with their horse, wer bitten by the same dog. A paragraph in the news papers, stating the occurrence, attracted the atten tion of the Earl of Arundel and Surrey, who, wit a benevolence that reflects eternal honour on hi illustrious name, immediately wrote to me to sa that he was in possession of a remedy brought t England by the Earl of Clanwilliam from Bohemia where it was considered a certain preventive o hydrophobia; that its protective influence wa tried in London on three soldiers of the Roya Horse Guards, who were bitten, as well as tw horses belonging to the same regiment, by a rabi dog.

Lord Clanwilliam, on hearing of the occurrence gave Dr. Hair, the regimental surgeon, some o the Bohemian remedy, with instructions for it

; it was administered to the *men, not to the ses.* They were all bitten on the 19th April, 5. The men exhibited no sign of the disease; horses died. One was attacked on the morn- of the 10th of May, and died on the evening of 11th; the second was attacked on the 4th of y, and died on the morning of the 6th.

His lordship made me an offer of the remedy, be used by the survivors if I thought well. I dly accepted the offer, and used it according to accompanying instructions for the family and horse.

t produced the *perceptible* effect that was ex- ted in most of the human subjects, namely, ious perspiration about the head, neck, &c. ree months have now elapsed from the biting; are doing well. It may be said, "they would as well without it." Look to the instance oted; the men got the remedy, they suffered in gree. The horses did not get it; one died in enty-three days after the injury, the other in o months and a half.

How magnificent is that true nobility—nobility soul as well as of rank—that will take a philan- opic interest in the most wretched of their low-creatures, at the moment when, of all others, nevolence and sympathy come, as Heaven-sent ssengers, to soothe the torturings of affliction.

To the Earl of Arundel and Surrey do this poor nily owe a debt of gratitude that can never be ficiently acknowledged. To his timely and mane interposition do they owe rescue from the est misery.

Excuse the length of my communication; the ject of it is an interesting one to me. I hope may produce some such brilliant flashes of talent enlighten the obscure question as often illumi- te your pages.

N THE APPLICATION OF THE PLUG IN CASES OF UTERINE HÆMORRHAGE.

CHARLES CLAY, Member of the Royal College of Physicians, ondon, Graduate of Edinburgh, Author of "Peritoneal Sections," nd Lecturer on Medical Jurisprudence, &c., Manchester.

[Continued from p. 148.]

Denman, whose name carries with it consider- le weight on almost all questions connected with dwifery, states nothing respecting the plug. r. Waller, however, who has lately edited the rks of Denman, 1832, considers the plug of e in the early months of pregnancy. It is a eat pity that Dr. Waller, in commenting on enman, does not make a clear distinction between own remarks and those he comments upon. r. Foster, of Dublin, edit. 1781, makes no mention the plug, and is therefore no advocate for its use. r. Hamilton, the Edinburgh professor, advocates e use of the plug, see edit. 1783, but only in refer- ce to hæmorrhage of the earlier months of preg- ncy. Opium became a favourite with this emi- nt man, and it is surprising that he did not receive the great use of opium in preference to e plug in the early months, it being decidedly ore applicable then than after delivery. In Dr. eake's elegantly written work, published 1787, enters largely on the treatment of hæmorrhage, th a view of establishing, what he termed, a new ode, viz.: cold-bath to the feet, draughts of cold ater taken internally, and injections of cold ater per vaginam. It was, however, an old ode, only revived by Dr. Leake, as will be seen the foregoing observations (Dr. Moore, 1777), least ten years before Dr. Leake's work ap- ared. Dr. Leake is no advocate for the plug. 1790, M. Baudelocque's work appeared, as anslated by Heath, 1795. This author speaks ry limitedly of the plug, not making the neces- ry distinctions in what cases it should be used. r. Rigby's work appeared in 1811, giving a most xcellent summary of the treatment of uterine emorrhage, illustrated by a considerable number cases, but which were selected chiefly from that hæmorrhage before delivery. Dr. Rigby, in ch cases, is decidedly against the plug; his actice, viz. rupturing the membranes, and speedy livery, was not new, as he himself admits, in his troduction, being the practice of Levret, with hich, however, he states himself unacquainted, l after the publication of his own cases. Be this as it will, I have shewn in the foregoing observations, that it was but an old doctrine revived, as the volume of "225 Cases by Gifford," in 1734, nearly eighty years before his time, fully proves. It is to be lamented that Dr. Rigby, who had done so much towards confirming the best mode of treatment hitherto established for hæmorrhage before delivery, should not have tested by experience the treatment of hæmorrhage after delivery. He states, in his preface, that the plug might be admissible after delivery!—an opinion now almost exploded: it is evident the Dr.'s notoriety was for rendering effectual assistance in hæmorrhage before delivery, and he might be consulted extensively for those cases; but in cases after delivery, his experience must have been very limited, otherwise he would not have ventured to advocate so pernicious a means as the plug; and that, theoretically, as he does not illustrate his opinion by one case. In reference to the practical part of his excellent work, the success of his treatment fully justifies the means used; out of 106 cases, only 11 were fatal; of which 3 died some days after of fever, and at 2 he did not arrive in time to render assistance; leaving but 6 immediately fatal out of 106. These cases further illustrate the fact that young and vigorous females are not prone to hæmorrhages. Out of the 106 cases, those of the 1st, 2nd, 3rd, and 4th pregnancies, only amount to 17; the remaining number being connected with those of more frequent births and debilitated constitutions. Dr. Merriman, in his "Synopsis of Difficult Parturition," 1820, says: the advantages of the plug must be very limited, and then only in the earlier months of pregnancy, when it possibly *may* be of use. After delivery, he distinctly states, that "so far from benefitting the patient, it adds to her peril." Merriman is an advocate for the use of opium. Dr. Stewart's excellent treatise "On Uterine Hæmorrhage" appeared in 1816. In reference to the plug in cases preceding delivery, he thus writes:—"Although stuffing the vagina, in such cases, might, at first, check the hæmorrhage, it is not a remedy which could be employed with safety or advantage, as it would be apt, *by irritating the os uteri, to excite the uterus to contraction,* necessarily rupturing more vessels, increasing the discharge, and destroying the chance of enabling the patient to go on to the full period of pregnancy," vide page 48; subsequently, at page 69, *he supposes a case,* where the plug might be used with advantage; but as the case is one that is scarcely ever likely to occur, it would have been better had Dr. Stewart left it out altogether: his words are—"If profuse hæmorrhage occurs when the membranes have been *for some time ruptured,* and if the os uteri be at the same time *rigid and contracted,* it presents one of the most perplexing combinations of untoward circumstances. In those cases benefit *may be derived* from stuffing the vagina, and if the patient be not very much reduced before assistance is called, and whilst the os uteri continues rigid and contracted, internal hæmorrhage need not be dreaded." The really practically experienced man cannot do otherwise than smile at this coining an almost impossible case. If the vast amount of experience produced by the celebrated Gifford, and subsequently by Dr. Rigby, be of any value, *then, after rupturing the membranes, profuse hæmorrhage is the least likely thing to happen;* and, therefore, the admissibility of the plug is of so rare an occurrence, that I think it might be dispensed with altogether. At page 72, Dr. Stewart gives his precautions as to plugging. He says, "No doubt when this remedy is employed the patient must be carefully watched, and when any symptoms appear which indicate internal hæmorrhage, the plug must be removed and the patient delivered." Here is a tacit acknowledgment of the injurious effects of the plug, and the author adopting a better course of practice. "But," says he, "whilst the os uteri remains rigid and contracted, *if the vagina be properly stuffed,* there is no danger of internal hæmorrhage." This is by no means clear doctrine; if the os uteri be in the state he describes it, there is the less call for artificial plugging. Again, he says, "If the signs of internal hæmorrhage come on after, it proves the os uteri has become yielding, and that the child may be the more easily turned." Now this is purely a gratuitous assumption; for if the os uteri is dilated, and open, the hæmorrhage is not confined or internal, unless forced to be so by the application of a plug; *but internal hæmorrhage has been known with a rigid, closed up os uteri.* With respect *to properly stuffing the vagina,* that is frequently effected by coagula, and often to the great mischief of the patient. If such means are really ever called for, the closing of the vaginal outlet with a cold wet pad of linen, firmly pressed to the parts, thereby enabling the vagina to be filled with coagula, is by far the most effective *in preventing the escape of any discharge outwardly.* Nevertheless, it is ten to one if the greater evil of internal hæmorrhage is not produced; therefore, the remedy is worse than the disease. In order to redeem his position, however, Dr. Stewart is very decided in his condemnation of the plug after delivery; he also advocates the use of opium in uterine hæmorrhage.

Dr. Conquest, in 1824, is silent respecting the plug, and may, therefore, be esteemed no advocate for it; he also condemns the extensive use of opium. In 1835, the justly esteemed Velpeau, in his "Traité Complet de l'Art des Accouchemens," has a most valuable chapter on the use of the plug. As he treats this question historically, as well practically, I shall give the substance of his remarks, feeling confident the reader will not be impatient if a long quotation from an author of such merit and general estimation as Velpeau is added. "One of the first ideas which presented itself to the mind of the practical man, in the early state of obstetrical science, in respect to uterine hæmorrhages, on seeing the flow of blood, was, no doubt, to stop the orifice from whence it proceeded. If we are to believe the assertions of Lereaux, the tampon or plug is a most valuable remedy, almost always followed by success; on the contrary, modern writers place very little or no reliance on its utility, and very often consider it as a source of great danger and mischief. Demangeon and Gardien reprobate its use in the strongest terms. James also condemns the plug. If we appeal to facts, Lercaux remarks that Hippocrates, Moschion, P. Eginetes, and Hildani speak of the use of the plug, and that Triæan, Smellie, and Ranchin employed it under the name of an astringent pessary. In the time of La Motte it was the practice of his contemporaries, for he accuses a midwife with having caused the death of a patient by the use of a plug. Portal employed linen pads dipped in *oxycrate.* Hoffman speaks of the plug very favourably. After Lereaux, Tourette boasts largely of its efficacy, *and that even after delivery.* Nægeli praises its use also. The plug, like all other therapeutical agents, important and excellent in the hands of an experienced person, becomes, on the contrary, an instrument of death with the unskilful and ignorant—for example, it appears imprudent to use it at the commencement, when plethora is not overcome, or when the blood is flowing internally, and the uterus is in a torpid, inactive state. Then it never fails to increase the evil by retaining the fluid, distending the uterus, &c. However, it is not yet sufficiently demonstrated whether it be more useful or injurious. This reasoning agrees with a great number of facts, and induces me to believe, with Chevreal, that it is a powerful means in many instances of *compelling the uterus to contract* and expel its contents; it is even questionable if it does not facilitate the expulsion of the ovum, and that it may be used for that purpose after the trial of other means (an excellent admission). Burns decides against the plug. Under the article "Delivery" we shall speak of its use after the child is born. Eight observations recorded by Charey prove, like those of Gallendat and Kok, that after abortion, when the placenta plugs up the os uteri, the evil consequences are not so great as represented. Stewart blames it, and Ingleby places no reliance on its use. From these remarks, Mann and Demon argue that the plug is only necessary before rupturing the membranes; and after that, the various parts of the child form a sufficient plug of themselves. The tampon or plug is generally formed of lint, linen rags, or sponge. Davies says it is not necessary to introduce the tampon farther than the entrance of the vagina; others advocate cylinders of lint up to and within the os uteri; others, again, a purse-like bag filled with astringents; but the most simple is to make a bag of fine linen, cover it with

cerate, and introduce it empty to the fundus uteri, and then fill it with folds of lint or something analogous, and fix it with a T bandage (all of which are easy to describe but not so easy to do); the cerate is only necessary for its easy introduction. Vinegar and oxycrate are less despicable than some imagine; their styptic action may be serviceable, notwithstanding the coagula and flux of blood; it becomes not only a mechanical but a pharmaceutical remedy against hæmorrhage, at the same time. Burns advises a pocket-handkerchief, with a piece of ice in it, as a means of promoting coagula. According to Blundell and Thackray, the coagulum will form of itself, without the artificial plug; which, stopping the flow of blood, compels the vessels furnishing it to close; as a foreign body, *it irritates*, changes the action of the uterus, restores its powers of contraction, and enables it to expel its contents. Should this means succeed, the flow of blood ceases from the external parts, and the symptoms become more favourable; the hypogastrium is firmer, without increasing in volume; and if depletion of the uterus itself does not follow, the party suffers slightly from tenesmus, colic, and a sense of weight in the pelvis. On the contrary, should it not succeed, violent pains and uterine contractions come on, expelling the clots, plug, and uterine contents all at once, or in quick succession; some women suffer great pain from it, although there is no appearance of uterine action, and they earnestly entreat to have the plug removed. Generally, such appeals must not be attended to; so long as there are no signs of internal hæmorrhage, and their anxiety does not produce other mischief, as convulsions, &c., their complaints are rather to be desired than feared; after a little while the functions are gradually and regularly restored. To prevent a return of hæmorrhage it is proper to leave the plug in as long as possible, at least some hours, if not a whole day. When it is of no further use, take off the T bandage, the pressure of which being removed, it will slowly escape; if it does not, take it away. Thus, in labour, as in abortion, the plug represses the flooding, and facilitates the expulsion of the uterine contents. It must not, however, be resorted to except in extreme cases, or, where it is not necessary to retard delivery" (See vol 2, page 103). I have thus quoted at considerable length the opinion and comments of M. Velpeau, on which I shall make some observations, after I have added one or two more authorities of still more modern date. Dr. Blundell, in his excellent system, 1840 Edit., is very decided in condemning the plug in hæmorrhages after delivery, but admits that it may be used with some advantage in the early months of pregnancy; he is also equally decided on the great irritation often caused by the introduction of a plug. Dr. J. Ramsbotham, in his practical observations, Edit. 1842, at page 281, states, "that the plug may sometimes be advantageously employed" in some cases before delivery. And lastly, Dr. and Mr. Campbell, whose joint experience is recorded in their new work, entitled "Study and Practice of Midwifery, 1843," are more opposed than any other authority of modern date to the use of the plug after delivery, and advocate its use very limitedly in hæmorrhages of the earlier months (see page 366). Having gone through a long list of evidence for and against the use of the plug, I shall now proceed to make some observations on the authorities produced.

[To be continued.]

PARISIAN INTELLIGENCE.

(FROM OUR OWN CORRESPONDENT.)

Paris, May, 23, 1844.

On Emphysema Pulmonaris. — By Professor Chomel. — Patients suffering from this disease were supposed for a long time to be affected with asthma; nor was it until auscultation came to the aid of the signs furnished by percussion that an exact diagnosis could be established. This error originated in two sources; by percussion no matity was heard; on the contrary, the sound was clear; and it was a general opinion when, after death, the lung crepitated on pressure, that it was healthy. Thus the physician was unable, during the life-time of the patient, to discover by percussion the precise nature of the disease; and after death the error was perpetuated, for a lung affected with emphysema crepitates on pressure not only as much, but even more than in its normal condition. Nay, further, the distended state of the pulmonary cells was considered advantageous, and it was only when auscultation had made sufficient progress to enable us to perceive the changes which had taken place in the respiration, that the disease was recognized. When the pulmonary cells are considerably distended, no respiratory or vesicular murmur is heard, an evident proof that the air does not penetrate into the parenchyma of the lungs. When the disease has reached a still more advanced period, the air circulates in the bronchi and pulmonary cells, and the respiratory murmur is replaced by a slight hissing noise, or by a sonorous or sibilant rhonchus. In the normal condition the respiration is performed as follows:—An inspiration, followed by an expiration, and then a momentary pause; after which a second inspiration, and so on. In an emphysematous person it does not take place thus; there is a rapid, sharp, jerking inspiration, sometimes almost convulsive, followed by a slow expiration, and *no* pause; on the contrary, the second inspiration commences ere the expiration has ceased. These phenomena once known and duly appreciated, *post-mortem* examinations were carefully performed, and the following lesions were found to exist:—Distension, more or less considerable, according to the intensity of the disease, of the pulmonary vesicles and bronchi, principally near their termination. In some cases, fortunately very rarely to be met with, in which the disease had attained its utmost degree of intensity, the lobules of the lungs are as it were dissected by the infiltrated air interposed between them. As I have just mentioned, this disease was long supposed to be a nervous idiopathic asthma, and this is not extraordinary; for, as I have repeatedly stated to you, many diseases are considered as nervous which are not so, and which do not even offer much similitude with nervous affections. These last are produced by peculiar causes, such as grief, moral emotions, fright, &c. Under these circumstances, nervous phenomena arise, and a disease, *sui generis*, developes itself, presenting symptoms to which the denomination of *nervous* may be given. But whenever a patient is seized with pain in a part of the body over the course of a nerve, you must not conclude that he is affected with a nervous disorder; on the contrary, the more you study nervous diseases, the more you will become convinced that there are few essential neuralgiæ. In the immense majority of cases, they are symptomatic of inflammation in a neighbouring part, or of certain maladies, such as rheumatism produced by a peculiar cause, which acts commonly on the nerves of the affected part.

There is now at No. 10, Salle St. Agnes, a case of emphysema. The patient is a young man, ætat. 22, a joiner; not of strong constitution, but rather lymphatic; skin fair; hair dark; not subject to take cold; had never suffered from rheumatism; during childhood had been affected with *achor*, which persisted until the age of eight or nine, in spite of the most active remedies; since then the only cutaneous eruption he presented consisted in several herpetic spots on the face. The disease under which he is now labouring began, two years ago, by a slight dyspnœa whenever he walked quickly, for any length of time, or carried a burthen. During 1842, three or four months after the apparition of these symptoms, he was affected with bronchitis, accompanied with slight fever, but so intense a dyspnœa, that he was obliged during the night to get out of bed, open his window, and remain there a longer or shorter time, according to the intensity of the paroxysm; fortunately for him, this took place in summer, otherwise such an act might have been productive of the most serious accidents. His health after this continued to be tolerably good, until November last, when he was, without any known cause, taken with bronchitis. This second attack produced, as in the former instance, paroxysms of dyspnœa, which came on principally at night, waking him up on a sudden, and obliging him to get out of bed and remain standing or sitting for some time. It is now three weeks since he entered the *Hotel-Dieu*; since then the paroxysms have been frequent, sometimes two or three per diem, but generally only one, without being preceded by cough. *Bronchitis* was recognized by the ropy, mucous, aerated sputa; frequent cough; subcrepitant, humid rhonchus at the base of both lungs posteriorly; and *emphysema* by the violet colour of the face, and especially of the lips; this symptom in some cases, when the disease is very intense, may not be limited to the face; but the violet colour or *cyanosis* may extend to the whole surface of the body; paroxysms of dyspnœa coming on principally at night; in no disorder are they carried to a greater extent than in this, and there are few practitioners who have not had opportunities of observing cases in which the patients appeared on the point of suffocation; this, however, rarely occurs; in the present instance they never have been so intense, lasting only five or six minutes, whereas, in the case just mentioned, they may last eight or ten hours; bulging out of the thorax posteriorly, which becomes cylindrical, owing to the increased size of the lungs from distension of their cells; sonoriety greater than normal. A remark must here be made, viz: that in very thin persons, on performing percussion, you may find the thorax more sonorous than usual, yet the lungs be perfectly healthy; this shows how careful you must be in establishing your diagnosis. Auscultation permits your examining the lungs in every part, and though you will meet with different results according to the part auscultated, still all are interesting and ought never to be neglected. In the case now under examination, on the left side of the thorax, a sibilant and sonorous rhonchus is to be heard, especially inferiorly, during inspiration and expiration, with diminution of the intensity and extent of the respiratory murmur. In general, when the sibilant rhonchus is intense, it masks completely the vesicular murmur; when the former is less, the latter is heard, but weaker than usual; and in the spots corresponding to its diminution, a slight crepitus is heard instead. Finally, there is almost always entire absence of the respiratory murmur just above the base of both lungs.

These different symptoms are so characteristic, together with the remittence, that it is impossible not to recognise *pneumatosis*. When the patient remains quiet, he seems to be quite well; and it is only when he fatigues himself that he is aware of the existence of a disease, which, though constantly present, manifests itself only at intervals. This remittence is one of the principal features of emphysema; though it sometimes happens that it is intermittent, and that in the intervals of the paroxysms the patient may move about, or go up and down stairs, without experiencing the slightest dyspnœa. It is therefore impossible to deny that, in these cases, the disease disappears for a time to recur again.

The *causes* in general are very obscure. In some cases, it appears after chronic or repeated attacks of acute bronchitis; the pulmonary vesicles, distended by the air forcibly driven into their interior during the efforts made whilst coughing, remain permanently so. But this is not sufficient; evidently another cause exists, though it is impossible to state in what it consists, since bronchitis may last for years without producing paroxysms of emphysema; and these last may take place without the patient's ever having been affected with the former. Although in theory the production of emphysema by bronchitis may be satisfactory, still it cannot be admitted, as experience has not confirmed this opinion; and experience, as you know, is the touchstone in sciences founded on observation. Rheumatismal and herpetic disorders very often precede emphysema and other pulmonary affections; and again, persons labouring under pneumatosis, are very subject to contract disorders of the skin or rheumatism. There seems to be a correlativeness between the two; and this fact might lead to the conclusion:—that the same morbific principle may have two very different results, and that the same cause might produce disorders very different from each other. Thus very often, when rheumatism precedes emphysema, you may observe during the existence of the latter, that the patient is considerably relieved by the presence of the former. The same remarks are applicable to cutaneous eruptions, whether they

ome on spontaneously, or are produced artificially y the use of sulphur baths. Now, as you may emember, our patient was when young affected ith *crusta lactea*, and when older with herpetic pots on the face.

In the *treatment* of this affection, of late, various ew methods have been recommended; thus, in- tead of fumigations which fatigued the patients, mall cigarettes made of belladonna and stramo- ium have been employed. During the paroxysm, the patient be strong, venesection may be had ecourse to; but if the attacks are very frequent, ou must substitute for bleeding, mustard poul- ces or pediluvia, and manuluvia in the evening.

The causes of the paroxysms are numerous; ns, dust, smoke, certain localities, may give rise emphysema. There are few practitioners who ave not had opportunities of observing the influ- nce exercised by the last cause. I myself, among any others, remarked the following:—A lady, henever she went to church, took cold, owing to e dampness of the edifice, and had invariably uring the day an attack of dyspnœa. A young an, whenever he slept in a chamber situated in n elevated spot, was sure to be attacked with yspnœa during the night. A gentleman who sided generally in Paris was, whenever he went to the country, and slept in a house situated ear the Seine, sure to be affected with this dis- rder; he thought that it might be the effect of nagination, but a circumstance occurred which roved that this was not the case. One evening, e went to a house in the country, which he ought far from the river, though the contrary as the case, and at night, as usual, the paroxysms ok place. These facts, to which I could add any more, are sufficient to convince you of the fluence localities exercise on the affection. Cer- in peculiarities therefore exist, which justify to certain extent the opinion formerly entertained, at emphysema was a nervous disease; aud even ow, although it has been studied so carefully uring the life of the patient and after his demise, ere is something in its mode of development hich cannot be explained satisfactorily. The aroxysm may be accounted for by the excitation roduced by the vitiation of the air retained in the ngs; but as to the cause which prevents that uid from coming in and out, we are completely the dark. There may be swelling or thickening f the walls of the pulmonary cells; there may be modification in the quality of the liquids secreted y the lining vesicular mucous membrane; but ese as yet are only probabilities, and are entirely roblematical.

On Resection of the Upper Extremity of the Humerus, with remarks by Professor Blandin.—This patient, as mentioned in my last letter, was resented before the Academy of Medicine quite ell, on the sitting of the 14th of May.)—A young an, ætat. 19; lymphatic; in general enjoyed ood health; in December last he fell from a ird story, and broke his left arm, in the centre nd at the neck of the bone; an apparatus was pplied and the former was consolidated; this did ot take place with the latter, for, whether it was ecause the fracture was not recognised, or, what more probable, because the apparatus was badly laced on the arm, the result was a deformity hich rendered an operation absolutely necessary. n his entry, he offered the following symptoms: ower fragment drawn inwards by the contraction f the pectoralis major, latissimus dorsi, and teres ajor, and upwards by that of the clavicular por- ion of the pectoralis major, and the muscles which xtend from the shoulder to the arm and fore-arm; o much so, that its upper extremity formed a welling at the inside of the arm, which had irri- ated the integuments and caused a commence- ent of ulceration. The upper fragments seemed o be drawn outwards and forwards by the con- raction of the supra and infra spinatus; but I do ot think this to be the case; for these two muscles annot act so powerfully as is supposed, because heir insertion takes place on the upper fragment, ery near its fulcrum; consequently the length of he lever of the power is very short, and therefore nfavourable to its action. The deviation of the pper fragment is therefore more apparent than eal, and the illusion is produced from the lower fragment being drawn considerably inwards by the muscles which are inserted into it, and which act very powerfully. The affected arm is about two inches shorter than the other; the two frag- ments cross each other, the inferior inside the superior; no pain; voluntary movements not much diminished; the fragments seem to move one on the other; so that every one who examined the patient concluded that *pseudarthrosis* existed.

This deformity can only be remedied by an operation; but which ought to be preferred? The ancients, and Celsus in particular, recommended seizing the two fragments and rubbing their ex- tremities one against the other, so as to create an inflammation; this, however, is impossible in the present instance, as the fragments cross each other, and consequently, instead of their extre- mities, the sides only would be acted on. Since that period numerous others have been proposed. I will content myself with enumerating the follow- ing:—1°, an apparatus being placed on the arm, the patient is made to execute certain movements, so as to create an inflammation in the extremities of the bone. 2°, to keep the limb motionless for a considerable length of time, by an appropriate apparatus. 3°, Percy and Physic, of New York, employed the seton passed between the two frag- ments; this method has succeeded in some cases, and at the Hospital St. Louis, M. Jobert de Lam- balle cured thus a non-consolidated fracture of the humerus. 4°, either to cauterize the parts sur- rounding the pseudarthrosis, or after performing an incision on the part, to carry the caustic on to the extremities of the bone itself. 5°, The accidents produced by this method have justly caused it to be abandoned. 6°, to *ruginate* the ends of the fragments. The remarks presented while speaking of the method recommended by the ancients are applicable here. 7°, to cut off the ends of the fractured bone, and then place them in contact with each other, or *resection*. Now, though this operation may be productive of serious consecu- tive accidents, still I consider it the only one by which the fragments can be placed in contact with each other; and as the superior fragments is so short, I will content myself, therefore, with simply destroying the fibro-cellular adherences organized around it, and cut off only the extremity of the inferior. Various methods have been proposed to attain this end. White made a longitudinal incision, extending from the acromion to about four or five inches below the insertion of the deltoides; this method is inconvenient, on account of its being impossible to reach the bone easily. This method was modified by Bent, who made a transverse incision superiorly, so as to form two triangular flaps; the bone is thus comptletely ex- posed to view, and the manœuvre rendered much easier. Sabatier made two incisions, each of about five or six inches in length, an inch apart supe- riorly, and united inferiorly, so as to form a **V**; he then dissected the flap from below upwards, removing while so doing the deltoides. Moreau proposed making two vertical and parallel incisions, the one commencing at the coracoid process, the other at the posterior extremity of the inferior border of the acromion, and then to unite the two by a transverse incision just below the latter apo- physis, so as to form a quadrilateral flap. Manne made likewise a similar flap; but instead of uniting the vertical incisions superiorly, he did it in- feriorly, so that the extremity of the humerus might be exposed to view by merely raising the flap. This last, being the most advantageous, will be adopted. The instruments necessary on these occasions are: the bistoury; scissors; Liston's pincers; an ordinary saw, and that of M. Martin (*scie à molettes*); these are preferable to Jeffray's saw, because the action of this latter shakes the parts too much, and also because from time to time it must be removed, in order to clean it of the particles of bone which prevent its acting; a sound for dissecting. This is a director with a groove; one of its extremities is crooked, and the other fixed on a handle with a hinge. When the bone is laid bare, the curved end of the director must be passed under it, so as to surround it, and the instrument being then made to turn on its axis, its convexity is brought in contact with the bone, and its concavity with the muscles, which by this means may be pushed back, and the ordinary saw made use of without fear of wounding them; a gorge and a leaden mallet; a dissecting pincers; thread; and needles for applying the ligatures. The flap raised and the circumflex artery tied, the fracture was examined, and the two fragments, after crossing each other, were found to be united by a callus, so that the movements made by seizing the lower extremity of the humerus were transmitted to its head—a circumstance very fortu- nate for the patient, as it diminished the danger attendant on the operation. Notwithstanding, it was necessary to remove the upper extremity of the lower fragment, which threatened to ulcerate the skin; the more so as it was free of adherences for about three-fourths of an inch, and presented a sharp point. To accomplish this, Liston's cutting pincers were tried, but failed, and it was, there- fore, removed by Martin's saw, and the angles of the bone snipped off. The flap was then pulled down again, and united to the surrounding parts by the twisted suture; the wound was dressed with linen on which some cerate was spread, and on it lint and compresses were placed, and the whole kept in place by a band. A retentive apparatus had been prepared and made firm by being moistened with a solution of dextrine, but the existence of the callus rendered it unnecessary. The traumatic fever and other consecutive acci- dents were slight; cicatrization took place gra- dually, and the patient left the hospital cured.

A pamphlet from Professor Orfila has just ap- peared, in reply to a series of articles published by a medical periodical. The author passes in review the various charges made against him, refuting them successively. 1° *His official mission to Blaye*, by a ministerial letter, and his reply. 2° *His having introduced the students in the se- condary schools, and the officiers de Santé, to the detriment of the Faculties and the M.D.'s;* by the following tables:—A. Number of students matri- culating in the secondary schools in 1835, 427; in 1836, 340; in 1837, 286; in 1838, 301; in 1839, 293; in 1840, 214; in 1841, 282; in 1842, 294; in 1843, 335. B. Number of students matricu- lating in the different faculties and secondary schools: in 1835, 1522; in 1837, 744; in 1838, 596; in 1839, 637; in 1840, 584; in 1841, 682; in 1842, 632; in 1843, 706. As it may be re- marked, since the promulgation of the ordonnance of the 9th August, 1836, by which the degree of Bachelor of Sciences, abolished in 1830, was re- established, the number of students diminished upwards of one-half, from the absence of illiterate young men. C. Number of *officiers de Santé* re- ceived by the medical juries: in 1837, 348; in 1838, 382; in 1839, 335; in 1840, 323; in 1841, 321; in 1842, 222; in 1843, 283; which shows that, instead of increasing, they have diminished. 3° *That he neglected the interests of the professors of the secondary schools:* by showing that it was at his solicitation that their salary was fixed at £60 per annum for the professors, and £40 for the *adjoints*. 4° *That he did not make known his opi- nions on medical organization, and that his reports in medico-legal cases were constantly unfavourable to the culprit:* by quoting facts proving the con- trary. 5° *That the building of the Hopital des Cliniques was an unfortunate idea, it being neces- sary to remove the patients several times per annum from the clinical midwifery wards, on ac- count of the existence of puerperal fever, which is endemic;* by the following documents:—A. That during eight years and a quarter the hospital was closed only four months and twenty-eight days. B. That puerperal fever was far more frequent at the *Maternité* (lying-in hospital), as it took place during the same lapse of time on twelve different occasions, making a total, when these periods were united, of three years and one month. C. That the average mortality at the *Clinique* was 1 in 23, and at the *Maternité* 1 in 26. D. That the average number of deaths in the surgical wards of the *Clinique* in 1837, 1838, and 1839, was 1 in 20, the same as at the *Hotel-Dieu;* whilst it was 1 in 16 at *Beaujon*, and 1 in 15½ at *St. Antoine*. E. That it was in the medical wards of the *Clinique* 1 in 9; at the *Hotel Dieu*, 1 in 7¼; at *St. Antoine*, 1 in 7½; and at *Beaujon*, 1 in 8. From these facts it is evi- dent that the mortality in the hospital mentioned

as so unhealthy is less in the medical and surgical wards than at the *Hotel-Dieu*, *St. Antoine*, and *Beaujon;* and that of the midwifery wards is scarcely superior to that of the *Maternité*. Finally, after refuting several other charges brought against him, the dean of the faculty of Paris terminates with that which accuses him of protecting specialists, and of favouring their nomination as physicians to hospitals, without undergoing the customary ordeal, *the concours*. This has reference to lithotrity, and orthopedy; but M. Civiale was named before the author formed part of the *Conseil des Hopitaux;* and as to the nomination of M. Guerin, it is true that it was through his recommendation that it was done, and he did it because he considered it his duty to confide to other practitioners certain specialities, when they were not performed by the medical staff of the hospitals. Who can gainsay the services rendered by M. Civiale to mankind?—and ought the poor to be deprived of this mode of cure, when such eminent individuals as Ant. Dubois, Lisfranc, Sanson, &c., to avoid a painful and dangerous operation, allowed lithotrity to be performed on them? As to M. Guerin, there was no hospital in which orthopedy was performed, and the duties were confided to him for the following reasons:—He had obtained the first prize awarded by the Academy of Sciences; he cured three patients affected with a notable deviation of the spine, confided to his care by the *Administration des Hopitaux*, the treatment having lasted eighteen months, during which time they remained at the *Muette* gratis; he also cured five other patients, and ameliorated the position of three. To what end was this done? In the hope that scientific discussions would thus clear up the doubts which still exist. This hope, in all probability, will shortly be realized, as a commission has been named, at the request of M. Guerin, to examine the results obtained by that practitioner, who, be it said to his honour, has done, and still does, all he can to render their task lighter.

Academy of Sciences. Sitting of the 20th May. M. Elie de Beaumont, V.P., in the Chair.—Books received: "Magnetical and Meteorological Observations made at the Royal Observatory, Greenwich, in the years 1840—1841, under the direction of G. B. Airy, Esq., M.A., Astronomer Royal." "Calcutta Journal of Natural History," by Messrs. J. Mc Clelland, Bengal Medical Service, and W. Griffith, F.L.S., Madras Medical Service.

On the Action of Ammonia on Butyric Ether: a memoir presented by Mr. G. Chancel. Since the researches of Professor Dumas, it is well known that oxalic acid with ammonia gives rise to what that distinguished professor called *oxamides*. This fact led the author of the memoir to conclude that similar results would be obtained with the butyric ether, and which was confirmed by experience. —*Butyramide:* In introducing one part of butyric ether with five or six parts of ammonia into a glass bottle, and agitating it frequently, the mixture is complete in eight or ten days; after which, on evaporating the liquid to one-third of its primitive volume, and cooling, *butyramide* is deposited under the form of crystals, of a pearly white colour, transparent, not changed by being exposed to the air; of a sweet and cool taste, followed by a bitterish one; melts at 298° F., and forms a colourless liquid, easily volatilized, and the vapours thus formed burn, and leave no residue; soluble in water, especially when hot; at 212° is decomposed by the alcalies into ammonia and butyric acid; analysed, it furnished a result which led to the following formula:—$C^8\ H^9\ Az\ O^2 = C^8\ H^7\ O^2 + Az\ H^2$; equivalent, represented by the number 1089·54. The formation of *butyramide* may be explained by the following formula:—

Butyric ether	$C^4\ H^5\ O = C^8\ H^7\ O^3$
Ammonia . .	$Az\ H^3$
Butyramide .	$C^8\ H^7\ O^2 = Az\ H^2$
Alcohol . . .	$C^4\ H^5\ O = HO$

On the Compounds of Phosphorus.—M. Pelouze read a report on a memoir presented by M. P. Thenard (vide *Medical Times*, Vol. X., No. 239, p. 51). Before speaking of the memoir, said the reporter, I will briefly mention the different researches of which the phosphurets of hydrogen have been the object. Gengembre, in 1783, in treating phosphorus in a solution of caustic potass, discovered a gas composed of phesphorus and hydrogen, which took fire spontaneously as soon as it was exposed to the air. This gas, preserved on mercury or water, loses gradually its spontaneous inflammability, and deposits a yellow substance, which was supposed to be phosphorus until 1835, when Severrier showed that it was a solid phosphuret of hydrogen. Some years after the discovery of Gengembre, H. Davy remarked that phosphorous acid, heated with hydrogen, produced a non-inflammable phosphuretted hydrogen gas, which he considered as different from the former. Their exact composition being still unknown, several chemists endeavoured to fill up the hiatus. Thomson and Vauquelin sought to fix the exact proportions of hydrogen contained in these two compounds; but subsequent researches did not confirm their opinions, for the precise knowledge of their composition was first given by Messrs. Gay-Lussac, and Thenard, who found that the spontaneous inflammable gas contained one and a half of its volume of hydrogen. M. Labillardieu, and still more recently, Professor Dumas, confirmed these remarks. The latter in 1826 published a long memoir on this subject, in which he stated their formulæ as: $Ph\ H^2$ and $Ph\ H^3$; the first representing the spontaneous inflammable, the second the non-spontaneous inflammable gas. Until 1827, these formulæ were generally adopted; but at this period Mr. H. Rose raised doubts as to their exactitude, and asserted that the spontaneous inflammable gas contained less phosphorus than the other; and consequently assigns to it the second formula; and that the gas which had lost its inflammability on mercury or water was a mixture of the two. In 1832, the same chemist pointed out that the two, though so different in their properties, presented a similar composition, and are consequently isomeric modifications of each other. Mr. Graham, in the hope of discovering the cause of their inflammability, submitted them to a further examination, and though the results obtained by this distinguished chemist was not exactly all that he sought for, still they were useful in shewing how small a quantity of a substance was necessary to render a gas inflammable. Finally, M. Laserrier, in 1835, published his researches on the phosphuret of hydrogen, which were confirmed by M. P. Thenard. After these remarks the reporter analysed the memoir of M. P. Thenard, and concluded by proposing its insertion in the *Recueil des Savants Etrangers*. (Adopted.)

On a Method of Embalming Bodies.—Dr. Després addressed a memoir, in which he exposed his method, consisting in injecting the corpse by the arteries or veins, with substances capable of preserving it, under the form of a vapour or gas, and he accomplished this by distilling vegetable and animal matter. A body will be disinfected in ten or twelve days, by two distillations of one or two hours each, and this is owing to the products of distillation and the heat generated. The greatest difficulty the author has met with is to prevent the epidermis falling off; this principally takes place in the face and is caused by the presence of a serosity, which accumulates between the dermis and the epidermis. The tissues are perfectly preserved, the muscles are of a roseate colour, and the body exhales a slight smoky smell, which, however, may easily be removed. In concluding, the author announces his intention of presenting shortly a memoir on the causes of fermentation in general, and putrefaction in particular.

Academy of Medicine. Sitting of the 21st May. M. Caventou, V.P., in the Chair.—Professor Moreau made some remarks on the difficulty with which sounds were produced in the new assembly room, and asked if this defect could not be remedied. M. Dubois (d'Amiens), said that measures had already been proposed to attain that end.

Dr, Dieulafoy, chief surgeon of the hospital de la *Grave Toulouse*, addressed two observations of ascites cured by an iodated injection.

M. Rochoux observed that the formula mentioned in his report on the memoir of M. Marochetti for the cure of epilepsy could not be considered as a secret remedy, since it was at the disposal of the members of the Academy. After some remarks from Messrs. Nacquart, Gueneau de Mussy, Boullaye, the academy maintained the decision taken in the previous sitting.—M. Barthelemy requested that M. Gerard might form part of the commission named to examine the preparations of M. Auzoux—(adopted).—M. Londe requested that the two commissions named to examine the memoirs on the mode of preserving bodies, be united into one. This proposition, seconded by M. Chevalier, was adopted.

On the conservation of medicinal plants. M. Guibourg read a report on a memoir of M. Sabatier on this subject. The methods adopted by the author were maceration or fermentation, and the substances thus prepared furnished a liquid darker, and containing more active principles, than that obtained from dried plants, and consequently ought to be preferred. Conclusions—thanks to the author—(adopted).

M. Hamel read an observation on *obesity of the umbilical chord*, produced by obliteration of the arteries and veins. Commissaries—MM. Moreau, Adelon, and Capuron.

On Scrofulous Ophthalmia.—Professor Velpeau read a report on a memoir of M. Morand, physician to the colony formed at Mettray. The author states that he remarked that the seat of the inflammation was principally in Schneider's membrane, and that it was accompanied with coryza and cephalalgia. The treatment which succeeded the best, was the introduction of the nitrate of silver into the ductus nasalis. He employed it under the form of solution, ointment, or in a solid state. The reporter stated that since reading the memoir, he had examined several scrofulous patients affected with ophthalmia, without meeting with this symptom. In conclusion, the reporter proposes—1° Sending the memoir to the *Comité de Publication*: and 2° To place the name of its author on the list of corresponding members.—Professor Roux did not think that the seat of the disease ought to be considered of greater importance than the cause.—M. Dupuy remarked that when the deuto-chloride of mercury was given for some time to animals, at the dose of gr. iv. or gr. v. per diem, the superior cervical ganglion of the sympathetic nerve, became softer, and altered in its structure; now this ganglion anastomoses with the nerves of the eye, and consequently its lesion will probably exercise a prejudicial influence on the diseases of that organ. It is, probably, owing to this, that in syphilitic ophthalmia, mercury sometimes fails, while sudorifics, such as the *Rob de Laffecteur*,* for instance, succeed.—M. Martin Solon thinks with Professor Roux that the importance of the cause is not sufficiently appreciated, and was astonished to hear Professor Velpeau state that the scrofulous diathesis is unimportant in diseases of the eye. Formerly this demonstration was sufficient to indicate the treatment, and must it now be understood that an anti-scrofulous treatment is unnecessary?—M. Castel does not deny that scrofulous ophthalmia may exist, but thinks that in the present instance the denomination is not applicable, the disorder having been epidemic. This is not the only point in which, in his opinion, the work is defective, as the author has neglected to establish the analogy that existed between the membrane of Schneider and the conjunctiva.—M. Rochoux, although he admits that the knowledge of the precise seat of the disease is

* The exact composition of the *Rob de Laffecteur*, not having been made public, M. Bouchardat proposes replacing it by the following:—℞ Sarsaparillæ radic. lb. iv. Folior. sennæ ℥iiiss. semin. anisi. Cort. cinnamon, ā ā. ℥iss. succ. spiss. sambuc. nig. ℥iiiss. sacchar. lb. viij. Aquæ puræ q. s. Cut the sarsaparilla root into slips, pour water on it and the senna, and keep the mixture at 140° F. As soon as the water is saturated, draw it off, and add fresh: this must be repeated until all the active principles of the two remedies are removed. Evaporate the whole to lb. iv, add the juice of the elder berry and the sugar, and pour the liquid while still hot, on a satchel containing the aniseed and the cinnamon, bruised together. Dose—five or six tablespoonfuls per diem, in a glass of an appropriate tisanne.

important, thinks that the cause is far more so; for instance, syphilitic ophthalmia may attaek the eye, the lids, &c., and yield to an anti-syphilitic treatment.—Professor Velpeau.—As to the reproach made on the author for having neglected mentioning the analogy that exists between the pituitary membrane and the conjunctiva, it was not because he was unacquainted with it, but because he considered that it was generally known, and, therefore, needed not repetition. And as to the influenee exercised by scrofula on the diseases of the eye, I am far from denying it; but what I cannot admit, is, the mode in which this denomination is given by the generality of oculists; viz., that it is possible from the form and the symptoms of tho disease of the eye, to state of what constitution the patient is; for, by judging thus, persons have been said to be scrofulous, who had never offered the least sign of that disorder. Again, a phlegmasia may be produced by the same cause, and yet present different characters, according as it affects the lids, or the various parts of the eye; and it is impossible to diagnostieate serofulous or rheumatic ophthalmia with such certainty as syphilitie; because in the last, the disease (syphilis) is produced by a virus introduced into the system; whereas the eause of the two former eseapes all our modes of investigation.—Professor Gerdy does not think it possible, in an organ so small as the eye, to designate the precise spot affected; nor is it possible to suppose that the inflammation will remain limited to any particular spot, without extending itself to the neighbouring tissues. Whenever a person is affected with ophthalmia, he presents at the same time some general symptoms; consequently, instead of dividing the diseases of the eye, as the Germans, he thinks they ought to be considered in a more general manner.—Professor Velpeau thinks that if the German pathologists have established too many sub-divisions, on the other hand, Professor Gerdy falls into the opposite extreme, when he says that it is indifferent what tissue is affected, since they are all accompanied with general symptoms. But do not similar phenomena take place in the various diseases which attack the lungs, the heart, &e.?—and who, on that account, would ever think of studying them in a general manner, and not consider them as different affections, according as they are situated in such or such a tissue of the organ. The same remarks are applicable to the diseases of the eye; for, though general symptoms are similar in all, each one has its peculiar one; thus, in keratitis, there is no photophobia, but vision is impaired; on the contrary, in conjunetivitis, there is an abundant photophobia, pain by exposure to light, but sight unimpaired. And the treatment, how different! Therefore, although the eye is so small, still it is possible, by a careful and attentive examination, to discover the precise tissue affected; and thus the diagnosis may be established, and an appropriate treatment adopted, with greater certainty than by the mode hitherto pursued.—Professors Berard, Gerdy, and Roux, having requested to be heard, the Academy, after adopting the conclusion of the Report, decided that the discussion should be continued in the next sitting.

Cancer of the Eye-lids.—Professor Gerdy presented a patient on whom he had extirpated a cancerous tumour, two years ago, at the external canthus; the disease having relapsed, a second operation became neeessary; and in performing it, the greater part of the upper lid was removed. The Professor here remarked how unneeessary it was to to make an artificial lid, since, as might be seen, the patient could close his eyes with perfect ease,—and that the obliteration of one of the puncta lachrymalia is not productive of any very serious aeeidents.

GARLAND DE BEAUMONT, D.M.P., B.L., & S., &e.
Honorary Physician to the Spanish Embassy.

A very exeellent Varnish for Objects of Natural History is thus made by Mr. Balls, of Dublin, and used for Shells, Fish, &e.

℞. Mucilage of Gum Tragaeanth, ℥j.
Mucilage of Gum Arabic, ℥j.

Mix them, and add spirit with corrosive sublimate, so as to precipitate the more stringy part of the gum.

DR. HARE, OF PENNSYLVANIA, ON HUMAN ELECTRICITY.

(From the Chemist.)

Liebig designates organic chemistry as "*the chemistry of compound radicals.*" Nearly twenty *primary* or derivative compound organic radicals have been inferred to exist, of which nearly an equal number are severally generators of acids and bases.

By Liebig the diversity of these radicals, as respects properties, is to be ascribed either to the proportions by weight, in which the ultimate elements are present, or, when the proportions of these are equal, to the mode in which they are grouped. But I conceive that, without resorting to the assistance of causes on which heat, light, electrieal reaction, and nervous influence are dependent, the proportions or the grouping of their ponderable elements furnishes no adequate cause of the wonderful diversity and astonishing activity of certain organie products.

Agreeably to Faraday's inferences, a grain of water, or a grain of zinc, eontains as much electrieity as eight hundred thousand square feet of well charged coated glass surface. Admitting that these inferences are greatly beyond a true estimate, with such experimental evidence before us, is it reasonable to overlook the quality of matter on which its electrieal efficacy is founded? Of the existence of some potent eause of electrical phenomena there can be no doubt, and, whether it be of one nature or another, certainly it plays a part of infinite importanee throughout the creation.

We may have under our eyes two little heaps of powder, eonveying to the senses no proof that there is any difference in their composition, or any potency peculiar to either. One of these, subjected to the blow of a hammer, will explode with a startling report, and with violenee sufficient to indent the steel; the other will cause, under like circumstances, no similar result; but if swallowed by an animal will be productive of death. A drop of prussie acid may produce an effeet no less fatal by falling on the tongue of a dog, constituted of the same simple ponderable elements as the acid. The eonsequenees are more like those of lightning than such as would result from the impression made by a poison, agreeably to the idea of poisons generally entertained.

We have innumerable essential oils, spices, and other pungent vegetable productions—such as einnamon, pepper, mustard, and horse-radish, which have upon the organ of taste, smell, or feeling, an endless variety of effects. Of the substances thus alluded to, many consist of nearly an equal number of atoms of carbon and hydrogen, while the rest vary only in having, in addition to these ingredients, a small proportion of oxygen. It is quite a mystery how, by the powers of vegetable life, these ponderable atoms are made to acquire such various qualities; but, as in the case of the fulminating powder, I have ascribed the result to the ageney of imponderable matter, so in the case of the active substanees engendered by vitality I should make a similar suggestion, their adventitious ehemical, medicinal, or poisonous energy being dne to the association of imponderable matter with groups of ponderable atoms.

It seems to me rather unreasonable in Liebig to speak so boldly as he is wont respecting physiological phenomena, while making no effort to explain the part performed by electricity in regard to them. Is there not reason to suppose that he has been so much occupied by the analytical department, that he is not sufficiently aware of the difficulty of doing justice to the electro-ehemical department of physiology?

The power of producing all the phenomena of voltaic electricity, which the gymnotus electrieus has been fully shewn to possess, can leave no doubt respecting the capaeity of the animal organization to generate electricity. It will be admitted that the animal nerves have functions to perform of the highest importance to animals; and, of all known agents, is there any which ean be conceived to be the medium of their efficacy, exeepting the electric fluid, or that cause of electrical phenomena which is usually thus designated.

So long as there is so much evidence of the potentiality of electro-chemical reactions, whatever may be their cause, and so long as we remain ignorant of the manner in which vital, electrical, and chemical forces are associated, is it not premature to expect any satisfaetory explanation of the processes of life?

ON POTATOE OIL AND THE PURIFICATION OF BRANDY.

BY PROFESSOR DÖBEREINER.

It is known that the brandy of potatoes, infected with the disagreeable taste to which the name of *fusel* has been given, is much ameliorated, with respect to both taste and odour, when mixed with one-tenth part of its bulk of vinegar, and a little sulphuric acid, and distilled after several days.

It was formerly, and still is, believed that by this process a little acetie ether (acetate of oxide of ethule) is formed, and that this is the eause of the improvement of the brandy. This is an error, for very little or no acetic ether is formed, but, indeed, acetate of oxide of amylol, which has so agreeable a taste and odour of fruit, that it may be employed for perfuming apartments and for the preparation of ratafias of fruits. The readiness with which oxide of amylol combines with acetie acid is infinitely more considerable than that which oxide of ethule exerts, and does not require, like the latter, the aid of a mineral acid.

The action of chloride of lime on the brandy of fusel, which I discovered more than thirty-six years ago, has no other origin, since the hydrated oxide of amylol or potatoe oil is metamorphosed by the salt, and thus converted into an ethereal substance of an agreeable taste.

Perfectly calcined wood and animal charcoals separate the potatoe oil completely, in brandy which contains it, only when the liquid has been previously diluted with water, by means of which the force with which the alcohol eontains this oil in solution is diminished. In rather concentrated brandy, or alcohol, this oil cannot be separated by any kind of charcoal.

The most simple mode of removing the fusel from brandy consists in rectifying it in Pistor's disinfecting apparatus. The oil of fusel is thus collected, as a secondary product, in such large quantities that it may be used for the purposes of illumination, on account of its brilliant flame, or for other uses in the arts. I received some time ago several quarts of this oil from an establishment for the disinfection of brandy at Magdeburg, and I have been enabled to study its properties, principally with relation to the purification of the brandy of potatoes; the results which I obtained are those above alluded to, and I have also completely convinced myself of the correctness of the opinions of MM. Cahours and Dumas, who regard the fusel potatoe brandy as analogous to alcohol and pyroxylic spirit.

I will call this oil, on account of this analogy, *amylol*, and will only remark that it acts with finely divided platinum in the same manner as spirit of wine and pyroxylic spirit; thus, when it is put in contact with these liquids, in presence of atmospherie air or oxygen, it absorbs four atoms of this gas, and forms one atom of valerianie acid and three atoms of water.

In a German vinegar manufactory I remarked, some time ago, a very evident odour of valerianic acid, and I very soon discovered that, for the preparation of vinegar, potatoe brandy which had not been disinfected was used. It would certainly be interesting to ascertain whether in the vinegar-mother liquors there is not alcohol alone, but also potatoe oil or amylol, which might be oxygenized, and whether we might not find, in commerce, vinegars made from alcohol containing valerianic acid. It appears probable that pyroxylic spirit, diluted with much water, might be oxidized in these apparatus and converted into formic acid; it is an experiment which I recommend to those who are in a position to make it.

TREPHINING IN INJURIES OF THE HEAD.—Dr Laurie and Dr. King, in a paper published in the *London and Edinburgh Medical Journal*, give the following rules for the operation of trephining in injuries of the head, when there are present profound coma, paralysis, and other symptoms of severe cerebral lesion, as the most rational, and best supported by experience. 1st. When the shock has passed off, and the patient is in a condition to bear the operation, we should operate where the state of the bone is such as would warrant interference in mild and less urgent cases. In other words symptoms of severe compression should not prevent us from operating in those cases in which the state of the bone, irrespective of cerebral symptoms, seems to warrant the operation, although our hope of benefit from the operation is very slight. In such cases we ought not to expect that removal of depressed or comminuted bone will take with it the symptoms of compression; all we can look for is that it will render the injury less complicated by removing an obvious source of irritation. 2dly. Where we have good grounds to suspect extravasation, we operate to give vent to the offending fluids; here also our hope of benefit from the trephine is very slight. 3dly. In all other cases of this class of injuries, they think it good surgery not to interfere, and it appears to them that nearly the same rules apply to those cases in which symptoms of concussion are united with compound fracture. If the state of the bone *per se* demand interference, we ought to operate, to take away a source of irritation, not in the hope of removing the symptoms of concussion. In all other cases complicated with concussion, we ought not to interfere. Dr. Lawrie and Dr. King express their opinion strongly relatively to the use of the trephine; they say that it would not have been greatly to the disadvantage of the patients admitted into the Glasgow Infirmary if a trephine had never found its way within its walls. Like all other operations however it is too often tried as a forlorn hope in hopeless cases, and in the more favourable is delayed until the proper period for its performance has passed. They believe that there are not many cases in which it can do good, butif these were but properly selected,and promptly and effectually operated on, statistics would shew fewer operations, and not only relatively, but absolutely more recoveries.

DISEASE OF THE TIBIA FROM INJURY.—Dr. Chisholm relates in the *London and Edinburgh Medical Journal*, the case of a man forty years of age, who was admitted into the Northern Infirmary, Inverness, with disease of the left tibia, following a blow from a stone inflicted a twelvemonth previously. On examination, a large ulcerated excavation, about four inches by three, was observed occupying part of the middle and inferior thirds of the leg on its inner and anterior aspect. No bone could be felt in the cavity, and the probe passed down to below the external malleolus. Several fistulous communications were also found on the inner side of the limb around the ancle-joint. Numerous pieces of bone had been discharged. In consultation on the case, amputation was unanimously resolved on, but previously to its performance, the anterior tibial artery became involved in the ulceration, and hæmorrhage to a very large extent was the result. The operation was consequently performed as speedily as possible, and the man ultimately recovered without having had a bad symptom.

OBSTINATE CASES OF URETHRAL STRICTURE.—In these cases Mr. Syme deprecates an attempt to effect dilatation by bougies, as no less dangerous than useless. He recommends division of the stricture, either by subcutaneous puncture, when it is seated in the pendulous part of the canal, or by a free incision upon a grooved director, when it lies behind the scrotum, as having proved completely successful in cases that had resisted every form of dilatation.

NEW DIAGNOSTIC SIGNS IN TYPHOID DISEASES.—M. Ranque states, in the *Journal de Medicine et de Chirurgie Pratiques*, that the pathognomonic sign of a fever which is likely to prove serious, is a coating like mother-o'-pearl of the gums, between the molar teeth. If, in addition, leeches have been applied to the patient, the bites will assume the color of indigo. This last symptom is quite characteristic, and when observed, we may rest assured, that however mild the symptoms may appear, they will ere long assume a very serious aspect. M. Ranque further states, when this pearly tint between the molar teeth disappears under the pressure of the finger, the typhoid symptoms will not be very serious; but if the exudation be thick, not disappearing under pressure, and occupying many of the interstices between the teeth, we may look for a severe and long-continued attack. As the disease advances, the colour of the appearance changes; it becomes black and sordes appear. The same remark applies to the leech-bites. The deeper the indigo colour, the more serious is the attack likely to prove. If these signs exist at the outset of an attack of pyrexia, they are, according to M. Ranque, infallible symptoms, either of a typhoid fever, or of inflammation accompanied by symptoms of a typhoid character.

TREATMENT OF STRICTURE BY POTASSA FUSA.—At a recent meeting of the Westminster Medical Society, some misapprehension was evinced relative to the use of potassa fusa in the treatment of stricture. We have therefoee referred to Mr. Wade,s excellent work on strictures generally, in which we find that mode of treatment strongly advocated. It was originally introduced by Mr. Whately, a cotemporary of Sir E. Home's, who recommended it in the treatment of stricture in preference to the nitrate of silver; but his practice has generally been regarded as inefficient, from the extremely minute quantity of the potash he employed. The twelfth part of a grain was the largest quantity he thought ought to be used, and that only once a week. He considered the nitrate of silver beneficial in cases of impervious stricture. Mr. Wade uses it more freely and more frequently, and with proportionately greater success. He finds it entirely free from any ill effects, and infinitely superior to the argenti nitras. The saponaceous compound formed by the dissolved potassa fusa, by the oil and mucous secretion of the urethra, proves less irritating to the lining membrane than the more watery discharge caused by the argenti nitras. The application of the potassa fusa also produces but little pain, or subsequent irritation. The nitrate of silver, when freely applied to a stricture, produces a slough; inflammation consequently ensues, adhesive matter is thrown out, causing more or less consolidation of tissue, so that in hard fibro-cartilaginous obstructions of any extent, it often happens but little progress is made after several applications of the remedy. The potassa fusa appears less disposed to cause adhesive inflammation than the argenti nitras, to which circumstance may probably be chiefly ascribed the greater success of the former than the latter, in many cases where the strictured portion of the urethra is of considerable extent. The effects produced by the application of the potassa fusa are, a sensation of heat, and a slight muco-purulent discharge, occasionally tinged with blood. Mr. Wade has never seen hæmorrhage follow its use, nor strangury either, unless it was previously present. He has never observed a slough passed after its application, and it seldom causes the painful scalding sensation occasioned by the urine passing over an ulcerated surface. He employs from an eighth of a grain to a grain at a time, inserted in a hole made in the end of a rounded, soft bougie, which is then rapidly passed down to, and steadily, but firmly, pressed against the stricture for one or two minutes, its exact situation having been previously ascertained. The application may be repeated every three or four days. Mr. Wade uses potassa fusa in cases of hard, fibro-cartilaginous strictures, impervious to instruments, without the employment of injurious pressure;—in hard strictures of long standing, which, although admitting the passage of a small bougie, bleed freely on its introduction: in irritable strictures—in spasmodic strictures, not arising from acute inflammation of the urethra—and in strictures which have a marked disposition to contraction. He believes that it acts beneficially, first, by its dissolvent powers; secondly, by promoting absorption, and stimulating the congested vessels to contraction; and, thirdly, by relieving irritability and inflammation.

LIENTERIA.—Dr. Summers, of Biggar, attended a woman forty years of age, who, after having laboured under obstinate, dyspeptic, and hepatic symptoms, discharged from the bowels at various times a quantity of brown matter, like sand or small gravel, and also large quantities of fatty and fleshy matters, which were examined by Dr. Maclagan, who ascertained that none of them were of intestinal formation, but that they consisted of indigested or indigestible matter passed along with the fæces. Among the matters passed were recognised parts of the skins of potatoes, bits of cheese, and fat: and the brown powdery substance resembled a vegetable matter, probably a seed bruised.

NOTICE TO CORRESPONDENTS.

Anglo-Hibernicus *is not more severe than correct in his strictures. Raspail indulges in not a few absurdities in speculation; and in his classifications and statement of facts in comparative anatomy, or physiology, is not unfrequently erroneous. But Raspail's character, we should hope, is too well known to allow any one to be blindly guided by him as by an authority. A chemist of great originality, if not of great soundness; a conjectural physiologist of high imaginative power—we publish his writings, less to guide than stimulate inquiry,—less, as showing what* has, *than what* may *be discovered. With much alloy, there is frequently much pure gold, and veins are occasionally struck upon, which neglected by the discoverer, are well worth being traced by others. We need say, however, the less on this subject, as Raspail's papers will not run through many more numbers.*

Surgeon, M.D.—*We are authorised to answer our correspondent's question respecting the operation for congenital cataract, in the affirmative; we have, also to express our regret that the very valuable lectures delivered by Mr. Guthrie, have been so long suspended, owing to his time being so fully occupied by his exertions to uphold the Profession's claims on the Medical Poor Law Relief Committee. We have, however, good reason to inform our readers that they will be soon resumed.*

"An Areadian" *must excuse our non-publication of his note. First, it is an anonymous notice of a communication published with the author's name; and, therefore, we like it not. Secondly, it differs wholly from our opinions, and, therefore, we approve it not. The observations of Dr. Willshire, which have met our eye, and we have read his excellent articles with much care—show all the qualities that characterise a judicious and learned physician.*

M. U. S.—*We thank our correspondent, but must decline the publication. Enough has already been communicated to us to secure the person the ignominious loss of both diploma and license. We are disposed, however, to give him a forbearance he has omitted to shew to himself.*

G. S.—*We shall reserve all papers on the chemical controversy till the close of the series we are now publishing. We shall then take a review of them.*

Mr. Peter Martin, of Reigate, *sends us a copy of resolutions passed unanimously by the "Surrey Benevolent Medical Society," and which speak in very laudatory terms of the exertions of the Apothecaries' Company to elevate the profession, &c. The mover and seconder were Dr. Mayd, of Epsom, and Ed. Westall, Esq. of Croydon. No other names are mentioned.*

Dr. Daniel Cronin, of Liverpool, *thus writes:*—"*In two cases of intermittent fever, which have come under my care during the last fortnight, one intermittens quotidiana, the other intermittens tertiana, I found the sulphate of quinine, mixed with equal parts of Scheel's prussic acid, and given in doses of two grains of the quinine, with two drops of the acid, and three or four drops of the liq. opii sed., to have a speedy effect in relieving the patient.*"

Dr. Collier *thus addresses us:*—"*A correspondent in referring to the exposure of the* 'clairvoyant patient,' *used by Mr. Vernon, has inadvertently stated, that I was lecturing in conjunction with him, which error, I am desirous of correcting, as I have not, in any way, been engaged with any other person. I will also boldly state, that the majority of cases per-*

sented to the public as mesmerie, are miserable deceptions, and must tend to seriously injure the cause of mesmerism."

We have received several letters on the Apothecaries' Company; some laudatory, and many more condemnatory of it, in its relation to the high standing of general practitioners. We shall notice some of these next week.

Several other correspondents must lie over till next week.

THE MEDICAL TIMES.

SATURDAY, MAY 25, 1844.

Be thine own advocate, and thou hast a fool for thy client.

A SCRIBBLING epidemic seems to have got hold of our medical corporations. The last victim we have heard of is the College of Surgeons, to whose last "speech and confession," as given in another column, we respeetfully direct our readers' attention. We really know not what to make of the document. The Counеil tell us that their "statement is published," first, to "explain" the New Charter, and, secondly, to "observe" on "its ultimate effect." Now, first, it happens that the explanation is rather late, is rather unrequired, and just explicates what was clear as daylight; and, comically enough, leaves utterly unnotieed whatever was dark and perplexed. And, secondly, as the "statement" assures us that "no alteration in the Charter, nor any legislative enaetment, can materially change the condition of those who have been for some time established in practice," we fear the observations on the "ultimate effect" (how strange that effects should be ultimate?) are sadly thrown away; for if the *ultimatum* be just *nihil*, the subject is hardly important enough to justify the expenditure of three folio pages of that costly article—corporate wisdom. Thus worthless as a *professed* explanation, and futile as a proelamation of the sage Council's "observations on ultimate effects," to what are we indebted to this extraordinary document? The authors will not admit that it is a defenee of themselves: and 'tis said that one of the best of the body thinks it but an equivocal defence of the Charter A trap for students' fees it is not—for the displaeement of the present system of Examiners is complacently commemorated: neither is it a puff for business—for the only name honoured with publicity is "Edward Belfour," Seeretary, and he is known to be out—of practice. For once, therefore, we are eompletely mystified. We have puzzled our brain into corners, and can't find a *cui bono*. Sentenees in sequence there are, and not a few of them, there are good periods, not bad grammar, some cleverness, mueh plausibility: in short, all sorts of tolerable qualities, except a reason that we, the public, should have three folio pages staring before us, in fair-set type,—corporate wisdom in daggle-tailed garments, dancing before us in the *kennel*, in the shape of a widely-diffused eircular.

The thing, we know, is neither rich nor rare,
But wonder how the devil it got there.

The Council cannot escape a reference to the new fellowships; but they leave us almost wholly in the dark as to their opinion on that vexed question. They tell us that for one of the objeets sought in making this invidious division—viz., the formation of a eonstituency for eleeting the Council — "*simpler* means" might have been adopted: and on the second object, "the promotion of emulation among Surgeons," they bestow no direct approval, whilst attributing to it very partial advantages. They indeed tell us, that if the Charter makes a differenee of rank, the higher position may be acquired by any member's "industry and talents." It is within his reach: so is the Councillorship, so is the Examinership, and so, they might have added, is the Governor-Generalship of India. If they had kindly explained how mueh a member is to pay in hard cash, who, by his "industry and talents," is to acquire the Fellowship: if they had unfolded the labyrinthine intricaeies through whieh, when a Fellow, he must find his way to the Councillors' board: if they had exposed some signs by which, their resignation being given, Elective Councillors for the present generation might appear less like the one prize of a lottery, less like one of those possibilities which foolish Fellows may speculate about, but never realize,—in any of these cases we should have had a better opinion of the utilities of this mistimed statement, and of the ingenuousness and prudenee of its authors.

The following paragraph is every way most unfortunate. The indiscretion it evinces, in a doeument drawn up so cautiously, is marvellous: and eertainly it is not more deficient in taste than in sense.

The great majority of the Members of this College are less engaged in the practice of Surgery than in that of Medieine, Midwifery, and Pharmacy, and many of them have arrived at *well-deserved eminence* in these latter departments of the Medical profession. *But* the Council, keeping in view the objects for which the Collegc was especially established, have felt it their duty, in the nomination of Fellows, to regard chiefly the qualifications of Members as practitioners in Surgery, or as improvers of those sciences which tend to its improvement.

We have here a lamentable indication given us, on no bad authority, of the fate of high merit in the Medical Profession. A surgeon who has gone through the prescribed surgical education, — honourably passed the highest examination experienced by the best of his contemporaries—and, more fortunate than most of them, for he is arrived at that rare height, "well-deserved *eminence* in Medieine, Midwifery, and Pharmacy:"—such a benefactor to humanity and honour to his profession, is, on one side, excluded, as a matter of "duty," from the honours of the College of Surgeons; and, on the other, is badged, as a matter of law, as but a member on sufferance of the humble Hall of Apothecaries. His own corporate position and eminent personal deserts form moral antipodes. Alas! for the Guthries, the Brodies, and the Greens, if accident had made them *country* instead of *town* General Practitioners. They would have performed their present *medical* practice (the best part of their business) as Licentiates of the Hall; and when asking for the recognition of their eminence in the College with which they felt some honour in being connected, they would hear other Brodies and Guthries assuring them that their "eminent merits" have just fitted them for a subordinate station!

There is a *naivete*, worth special remark, in the manner in whieh the Counеil express their opinion that men, eminent in Midwifery, Medicine, and Pharmaey, have nothing to do with "those scienees which *tend* to the advaneement of Surgery." The accoueheur, saving two lives by a single surgieal operation, mother and ehild, —influencing more happiness, in eonnection with the tenderest and highest of human feelings, than falls to the lot of medical man in any other of his always-important duties,—this worthy man, whose plenitude of good originates solely and wholly in surgical skill, is spoken of by this Council as one not fulfilling the objects of the College, and who cannot elaim to be connected with even "the sciences that tend to the advancement of surgery!" We profess not to know the "objects for which the College was established"—it may have been for promoting easy shaving for aught we know,—but if its present rulers are to be believed, the crutch-maker who improves the meehanical science of his trade, and so eertainly helps to the advancement of Surgery—and the vulgar bone-setter, who knows nothing of such a thing as constitutional treatment, or what the Counеil call "Mcdieine and Pharmacy," would have an infinitely better title to a plaee among their Fellows than a Blagden, a Velpeau, or a Hunter!

REVIEWS.

A Letter to Mr. Newman, of Glastonbury, being an Answer, &c.

Our readers are aware that Mr. Newman praetised as union surgeon on homœopathic prineiples. Mr. Gale, a surgeon of South Petherton, and not in praetice, of eourse felt the poor's danger, and by dint of oft-repeated eommunications with the Poor Law Guardians and Poor Law Commissioners, procured Mr. Newman's dismissal. Mr. Newman then published for his peeuliar opinions, a defence, in whieh he offered no high compliments to the purity or judiciousness of Mr. Gale's motives, in performing the offiee of his ejector.

In the *brochure* before us, Mr. Gale replies with more effeet for his own eharacter, than amusement to a less interested reader. The point in the pamphlet that excuses its publication, is that it shows that through Mr. Gale's labours, the Poor Law Commissioners have imposed on themselves the law of not sanetioning homœopathie practiees in their medical offieers.

Remarks on the Efficacy of Matico. By THOMAS JEFFREYS, M.D. Longman & Co.

This is a second edition of Dr. Jeffrey's pamphlet on the important plant whieh he

has had the honour of introducing to our English Materia Medica. We have here a history of Dr. Jeffreys' efforts in calling attention to matico with their results, and, of course, in given us very interesting details on the efficacy of the plant, in the peculiar cases for which it seems designated. Having no long time since devoted much of our space to this subject, we shall leave it now with the single remark, that Dr. Jeffreys strongly notes in this second edition that the styptic powers of matico are best developed when it is applied as a decoction, and that the plant is better adapted for cases of *passive* than active hæmorrhage.

The Fallacies of our own Time. By OLIVER BYRNE, late Professor of Mathematics, College for Civil Engineers, &c., and Professor JOHN BYRNE, &c.

Here we have, in the first part of an important serial work, phrenology brought to the test of mathematics; and if our authors are to be believed, the subject is found grievously wanting.

The Athenasian creed has been demonstrated on the principles of geometry, and why not anti-phrenology? We think this a fair *à minore ad majus* argument. Hence, though prone to surmise that mathematics stands in point of proof to phrenology much in the same relative position in which 6 o'clock does in point of distance to Hyde Park Corner, we must frankly own that as men "almost persuaded" to be phrenologists (for who will not favour phrenology that phrenology favours?) we are smitten heart-sick to hear on the authority of two such distinguished mathematic professors as the Messrs. Byrne, that the exact sciences are against what we must now, we suppose, call our "*amabilis insania.*" Our only remaining hope arises from D'Alembert's declaration, that the world would disbelieve mathematic axioms, if it had a strong interest in the matter. In the Messrs. Byrne's dislike of "the delusion" of phrenology, may there not be an interest evinced, strong enough to make the exact science something very inexact? In other words, supposing the yard measure to be just the thing to tell you a day's length, have the yard's inches been properly applied? We suggest the point with deference, for we are bad phrenologists, and worse mathematicians.

PENCILLINGS OF EMINENT MEDICAL MEN.

DR. JOHN BURNS,

PROFESSOR OF SURGERY, GLASGOW, AUTHOR OF "A TREATISE ON MIDWIFERY," &C.

In our Pencilling of Dr. Jeffrey, we left a young student disappointed at the result of his first visit to the anatomy class of the ancient University of Glasgow. There are other lectures, however, set down in his curriculum, about which he may speculate, and hope better things, and he is urged along with the still merry crowd to the rooms of the Professor of Surgery, with his expectations probably not now so highly raised. Every one had spoken with respect of the venerable gentleman who has just disappointed him, and the *freshman* as he hurries along to the next dish of his college course, hears, with some feelings of surprise, if not, perhaps, disgust, "I wonder what Johnnie Burns will gie us to-day?" Professor Burns himself, however, knows quite well what he is going to say—in this respect differing from many of his learned contemporaries, although it must be owned, he will present his matter as he does his person, in an occasionally very grotesque attitude. The hall is crowded to excess, (for most of the students are in the habit of attending the *introductory* lectures,) and all eyes are towards the side doors, for it is generally by some aperture, not at first observable, that learned professors of medicine enter their class-rooms. In then bustles—as if in a hurry—Dr. John Burns, the famous lecturer and distinguished author, and we see in him an intelligent and rather care-worn looking, middle aged man, and about the middle height, with one leg and foot perceptibly smaller than the other. He gives himself very little trouble about this latter defect, for he presents himself in shorts, and in coat not of the present day, but somewhat after the dress worn at court, where even the harmless improvements of a Stultz are denied the entrée, although it is said, that Prince Albert, as far as he may dare, is somewhat of an innovator in dress.

Our professor seems to take a pleasure in his unusual externals, and laughs at a taunt he once met with from a controversial opponent, "that his opinions were as antiquated as his dress;" he answered, that he had seen no good reason to change either.

The superabundant bows and smiles being duly answered by vociferous plaudits, the students' attention is immediately arrested by the opening words, "Gentlemen, you have undertaken the study of a profession than which there is no one more important to the welfare of your fellow creatures, and you are responsible to God that you do not neglect your studies. For my part, I feel deeply the responsibility I am under, to give you every facility in my power."

We have, then, laid down, in plain and vigorous language, the prominent points of the history of the science of surgery. The leading characters who, from age to age, led the way to important improvements, are introduced, and the nature of their improvements briefly explained, and thus, necessarily, most of the great principles of surgery come under review; a slight review, of course, but addressed to an admiring auditory, every member of which becomes anxious for farther knowledge.

Dr. Burns' style of speaking, although energetic and very plain, is not always very correct. In his introductory discourses, however, and some others on particular subjects, he uses notes, and is then less open to criticism. His students were pretty generally of opinion—or, at least, made a joke of it—that his notes were written on the blank leaves of letters, of which he daily received so many from his patients. Hence it was alleged, that if we could have got hold of the Professor's notes: we might have got hold of some pieces of information which might have proved an amusing supplement to the lecture. It would have been a lecture with cases. Alas, how gaily young medical men proceed in their course; happy in the mirthfulness of their hearts to cover the painfulness of many of their duties, and little dreaming of the struggles of their future career, the envy of bad rivals, and the rivalry of quacks, the obstructions of corporations, the perplexities of the law, the legislation of Sir James Graham, or the man, who, pretending to represent us, barters us away to his prejudices or ignorance.

> Gay hope is theirs, by fancy fed,
> Less pleasing when possessed;
> The tear forgot as soon as shed,
> The sunshine of the breast.
>
> Alas! regardless of their doom,
> The little victims play;
> No sense have they of ills to come,
> Nor cares beyond to-day!

But none of their thoughtless levity of mischievousness can be traced to the door of our learned Professor, who is as good, if not as grave, as a patriarchal quaker, and after keeping up the fixed attention of his young friends for an hour, dismisses them, with another solemn appeal, as to the paramount importance of attending to their studies, for inattention now would lay the fruits of future misery to themselves, and injury to their country.

But we must not suppose, that because Dr. Burns is thus solemnly admonitory, that his lectures are, by any means, of a dry and uninteresting nature, or calculated to deter from hope by too formidable an array of difficulties and responsibilities. Quite the contrary. In connection with his historical sketches, he often enlivened them with anecdotes of considerable humour; nay, humour, sometimes almost condescending to lowness. Thus, in alluding to Taliacotius, he could not forbear treating us to Hudibras, and the brawny porter's story.

The student leaves him with a decided intention to return regularly, and continues to attend to the end of the course with much benefit and unflagging interest. It is true he was at times prolix. On the subject of hernia, for example, he sometimes dwelt for about six weeks, at the close of which the student got completely bewildered among fasciæ and ligaments, although, during the first week, he had a pretty good elementary idea of the subject.

In truth, clearness of method is not his forte. He is wanting in order, yet, from his great practical knowledge, he communicates so much information in so pleasant a form, that he may be considered a most improving teacher.

We could not better pencil a man who has so ably filled the Professorial chair, than by describing his appearance in that office. But it is not as a Professor alone that Dr. Burns is eminent. He has long had the highest reputation and the most extensive practice in the West of Scotland, and there are few disposed to refuse his many claims to superiority, although his manner, it must be admitted, is not at all times conciliatory.

Dr. Burns has been the architect of his own fame and fortune. Like so many of our eminent medical men, the son of a respectable clergyman, he enjoyed the usual advantages of a Scottish education, but no more. He early published a work on inflammation, which displayed much ingenuity and great industry; but, from the state of anatomical science at that time, forty years ago, it may readily be supposed that his opinions on this subject are not now much attended to. Even with all the labours of that rigid school which might, without offence, be called the microscopists', such as Wharton Jones, Williams, &c., whether we are, even yet, a good deal in the dark on that subject. But it says much for his assiduity, that at such a period, and with comparatively few advantages, he devoted himself to so difficult a study, and produced so respectable a work. He lectured for many years on midwifery, to which he paid much attention; and the result of his researches in that department of the profession were given to the world in a voluminous work, since become a standard in many parts of the country, and which has gone through ten editions. Almost everything known on the practical parts of the subject are included in it, while his own experience, now annually becoming greater in that department of practice, gradually added to the value of the work; still it is marked by the fault of its author's mind—a want of logical order—so that the student hardly knows under what head to look for any subject he may wish to be informed upon.

The result of his labours in surgery he gave to the world in two volumes at a more recent period. His style here had become worse and worse, and the result has been that the book has been very little read. Yet, here it may be again remarked, that it does his character high honour, that even when in full possession of wealth and fame, and engaged in an extensive and harassing practice, he occupied his leisure in producing a work, which, whatever its defects in style, would not fail to extend sound surgical knowledge. What a contrast to his venerable colleague whom we lately pencilled, and who, during a long life of ease and health, never furnished anything that can be remembered. But the balance of accomplishments exists. If Dr. Burns be the more useful, Jeffrey is the more agreeable man. Dr. Burns has an opinionative manner, amounting to offensive, and is not very obliging, except in bows and smiles. This reminds me of a story current enough in his neighbourhood. A wealthy dame had taken offence at the collectors of the poors' money at the church door; and, instead of putting in her usual contribution, marched past with a low reverence. At length, one of them, a little out of patience, followed her ladyship into the church, exclaiming—"More of your money, my lady, and less of your manners." In a similar spirit, we may say, that if the professor of surgery had bestowed more

friendly aid or counsel to young students, and fewer nods and smiles, he might have been a more popular man than he is ; although no one who has studied under him, but will remember, with gratitude, the benefit he derived from his instructions.

Dr. Burns was appointed Professor of Surgery in 1815, at which time the Crown erected surgery into a separate professorship. Previously, it was included in the anatomy lectures.

At that time, the late Duke of Montrose had the entire dispensation of the Government patronage in the University of Glasgow ; and to his influence with his Grace, Burns, of course, owed his appointment. It is but justice to add, however, that had the voice of the profession been consulted, he would, in all probability, have been the unanimous choice.

He showed his gratitude to the Duke by a dedication (of the work on midwifery), in terms most ludicrously fulsome. He almost attributed to his patron all the glories of the French war, and the crowning victory of Waterloo. How humiliating to see a man of real talent thus prostrating himself before a useless courtier, who spent a long life in fawning upon princes, and pocketing the public money.

The following are the principal of Dr. Burns' publications :—Dissertations on Inflammation, 2 vols. 8vo. 1800; On Uterine Hæmorrhage and the Placenta, 1 vol. 8vo. 1807 ; Principles of Midwifery, 1 vol. 8vo. (This elaborate work has gone through many editions). Principles of Surgery, 2 vols. 8vo. (published at intervals).

Having pencilled Dr. Burns' professional career, as an author, medical adviser, and lecturer, we shall very briefly allude to his family. His father, the Rev. Dr. Burns, one of the ministers of Glasgow, died a few years ago at a very advanced age. In connection with this patriarch there is an anecdote worth remembering :—Notwithstanding his laborious life, our professor took it into his head to publish a work on Christianity, which became very popular ; it appeared orginally in an anonymous state, and he presented a copy to his reverend parent, who, having read it, exclaimed, "Oh, John, I wish you could have written a book like this !" His delight was great on discovering that his talented and industrious son had anticipated the idea.

John Burns is the elder brother of Allan Burns, who at a very early age established for himself a name in the profession by his work, still well known and appreciated, on the Anatomy of the Head and Neck. He promised well to have been very eminent as an anatomist, but remorseless death decided otherwise. Dr. Burns must have felt deeply so early a deprivation of a brother of a kindred spirit, but he has had still farther family sorrows. Of a numerous and highly amiable family, one alone now survives—an officer in the army.

His last blow was in the death of his favourite and younger son, Alan, whom he had spared no pains to accomplish as a physician. We recollect his first appearance as a little red-gown student, a gaily-dressed sprightly-looking youth—his father's contrast—sitting by his side in the lecture-room, aiding in his dissections, shewing everyday increasing ability as he grew older, and at length becoming the Professor's partner in practice. Many a plan had the old gentleman to promote him to a professorial chair, which it is likely Alan had little sympathy with. He seemed contented as he was, and enjoyed the innocent gaieties of life. How cheerfully his voice sounded as he sported like a butterfly amid the gardens of Paris! how sprucely trimmed were he and his steed, as they paced from door to door among the demure citizens of Glasgow! Alas! for the love of the father and the affection of the friend, the rider has fallen, and the voice of mirth has been extinguished never more to be heard !

At an early age Alan married an accomplished young lady, who died a few months afterwards ; and he himself within the last year fell a victim to fever, then very fatal in Glasgow. He had little opportunity of distinguishing himself in his profession, to which he seemed destined to be such an honour. Permit these few lines to record the name of one in whose company the writer has had hours of delectable converse!

The bereaved father, it is now said, is much disposed to retirement. Should he persevere in the wish, we have little doubt that his active mind will atone for the loss by some work of high utility. We trust, however, for the sake of the rising profession, that whatever he may do with his practice, he will not give up the discharge of his duties as professor of surgery.

In concluding our notice of another of the excellent men who illustrate our profession, our readers will join in our wish that peace and honour may surround this good man's grey hairs wherever they lie! A.

MEDICAL REFORM.

Sir,—Will you allow me to suggest that the remonstrance to the College of Surgeons (which appeared in your valuable Journal in March), might be turned to very much greater account than any you have yet fixed on. It contains, to my mind, in the shortest and most appropriate language, by far the best dissection of the Charter I have seen, and it contains also a plain and very attractive expression of such Medical Reform as the profession really desires. Now I propose that it should, undergo the few verbal alterations necessary to make it a petition to the House of Commons, and should be carefully conveyed to every member of the College of Surgeons for his signature. There can be no doubt that nearly all the members would sign so gentlemanly a document, containing so fair a representation of their wrongs and its effects on Ministers and the House of Commons, would not be inconsiderable. From my experience of the profession, I can affirm that this is the only way to get from it an effective demonstration of its opinions. Its members have neither *time*, inclination, funds, nor the natural disposition, requisite for any combined and respectable exertions through *associations*, which are always managed by a few stirring, characterless, persons, who, having nothing better to do, find it worth their while to use their superior leisure and impudence in the acquisition of a ruling influence on the Councils or Committees. To be notorious, to them is a boon to be sought for, their only choice is to be that or nothing. Besides, they may get there what they rarely get at home—the disposal of money. In the recent history of professional associations, their deputations have been mere personal puffs—used as introductions to practice, and their public documents have been respectable advertisements on a large scale, paid for by dupes ; and when all is done, it is not the profession that speaks, but a few persons—sometimes I may say a few fellows, who neither know their own nor other persons opinions on any subject, and who could hardly form an independent opinion if it would save them from a passage through the Insolvency Court. As an instance of this, a patient of mine, an M.P., who has been *honoured* with some five or six of these deputations in his time, has told me that he never could get at what they were really desiring—the second man unsaying the first one's sentiment, if the first one did not, as he often did, do the work himself. He added that he rarely got good sense—never good grammar—from these gentlemen, who visited him as the *representatives* of the profession.

A petition generally signed, would obviate all this, and I think your remonstrance well calculated to give the most defined certainty as to what we do, and what we do not want. But the way to get it signed, is not, I think, that you proposed in a former number, for medical men having little time, and sometimes little zeal, will not, as a general rule, take the necessary trouble your plan imposes on them. The plan would be for you, Sir (or a Committee, if it could be formed), to shape the remonstrance into a petition, with as little alteration as possible (for there is now in it a moderate and gentlemanly spirit, which I should dread to subject to change), and get about a thousand printed off. These might be sent to about as many gentleman among your own numerous subscribers, or those whose addresses are given in the College list. All would, probably, sign their own names, and most would make an effort to get added those of their neighbours. These could be transmitted to your office, and your people—or better still, a Committee might take charge of the signatures, and transfer them to one large petition. You may put my name down for a guinea or two to help.

Your obedient Servant,
SENEX.

[The letter of Senex strikes us forcibly as conveying much practical wisdom, especially in its last sentence. With subscriptions to the amount of twenty pounds, 2,000 petitions could be prepared, and diffused among the body of English surgeons.—Ed.]

THE COLLEGE OF SURGEONS.

The following "Statement," relating to the Charter lately granted by her Majesty to the Royal College of Surgeons of England, is issued by authority :—

The Council of the Royal College of Surgeons of England feel that the time is arrived when it is proper for them to offer some observations, in explanation of the principal changes which the charter, lately granted by her Majesty, has occasioned in the constitution of the college, and on the ultimate effect which those changes may be expected to produce in the condition of the surgical profession. They avail themselves of the opportunity thus afforded to state the principles on which they have hitherto acted, and those on which they propose to act hereafter in the exercise of the new duties which this charter has imposed on them.

The bye-laws which may hereafter be made for the government of the college will not be valid until approved of by the Crown.

The members of the council will be elected, not for life, but for a limited term of years.

When vacancies occur in the council they will be supplied, not by the council, but by the new body of fellows, who will elect the new members from among themselves.

Fellows of the college who are not members of the council will be equally eligible to the court of examiners with those who are ; and future examiners will hold their office only during the pleasure of the council.

One object of her Majesty's advisers in establishing the class of fellows was to create a sufficient constituency for the election of the council. The same end might have been attained by simpler means, such as giving the franchise to members of a certain standing in the college ; but another and expressly avowed purpose was to promote a spirit of emulation among surgeons, to afford additional inducements to exertion in the cultivation of science, and thus to increase the utility and elevate the character of the surgical profession. After the expiration of one year from the date of the charter no one will be admitted into the rank of fellows until he has undergone a strict and lengthened examination, not only in practical surgery, but also in the collateral sciences. Those who aspire to become fellows, without having been previously members of the college, will be required to have gone through an extended course of professional study in hospitals and schools, and to be at least twenty-five years of age. But the fellowship will not be limited to candidates of this description ; and they who, not having had the same advantages of education, have been admitted as members at twenty-one years of age, may, after having been engaged in practice for a certain number of years, represent to the council that they have continued to study their profession as a science, and claim on these grounds to be examined for the fellowship. Thus any individual, however limited his means of improvement may have been in early life, may raise himself by his own industry and talents to the same rank in the college with those who were in the first instance more fortu-

nately situated. No one who desires to attain the fellowship can complain that it is not within his reach, or that he is prevented from becoming an elector, or a member of the council, or of the court of examiners.

Candidates for the fellowship at 25 years of age will have had the opportunity of obtaining a liberal general education previously to entering on the studies peculiar to their profession; and it is reasonable to expect that the example of such well-educated persons will influence those whose preliminary education has been imperfect, to supply the deficiency, by devoting to the acquirements of various knowledge and the general cultivation of the mind a portion of the leisure which falls to the lot of every young practitioner.

The course to be pursued in the future admission of fellows is sufficiently obvious; but the new charter imposed upon the council another task of much greater difficulty, that of selecting, from among the many thousand members of the college, a limited number of individuals to be nominated as fellows in the first instance, so as to form an immediate constituency for the future election of members of the council.

The following provisions of the charter on this subject give to the council the absolute power of nomination, without conferring on any description of members the right to be so nominated:—

"The council of the said college, with all convenient speed after the date of these our letters patent, and before the expiration of three calendar months from the date hereof, and in such manner as the said council shall deem best, shall elect to be fellows of the said college any such number of persons, being members of the said college, and not being in the whole less than 250 nor more than 300, as the said council shall think proper.

"It shall also be lawful for the council of the said college, at any time or times after the expiration of the said three calendar months, and before the expiration of one year from the date hereof, by diploma or diplomas under the seal of the said college, and in such form as the said council shall think fit, and without any fee, to appoint any other person or persons, being a member or members of the said college, to be a fellow or fellows of the said Royal College of Surgeons of England."

When these passages of the charter are considered in reference to each other, and in combination with the circumstance that the nomination of fellows by the council is only a temporary expedient, designed to provide, in the first instance, that constituency which will be supplied hereafter by fellows admitted on examination, it will be obvious that the framers of the charter did not intend that the fellows to be thus nominated should greatly exceed the number of 300.

The council entered on the duty assigned to them by these provisions of the charter with a full sense of its invidious nature. They were aware that of those not included in the list of fellows, a considerable number would feel and express dissatisfaction. But they have done what was required of them to the best of their ability, and have made the selection altogether on public grounds, without favour or prejudice, and uninfluenced by private motives. The following statement will sufficiently explain the principles on which they have acted.

The great majority of the members of this college are less engaged in the practice of surgery than in that of medicine, midwifery, and pharmacy, and many of them have arrived at well-deserved eminence in these latter departments of the medical profession. But the council, keeping in view the objects for which the college was especially established, have felt it their duty, in the nomination of fellows, to regard chiefly the qualifications of members as practitioners in surgery, or as improvers of those sciences which tend to its advancement.

1. In accordance with this principle, they placed in the list of fellows the surgeons of all the hospitals in England and Wales which are recognised by them as schools of surgery; and they did so under the conviction that the surgeons of large hospitals have the best opportunity of experience in surgery, and that they are the persons principally consulted in private practice, and referred to by other practitioners in surgical cases.

2. But they were aware that in several parts of the kingdom there are members of the college having considerable reputation as surgeons, and called into consultation in surgical cases by the practitioners in the neighbourhood, although they have no connexion with the hospitals; and the Council thought it right to place the most eminent of such persons on the list of fellows. In executing this part of their duties great circumspection was required, lest improper names should be inserted, and proper ones omitted. In this respect the list is incomplete, there being individuals of this class whose claims are still under consideration.

3. Not being well acquainted with the qualifications of military and naval surgeons, and being at the same time desirous of doing justice to them, the council applied for assistance to the heads of their respective departments; and many of the names included in the schedule of fellows are the result of this application.

4. There are in London several practitioners in surgery, who, though not connected with hospitals, were considered eligible to the council under the former charter and according to former usages, and the council therefore thought that they ought to be admitted to the fellowship. Many of these gentlemen are well known and much esteemed by the profession; and the question was, not whether they should be elevated to a new position, but whether they should be displaced from one which they had previously occupied.

5. Some individuals have been placed on the list of fellows from having distinguished themselves in cultivating the kindred sciences of anatomy, physiology, and natural history. The council cannot but regard such persons as ornaments of the college, and it will be gratifying to them to find others of the same class who may be added to the list.

6. Other names have been inserted for special, reasons, being principally those of teachers who had been recognised by former acts of the council or of persons holding important public offices. Among the latter are four senators of the University of London.

The council are empowered to nominate an additional number of fellows before the expiration of the first year from the date of the charter. This will enable them to supply the deficiencies of the former list, in anticipation of which it is evident that this clause was introduced. In the future nomination of fellows, the council see no reason why they should depart from the general principles on which they have hitherto acted; though they will make it their object to omit the name of no individual who is held in esteem by the other members of the college for his surgical experience and scientific attainments. For those who are not yet so distinguished, there is an honourable method of obtaining the fellowship by examination.

In conclusion, the council take the liberty of observing, that no alteration in the charter, nor any legislative enactment, can materially change the condition of those who have been for some time established in practice, In the medical profession each individual makes his own place in society; intellect, knowledge, and integrity being equally appreciated and respected in every grade and station. If the changes introduced by the present charter are to have the effect of elevating the character of the surgical profession generally, it will be in the next rather than in the present generation: and if the elder class of practitioners are interested in these changes, it is less on their own account: than on that of their sons and successors.

By order of the council,
EDMUND BELFOUR, Sec.
Lincoln's-inn-fields, May 25, 1844.

WHAT IS THE VALUE OF LIEBIG'S THEORIES?

By Professor Schulz, of the University of Berlin.
(For the "Medical Times.")

Organic life is everywhere connected with chemical phenomena, and hence, medicine stands in a constant relation to chemistry But to apply chemistry with advantage to medicine, this relation must be *accurately* understood, and properly appreciated. Because life is accompanied by several chemical actions, many presume that it is chemical itself, and amongst them Liebig. What he calls "the *application* of chemistry to physiology and pathology," is nothing else but their *substitution* by chemistry. This is the real meaning of all modern writings on chemical physiology, and physiological chemistry. They contain chemical explanations of life itself. Often and often was the tendency of this work repeated in medicine. At all times, the philosopher's stone was sought in chemistry, and the explanations have only differed according to the state of the science. *Liebig's* theory of life is nothing but a chemical theory of combustion, in which life is compared to fire, and analogous chemical phenomena of oxydation. He divides his book into three parts. In *the first part* he endeavours to shew "that the most enthusiastic physiologists were far from knowing the laws of animal life. None of them had a clear notion of the processes of development and nutrition, none of the true cause of death. They explained the most occult psychological phenomena; and still they could not say what was fever, and how quinine operated in curing it." Now, chemistry explains all this, as Liebig shows by the following theories. "Every motion, every exertion, is the consequence of transformation of the organs. Every idea, every affection, causes a change in the chemical quality of the secretions. Every thought, every feeling, is accompanied by a change in the chemical composition of the brain. The only known and ultimate cause of animal, as well as vegetable vitality, is a chemical process. Food serves to replace the consumed substances in the body, and, by that means, to produce force. The substances of the body create force by being moved out of, and then returning to the statical equilibrium. Chemical affinity is the power which puts the substances into motion. Thus, all vital functions arise out of the mutual action between atmospheric oxygen, and the constituents of food. Life consists in a constant consumption of materials, i.e., in a constant supply of substances in the form of food and of atmospheric oxygen, which serves for their combustion." All this system, closely viewed, must be recognised at once as a repetition of the old doctrine of consumption of Aristotle and Bacon. Bacon, in his celebrated work, "Historia vitæ et mortis" (used also as the basis of Hufeland's "Makrobiolik") promulgated this doctrine of the consumption of matter, and the renewal of the body. The theory of "*consumption*," has changed according to the progress of chemistry. Liebig naturally conceives it in the spirit of Lavoisier's discoveries, which were unknown to Bacon.

Liebig next treats of the statistics of substances, in which the pounds and cubic feet of oxygen absorbed by the lungs during respiration are compared to the quantities of hydrogen and carbon contained in the transpired water, and the exhaled carbonic acid, (according to the well-known calculations previously used by Lavoisier in his experiments). Carbon and hydrogen are only supplied by food. An adult consumes about 13.9 ounces of carbon in his daily food, and daily requires for its combustion and transformation into carbonic acid, 37 ounces of oxygen. The azotic constituents of food, as albumine, caseïne, re-appear (after their transformation) in urine as uric acid and urea. But Liebig has made no calculation nor comparison between the quantities of azote in urine, and those in the consumed food; else he would have found, that urine only contains an imperceptible quantity of azote, if compared to the quantities of azote contained in food. His calculations only refer to the combustion of carbon. Fibrine and albumine are considered by Liebig as the only constituents of blood; and he imagines that those constituents can only be formed out of azotic food. According to his theory, butter, sugar, amylum, and other carbonaceous substances, can furnish no constituents of blood; they only serve to maintain combustion. No explanation, however, is given as to the form in which carbon is supplied to the lungs for this process. In this instance, Professor Liebig clearly shows that he is unacquainted with

important physiological facts ; for not only fibrine and albumine, but also fat and colouring matter, are chemical constituents of blood ; and particularly fat abounds in the young vesicles formed out of the globules of lymphatic fat. *Liebig* endeavours to explain, by his theory of combustion, the formation of animal heat and of fat. He attempts to prove the well-known theory of *Lavoisier*, according to which calorie is produced by the combustion of carbon and hydrogen in the lungs (attended by the formation of carbonic acid and water), and stoutly opposes the opinion which ascribes the production of caloric to the nervous system. His arguments run thus : "The animal body is like an oven which we supply with materials for burning. In cold temperatures, a great quantity of fuel is required to keep the oven warm; in warm, when not so much heat is lost, less fuel is required. Therefore, in winter, and in the polar regions, there is increased want of food containing carbon and hydrogen. Frost causes hunger. In hot climates, want of food is greatly decreased, because the body requires a smaller quantity of heat. The warmer we dress in winter, less food we are said to require, for we lose less heat. If we lived naked like the Indians, we should want much more food as fuel. The Neapolitan cannot take more carbon and hydrogen in his food than he will exhale, and the inhabitant of the polar regions cannot exhale more carbon and hydrogen than he took as food. The northern beasts of prey surpass all others in voracity." But Liebig's theory is not proved by such facts as these. Contradictions in his own arguments are shown, for his own doctrine is, that carbonaceous vegetable substances are peculiarly fit for combustion, and that azotic animal substances are less apt for production of animal heat. Notwithstanding this, he gives the voracity of the northern animals of prey (living on flesh, viz., on azotic substances, which, according to his own theory, cannot be burned) as a proof, that a large process of combustion must take place here, in order to produce a sufficient quantity of heat ; for, according to his own theory, no meat should be eaten in cold countries, for vegetables are more favourable to the process of combustion than meat. But the assertion is entirely false, that the inhabitants of cold countries eat much, and the inhabitants of warm countries little. In truth, all that can be said is, that *in cold climates, more meat and less vegetables are consumed ; and in warm countries, more vegetables and less meat.* The man can certainly not be called temperate, who, in hot Persia and Arabia, eats daily from twenty to thirty pounds of melons, and other fruits; nor do the pot-bellied negroes display as much temperance as the inhabitants of the polar regions. There are other circumstances which give a most decided contradiction to that theory of combustion. If it were true, vegetable diet must be heating, and animal diet cooling. But daily and undisputed experience in all countries, in man and in animals, distinctly shews the contrary, On the contrary, *animal food has the effect of heating, vegetable food that of cooling.* Thus roots, fruits, seeds, (all of which ought to be so favourable to combustion, according to Liebig,) *diminish* the heat of the body ; whilst flesh meat (so little combustible) *increases* the animal heat in a high degree. The herbivorous animals possess little heat, and can therefore no more exist in high degrees of latitude ; but the carnivorous animals of all countries are from two to three degrees warmer than the herbivorous of the same climate. The polar inhabitants only maintain themselves by eating animal food; they scarcely eat any vegetables, and would be frozen if they attempted to live on them. The inhabitants of the tropic countries, obliged to keep themselves cool, live on vegetables, and avoid animal food as much as possible. Liebig asserted, it is true, that on account of the small quantity of carbon contained in meat, men and animals are obliged to consume great quantities. But this is likewise false. For all the carnivorous animals take much less food, and have therefore thin bellies (gracilia), whilst the mass of food taken by herbivorous animals is immense; and their ample digestive organs are peculiarly adapted by nature for these large masses of food. Liebig ought to have reflected that an elephant, which daily eats hundred weights' of hay, potatoes, and corn, is, notwithstanding, so cold in our climate, that it could scarcely maintain life without the help of brandy. But the foregoing objections are still the least important as regards the production of heat by means of combustion in the lungs. For heat increases and diminishes in different parts of our body quite independently of respiration. Paralysed limbs become cold while respiration continues. In inflamed parts of the body, heat increases from four to five degrees. The stomach is warmer than usual by two degrees during digestion. Through retention of secretory substances in the blood, for instance, after the removal of the kidneys, heat is increased from six to eight degrees. The same thing happens in many fevers, where respiration is not at all increased. How shall combustion take place here ? The theory of combustion of hydrogen militates against fixed physiological experience ; and it can by no means be proved that the water existing in our body has been received from without, and is again eliminated. For watery vapour is exhaled from the lungs, when no oxygen has been inhaled, but hydrogen, or pure azote. How could water be formed here by combustion ? In my work, "Uber Verjüngung," I have proved the source of calorie to exist in something quite different, viz., in the increased formation of blood vesicles, and consequently, in the heightened process of regeneration. On that account, the azotic animal food, which favours the formation of vesicles, increases heat without reference to combustion; whilst the carbonaceous vegetable nutriments (rather favouring the formation of nuclei in the vesicles, and weakening the formation of the vesicles themselves,) do not favour the production of caloric.

Liebig's theory on the formation and consumption of fat is equally invalid. According to his theory, fat is the fuel for organic warmth. The starving person gets emaciated, according to Liebig, because, wanting fuel in the form of food, his oxygen consumes his fat. Even without enquiring how oxygen contrives to arrive at the fat, it must be borne in mind that disappearance of fat in a starving person is not the only cause of his emaciation. All muscular, nervous, and albuminous organs, which contain very little carbon, and cannot be consumed, are absorbed, and disappear as well as fat. On the other hand, Liebig believes fat to be *formed* through want of oxygen and diminished respiration, as in the repose of animals, because all the carbon is not consumed. But the formation of fat in animals depend on perfectly different points ; and the idea is perfectly false, that fattening animals respire less, and form less heat in repose ; on the contrary, the respiration and formation of carbonic acid is very strong, and animal heat high; therefore, they are more advantageously fattened in cool weather than in a great heat. The formation of fat rather depends on the operation of the digestive organs, on the quantity of bile, and on the manner in which chyme is neutralised by the bile.

To be continued.

SLEEP WAKING, OR SECOND CONSCIOUSNESS.

By H. BROOKE, Esq.

(For the 'Medical Times.')

PERHAPS there is no phase of human life or being, more deeply interesting to the physician, the metaphysician, or the physiologist, than that of somnambulism or sleep-waking; yet few have, perhaps, been less carefully observed, or investigated, or are less perfectly understood. Many causes might be assigned to account for this : the metaphysician views it merely as a mental or psychical phenomenon ; and the physician and physiologist rank it in the same category as the so-called inexplicable vagaries of hysteria. But the chief reason is, doubtless, the very limited number of cases of this description which have come under the notice of the philosophical observer, the many points of difference, combined with the few points of resemblance in each individual case, and consequently the apparent impossibility of establishing intelligible and permanent characteristics.

In many members of the profession, there is an evident and strong disinclination to meddle with such cases, viewing them as they confessedly do, as, more or less, voluntary afflictions, exposing them to the risk of being deceived and outwitted by the patient. It is, doubtless, this *feeling*, though there are certainly many other reasons which may contribute, which makes the physician so sensitively shrink from the investigation of the peculiar and interesting characteristics of an analogous state of second consciousness, or sleep-waking, induced by the artificial processes of the mesmerizer. But this should not be, and the very familiarity of which he boasts, with the numerous and ever-varying phases of hysterical phenomena, should prepare him to contemplate, with additional interest, analogous phenomena artificially induced, without any reference whatever to their real or supposed cause, and particularly should it make him hesitate in rejecting as undeserving his attention, any such phenomena, however apparently strange, or inexplicable, on ordinary principles, or however incompatible with our preconceived notions.

Whatever may be the cause, or its mode of operation, it is now no longer a matter of doubt that *a state* of second consciousness, or sleep-waking, may be from time to time induced, and terminated at pleasure, in some cases, by the use of the mesmeric processes, and it cannot, therefore, be other than a subject of interesting enquiry to ascertain its characters, and in what respects, and to what extent they differ, when thus artificially induced from the characters presented by those cases in which it has been developed, as the consequence of an abnormal condition of the nervous system. The assumption sometimes had recourse to, that such a state can be so induced only in cases predisposed to it, does not materially affect this view; for, without such induction, such cases might still have remained cases of predisposition only, and the opportunity of studying either its spontaneous, or artificial development, would consequently have been lost.

In the commencement of enquiries of this kind, nothing is of greater importance than to have an accurate and precise understanding of the sense in which the terms used are to be received. The terms, somnambulism, trance, sleep-waking, and double or divided consciousness, have hitherto been too indiscriminately used in reference to states essentially different, and I would, therefore, suggest the expediency of considering these various phenomena in the following three classes ; viz., those pertaining to the waking or conscious state; those pertaining to the sleeping or unconscious state; and those pertaining to the sleep-waking, or state of *second* consciousness. In the waking state the senses are susceptible of external impressions, the brain receives and perceives them, and the individual is *conscious* of them. In perfect sleep there is perfect quiescence in the brain and external senses, and consciousness is perfectly suspended. But between these two states, there are innumerable intermediate ones ; all, however, are more properly referrible to the former as connected with it by consciousness. For instance, the brain may sink into a state of partial, but not perfect, torpor—the individual remaining conscious, and he is said to be in a state of reverie. He is not asleep—only partially asleep—and the difference between this state and that of another kind of partial sleep, that of dreaming, seems to be that the state of reverie partakes *more* of the waking than of the sleeping state, and dreaming *more* of the sleeping than of the waking state; reverie may, therefore, be classed as a variety of the waking state. In dreaming, as already indicated, there is activity or wakefulness in one or more of the organs of the brain, whilst the remainder are in a state of torpor or repose ; but the *consciousness* is awake, the dream is remembered after the partial sleep has terminated, and dreaming may, therefore, be classed as a variety of the waking state.

In some diseases, actions apparently voluntary take place involuntarily, the patient being, never-

theless, perfeetly *conscious* of them—in some cases, perhaps, endeavouring vainly to restrain or controul them—in others, feeling the involuntary impulse, and voluntarily yielding to it, and having a perfeet reeollcetion of the whole after the termination of the paroxysm, and after the disease has ceased.

In many eases of hysteria, for instanee, the patient though frightfully contorted by the most violent convulsions, and apparently insensible and uneonseious, is, nevertheless, perfectly eonseious, hears everything around, knows and eomprehends everything that is being done for her relief, &c. and remembers all afterwards. In some eases of monomania, the patient *feels* the impulse to do a thiug whieh he is conseious he ought not to do, and would avoid, but eannot. A patient in the Salpetriére in Paris, habitually deelaimed, with ineredible rapidity and vehemence, against the eruelty, &c., of the physician; yet, in the midst of showers of impreeations, she introdueed frequent parenthetieal deelarations, that she did not mean what she said, and that though anxious to evinee her gratitude by silence, she was constrained by an invisible ageney to speak as she did, In other cases, he feels the impulse, and the strength of the impulse seems to lead (or mislead) his other faculties —those whieh judge of its propriety, &c,—and he yields to it as if convineed that the act he feels so strongly impelled to do, must and *ought* to be done, *because* he feels so strongly impelled to it. I have met with eases of this kind (and so, doubtless, have many others) in whieh the patient after reeovery, retained a perfeet recolleetion of all such feelings, and I need not say, that in a medico-legal point of view, they are eases of the very highest importanee: these eases also I should elass as varieties (abnormal of eourse) of the waking state.

Several eases of tranee, or lethargy, are recorded in whieh there were not only the ordinary evidenees of sleep—a suspension of the eerebral or mental functions—but an apparent suspension of the organic or vital functions. In some of these cases, the individual has been conscious, during the whole period of its continuanee, and has retained a perfect recollection of every circumstance afterwards. One of the most remarkable cases of this kind is recorded in the *Psychological Magazine*:—"A young lady, after having been confined to her bed for a long time with a violent nervous disorder, was at last, to all appearance, deprived of life. Her lips were quite pale, her face resembled the countenance of a dead person, and the body grew cold. She was removed from the room in which she died, was laid in a coffin, and the day of her funeral fixed. The day arrived, and, according to the custom of the country, funeral songs and hymns were sung before the door, Just as they were about to nail on the lid of the coffin, a kind of perspiration was observed to appear on the surface of the body. It grew greater every moment, and at last a kind of convulsive movement was observed in the hands and feet. A few minutes after, during which time fresh signs of returning life appeared, she at once opened her eyes, and uttered a most pitiable shriek," In the course of a few days she was considerably restored, and gave the following account of her sensations:—"She said it seemed to her as if in a dream she was really dead: yet she was perfectly conscious of all that happened around her in that dreadful state. She distinetly heard her friends speaking and lamenting her death at the side of her coffin—she felt them pull on the dead clothes, and lay her in it. This feeling produced a mental anxiety, whieh was indescribable. She tried to cry; but her soul was without power,and *could not act on her body*. She had the contradictory feeling, as if she *were in her body, and yet not in it*, at one and the same time. It was equally impossible for her to stretch out her arm, or to open her eyes, or to cry *although she continually endeavoured to do so*. The anguish of her mind was, however, at its utmost height when the funeral hymns began to be sung, and when the lid of the coffin was about to be nailed on. The thought that she was to be buried alive, was the one that gave activity to her soul, and caused it to operate on her corporeal frame,"

A similar case of suspended animation, accompanied by consciousness and memory, was narrated to me by the lady herself, and in her ease the state seemed to be of frequent occurrence, and the predisposition hereditary through several generations. The lady was about forty-five, of healthy and robust appearance, had never known any other ailment, had been the mother of nineteen children, all born alive, and some twelve or fourteen of whom were then living and healthy. She had been several times seized whilst apparently in her usual good health, with every symptom and appearance of complete death, and this state sometimes continued for one or several hours. Her family and friends, though accustomed to its recurrence, and with the knowledge of her recovery from previous attacks, always seemed impressed with the idea that some time or other they would be prolonged into actual death, and on each occasion fearing that result might ensue, could not refrain using every means for restoring animation which they could possibly have recourse to. And of all this she herself was perfectly conscious, heard all their suggestions and remarks, their expressions of fear, anxiety, and grief, felt all their movements about her person, and knew all the expedients they tried, and knew also that they would be of no avail. She was happy, and perfectly free from pain, or fear, or anxiety; knew there was no danger, and that if they would not disturb her, she should be restored after the lapse of a certain period of time, and wished she had the power to tell them so. On recovery she speedily regained her wonted strength, and felt no other inconvenience. Several of her ancestors had been subject to similar attacks, and according to a tradition in her family, one of her great grandmothers in the time of the great plague in London, lay in that condition for ten days, and recovered, and none of her family had since been buried till after the lapse of ten days from their apparent death.

Now, in all these cases (and I might have particularised many others, but these will be sufficient for the purpose of illustration) so different from each other in many respects, there is one distinguishing feature which pertains to each. They are all states or conditions of the system attended by consciousness. The *consciousness of the normal or waking state*, and their events are remembered in that state, and all these cases may, therefore, be considered as varieties of that state.

But in sound normal sleep the consciousness ceases, the brain receives no impressions either from without or from within, and therefore remains in a state of quiescence, and there being no consciousness of anything during its continuance there can be no memory afterwards. This appears to be the case in hysteric coma, and in epileptic and apopletic coma, in cases of prolonged or protracted sleep, and even in those cases where the coma has resulted from concussion or compression of the brain, and in which there may or may not have been various involuntary or reflex motions manifested, and these may all be classed as varieties of the sleeping or unconscious state.

And this state of unconsciousness may continue for an almost incredible period. A case is reported which occurred but a few years ago, of a man who fell on his head from the rigging of a vessel. He was taken up in a state of complete insensibility, which continued during the remainder of the voyage, and until after he had been some time in one of the London hospitals—in the whole, a period of about thirteen months. During this period, he swallowed the food placed in his mouth just as a brainless infant would, and without exhibiting any other sign of consciousness, sensation, or volition. It was ultimately discovered that the skull had been fractured, and a portion depressed; and on this being raised, consciousness returned, and the first words he expressed shewed that he had no memory of the long intervening period, but imagined himself still in the rigging, as at the moment before his fall—thirteen months before. I lately met a gentleman (a member of the profession) who had remained in a precisely similar state of unconsciousness, after an injury on the head from a fall, for a period, I think, of two months—of the events of which he had no recollection whatever on his restoration. He appeared in exeellent health at the time I saw him.

And now we come to the third class, those of sleep waking or second eonsciousness. As consciousness—*the* conseiousness of the waking state—was the eonneeting link, the essential charaeteristic of our first class, and as the eessation of that or unconsciousness was the essential characteristic of our second elass, so a new or seeond state of consciousness, not identical with the eonsciousness of the waking state, constitutes the essential eharaeteristic of this our third class. As a neeessary consequenee of this, its leading eharaeter, there is no memory, no recollcetion of any of its events in the waking state, the moment the latter is restored, all traces of the former are obliterated, and continue "as a sealed and unknown record" until this state of seeond conseiousness again supervenes, and then all are again recognised. Let us now review a few of the many interesting cases reeorded of the oeeurrence of this state, and having examined the eharaeters they present, we shall be able to institute an interesting and instructive comparison between them and the analogous phenomena presented in cases of mesmeric sleep waking.

THE PHYSIOLOGY OF MATERIA MEDICA,

AS ESTABLISHED BY THE LATEST RESEARCHES IN ORGANIC CHEMISTRY, PHYSIOLOGY, PATHOLOGY, &e.

By the celebrated Professor T. F. SOBERNHEIM.

(Translated and prepared for the 'MEDICAL TIMES,' by SIGISMUND SUTRO, M.D.

DISEASE and health are both included in the idea of life, and life is the process of constant reproduction. The future body is contained in the first germ; and its progressive tranformations, from the germinal layer or yolk to the beauty of manhood, have been closely observed and followed, step by step, by Wolff, Döllinger, Pander, D'Alton, Baer, Meckel, Purkinje, Valentin, Rathke, Huschke, T. Müller, Carus, E. H. Weber, Siebold, R. Wagner, Krause, Bernhardt, Reichert, Bischoff, Prévost and Dumas, Coste and Delpech, Sars, Brechet, Velpeau, Serrès, Flourens, Dugès, Dumortier, Wharton Jones, Martin Barry, Grant, Rusconi, and others. The body is the element which constantly changes during life, whilst the *being* remains in its integrity. The change of form always proceeds from within outwards, and is caused by an agent we call *development*.

Phenomenon of rotation in the fructified ovum.—The fructified ovum or egg does not enter the womb by a plastic, but by a real *locomotor* movement. "How agreeably surprised I was," says Bischoff, "when I saw with the mieroscope the round yolk turn energetically and majestically round itself." Bischoff observed that the yolk accomplished these independent rotatory movements by means of very fine ciliæ on its surface, though the cells of the Fallopian fimbriæ might support the rotation. Siebold discovered, lately, that the yolk-balls of the freshly-laid *planaria* performed *lively*, *peristaltic*, and *anti-peristaltic* movements, by whieh the constituents of every yolk-ball were moved to and fro, and these alternate eontractions and expansions lasted for several hours. No muscular fibres existing here, this phenomenon must be attributed to an automatic power. The process of *furrowing* is nothing else but a progressing production of encased mother cells, the final result of whieh is the birth of the simple cells, destined for the formation of the whole organism. These primordial movements (performed without any peculiar apparatus, *by the inherent vital power*) must convince us, *that automatic motion is originally inherent to life.*

Automatic movements of plants.—In many plants a movement of juices is observed, analagous to circulation, namely, *cyclosis* (through the lacteals) and *rotation* (through the cells), though they possess no central organ like the heart. Thus the filaments move towards the *stigma* in time of fructification, in the following plants:—*ruta graveolens, geum urbanum, cactus opuntia, fritillaria*

persica, hyoscyamus aureus, polygonum orientale, &c. Burdack observes, "Now and then, such rapid and perceptible motions are observed in plants as *cannot be communicated from without*, but must arise in the vegetable organism itself;" and he designates them a "*trace of free animal motor power.*" Vegetable motion is generally called *plastic*, to distinguish it from *animal* motion. But the terms, *subjective* (viz., without a medium) and *objective* (called into action by a certain medium), would be more correct. The *nervous system* serves as a mediating organ for the free development of the psychical principle; and, according to the latest and most accurate researches, even the lowest animals are in possession of a nervous system. Thus, the difference between vegetable and animal lies not in the principle of automatic motion, but in the possession or want of mediatory organs. The widest definition of *irritability* is, indeed, but *movement.* In plants, subjective movements take place either spontaneously, or by external influence. In the latter case, we have the appearance of organs for irritability. Since the contraction of the cellular cells (assumed by Decandolle and Treviranus, for explanation of the rotatory movement) has been satisfactorily disproved by Corti; since the nervous substance, supposed by Agardh and Dutrochet to exist in plants, has been proved to be very problematical, and since Raspail's attempted *physical* explanation has not proved more satisfactory; nothing remains but to consider this vital phenomenon as *an automatic function* (subjective motion.) The same thing takes place by the circular motion of juices in the lacteals of higher plants. According to Meyen, the lacteal juice rises through some of the larger vessels in circular lines, passes so to the leaves, circulates through their numerous ramifications, — returning similarly through other vessels, runs through all the ramifications of the root, obtaining there a fresh supply of raw juice, and begins anew its circular motion upwards. Now, this circulation cannot be caused by contraction of the vessels, because the walls are so firmly joined to the surrounding organs as to preclude all possibility of such action. "The cause," says Meyen, "can only be found in the juice itself." Besides this rotatory motion, *an oscillatory or molecular motion* has been observed in the inner cells of many plants.

The automatic power of muscles cannot be wholly ascribed either to the inherent moving power of the muscular fibre, independant of nervous influence, or to the nervous impulse alone. Prochaska, Legallois, and Reil attempted to prove the *necessary* co-operation of the nerves, by the circumstance that narcotics, though chiefly operating on the nervous system, diminish likewise the muscular irritability. But the contrary has been proved, partly by the observation of Nysten, Brodie, and Wilson Philip (as regards the independance of muscular irritability, or the integrity of the brain and spinal marrow), and partly by the experiments of T. Müllur, which shewed that the muscular contractility was undisturbed after poisoning by narcotics. The dependence of the muscular action on the nervous system can also be disproved by the circumstance, that the application to the nerves of several chemical agents (as of mineral acids and alcohol) produces no contractions, whilst their application to the muscles causes contractions. Though T. Müller's ingenious experiments put it beyond doubt, that the close contact, for some time, of a muscle with a narcotic principle (as a solution of morphia) annihilates both muscular and nervous irritability, they only shew that the vitality of the muscle, and (as a consequence) its contractility, have been paralysed by the narcosis. But it does not follow, as T. Müller concludes, that the muscular irritability has only been destroyed by the narcosis of the nervous ramifications dispersed in the muscular tissue: for such an inference would justify equally our concluding that the principal cause of nervous vitality is in the blood, because the local application of narcotic substances on the nervous centres produces no symptoms of poisoning, (as is shewn by the instructive experiments of Fontana, Emmert, Delille, Majendie, Orfila, Medemeyer. Segalas, T. Müller, Stannins, and others); whilst symptoms of poisoning ensue as soon as the poison enters the blood, and because the blood (the arterial) exercises such an exciting and enlivening influence on the nerves, that internal hæmorrhages reduce, or even destroy the nervous activity. The great physiologist, Tiedemann, attributed the proximate cause of muscular contraction *to the muscles themselves*, for "the living nerves," he says, "cannot communicate to them (the muscles) a power which they do not possess themselves;" and T. Müller agrees with him in this point, but insists that this contractility is inherent in the muscle for the *co-operation of the nerves.*

Automatic motion of the nerves.—The tubular structure of the nerves, with other circumstances, caused the hypothesis of a nervous juice circulating within the nerves. But nobody ever saw the nervous fluid. Very lately, Van Deen had the courage to speak of a local movement of the nerves. He distinctly saw spontaneous motions, both of the grey and white substance of the spinal marrow. Can we assume the communication of impressions by the ramifications of the peripheric nerves, to the nervous centres, and the ensuing reaction, without centripetal and centrifugal movement? I think not.

Automatic movement of the arteries.—According to T. Müller, the arteries possess no muscular contractility, because neither sudden nor rhythmical contractions can be observed in them; nor can contractions be caused by electricity. But Wedemeyer succeeded in causing, by the galvanism educed from twenty-four pairs of plates, distinct contractions of the small arteries, till they shrunk to the fourth of their diameter; and cold, we know, (a principal criterion of the glutinous contractile tissues) produces contraction. As the middle arterial membrane belongs to the *contractile, elastic tissues*, a tissue different from muscular tissue, in microscopical as well as in chemical relation, the pulsation might be brought about by the alternate extension and retraction of the muscular membranes. But this is not sufficient to explain the phenomenon of pulsation, because: firstly, arteries gradually become narrower during life, though the pressure of the blood remains the same (as is shewn by the experiments of Wedemeyer, Parry, Hastings, and others); secondly, the larger arteries continue the pulsation in their narrower state, though they possessed a larger volume at the diastole of the heart; thirdly, according to Parry's researches, the arteries are more contracted by hæmorrhages, than is warranted by their elasticity; fourthly, according to Schwann's experiments, the diameter of an artery was, by gradual application of cold water, reduced, within 15 minutes, from 0.0727 lines to .0.0276; and, lastly, a spasmodic pulse shews a spasmodic state of the arteries, which disappears on the access of perspiration. As all the above phenomena do not depend on the clasticity of the middle arterial membrane, for they disappear after death, whilst the extension and retraction, occasioned by the elasticity, remain for years after death, the cause of pulsation must be ascribed to the living contractility of the arterial fibre. The independent contractility of the arteries is also proved by the circumstance that, in several affections, particularly spastic and paralytic, the pulse differs in strength and frequency in different parts of the body. This could not be, if the only cause of the blood's movements were the force proceeding from the heart. This difference of the pulse has been proved by the observations of Albers, in Bonn. In one case, the pulse of the left hand beat 55 to 57 times a minute, whilst that of the right hand beat from 61 to 63 times. In another case, there were from 56 to 58 pulsations in the left hand, and from 64 to 66 in the right. In a third case, the pulsations on the paralysed side were three a minute less than on the healthy side.

Automatic movement of the veins.—The experiments of Hastings, Verschuir, Thomson, and particularly Merx, have proved distinct venous contractions, in consequence of mechanical or chemical irritation. Alison, by his recent researches, proved the existence of a venous pulse, independent of the heart and nervous system:— first, the venæ cavæ, near the heart, show a pulsation in the four higher classes of vertebrata; secondly, they continue to beat after death, long after the auricles and ventricles of the heart have ceased to move; thirdly, when the venous pulsation has perfectly ceased, it can be renewed by galvanism, or simple mechanical means; fourthly, the greatest variations take place in venous pulsations, though not in proportion to those of the heart.

Automatic movement has also been proved in the capillary vessels, in the tunica dartos, corpora cavernosa, &c. What is the cause of the movement of the blood? J. Müller, Allen Thomson, Magendie, and others, consider the heart the *primum movens* of the blood. According to Caspar Friedrich Wolff, blood is formed in the *area vasculosa* "before the heart beats and flows towards the heart; before it (the heart) displays the smallest trace of activity." According to H. Schultz's experiments, the flowing of the fluid portions of the blood shews itself long before the formation of the red blood. Ozermak made the following interesting observation (agreeing with Valentin's ingenious experiments):— When a *proteus* (which had been enclosed during winter in water) awoke, Ozermak distinctly saw, in the transparent parts of this animal, that the circulation began at the circumference and moved gradually towards the heart; so that the blood began to circulate before the heart acted. The following facts prove the existence of circulation without the heart:—the circulation of the fluids in plants; the circulation of blood in heartless animals—as the planaria, holothuria, and abdominal worms, (according to Ehrenberg, Nordmann, Tiedemann); monstrosities born without hearts; the ossification of the whole heart. (Matacarne and Meilleur found the whole heart of a duck so ossified, that no muscular fibre could be discovered in it.) The continued circulation in the arteries and veins after the resection of the heart (as in frogs). The continuation of the movement of blood in those parts which are separated from the body. Thus, H. Schultz observed, after the perfect removal of the mesentery with the alimentary canal, (in frogs and mice) the peripherical movement of the blood continued for half an hour after life had been extinct. The result of all the above and many other researches and experiments is, that automatic motion does not only belong to single organs, (supplied with muscular and nervous fibres for that particular purpose), *but to all parts of the animated being.*

Automatic sensation.—The definition of the spiritual automatic feeling might be—*sentio, ergo sum.*

The automatic sensation of plants has been denied, because they possess no nerves: but since Schleiden and Schwann have proved the similarity of vegetable and animal development, and shown that the simple cell is the origin of all the successive changes of both, the difference between vegetables and animals has considerably diminished.

Objective sensation must be distinguished from *subjective.* While the former kind of sensation is conducted by a particular apparatus (the nerves), the latter ensues without this particular organisation, by immediate perception of bodily existence. T. Müller denies sensation in plants, because "sensibility without consciousness cannot be allowed." But do not the chaotic cells of the yolk of the ovum make the most ingenious movements, as it were, to form a general cellular organisation? Do not all plastic functions take place without consciousness in their respective organs? and are we, on that account, justified in denying them sensibility? Undeniable facts prove sensation without nerves, motion without muscles, and growth without vessels. Pain is felt at every point of the skin punctured by a needle, though we cannot always discover nerves at that particular spot. A striking proof of sensibility without consciousness is the following:—"If you irritate," says Volkmann, "a decapitated amphibia, by sticking, pinching, or burning, the animal performs regular muscular movements, perfectly similar to the voluntary locomotions; these phenomena last in lively frogs, salamanders, and water-serpents, for several hours after death." Nay these unconscious movements assume sometimes the appearance of being performed *for a*

particular purpose! Thus, for instance, if you irritate a decapitated tortoise, it will retire under its shield. When Volkmann irritated the fore-legs of a beheaded frog, the animal drew them back; when he irritated them again, they were further retracted, and at last the animal hid them under the belly and changed its sitting posture into a lying one. If you violently irritate one of the hind-legs of a decapitated frog, when in a sitting posture, it will make a leap. If you seize it with pincers at the abdomen or at the back, it generally scratches the irritated spot with the hind thigh of the respective side. Again, it is shewn that the organ of *consciousness* does not exhibit a single trace of *sensibility*. When Magendie cut off both the hemispheres of a rabbit, by pieces, down to the base of the skull, the animal remained very quiet during this delicate experiment; it sat on its hind-legs, looked to the right and left, and changed its position more out of tediousness than for the purpose of escaping pain. Even in man, whole pieces of the cerebral lobes were cut off without causing any pain, as I have witnessed myself in a case of encephalocele.

The sensibility of plants is proved by many facts. Decandolle's experiments show, that by the influence of artificially conducted light, certain plants can be caused to develope their leaves at night and to shut them during day. The application of narcotics changes the vitality and irritability of certain plants. When Meyen burnt the stalks of the sensitive plant near the root, phenomena appeared similar to those which T. Müller found in cauterizing denuded nerves of frogs and rabbits with the flame of a candle; namely, violent contractions. According to Göppert, poisons destroy the irritability of the sexual parts of the *berberis vulgaris;* and, according to Nasse, oil of turpentine is a powerful stimulating remedy for the anther of *parietaria.* Those substances which excite the irritability of animals, excite likewise the sexual organs of plants.

Automatic sensation of the primitive cell.—Immediately after conception, an ovulum separates from the ovarium and moves towards the uterus. Just as cold water thrown into the face of a fainting person produces automatic sensation and automatic movement, in the same way the exciting influence of the seed operates on the slumbering ova, and causes their motion. No movement can take place without previous feeling. Thus, the muscles and nerves are proved to possess automatic sensation. The *localized pain*, which can be removed by local application of narcotics, argues automatic sensation of pain for this special spot. The following experiment proves the automatic sensation of nerves beyond doubt:—T. Müller denuded a frog's crural nerve, the end of which he placed in a solution of acetate of morphia; after some time, the end had entirely lost its irritability. The same happened when muscles were dipped into a solution of opium. Henle mentions, that by directing attention or consciousness to sensitive nerves alone, their sensibility can be raised to a feeling of heaviness, pressure,—nay, of *real pain*, even without any external irritation. "Thus, attention might be considered a sort of stimulant, and a nerve so excited might communicate its state to other nerves, particularly the motor nerves, and produce spasms and convulsions in the involuntary muscles. The direction of thought to the heart changes its throbbing, and a continued attention produces palpitation." The automatic sensation of the blood is proved by its possessing *independent* life; it can be diseased independently of any other organ, and we know that only *living* strictures can be unhealthy. For what is disease but a conflict between the life of an organ and a delcterious agent? The experiments of Fontana, Coindet, Orfila, and Hertweg, prove that animal poisons primarily attack the blood. The narcotics operate by poisoning the blood. The experiments of *transfusion* made by Dieffenbach, showed that the blood of mammalia is decidedly fatal to birds. "What peculiar substance lies in the blood of mammalia," says Dieffenbach, "that a few drops of blood brought into the circulation of birds should destroy their life, as if by charm; or kill them under the most violent convulsions, as if the strongest narcotic poison had been introduced? In no case was accident the cause of death; no material difference of blood could cause such sudden death; it must have been *the* LIVING *dissimilarity* of *mammalian blood.*" On the other hand, the transfusion of healthy blood from animals of the same class has proved very beneficial. Thus, Brigham saved the life of a woman suffering from anæmia, by injection of twelve ounces of blood, every ten minutes. Even the fluidity of the blood shows its *independent* life, and its coagulation has been justly considered as an act of dying. How unnecessarily has it been attempted to account for the fluid state of the blood by *animal heat*, by the *non-access of air*, by the *activity of the lungs*, by the *capillarity* of the *finest vessels*, and lately, on the part of *Raspail*, by the saturation of the free soda in blood through carbonic acid. The real cause is the agency of the "*inherent life*," a fact that cannot be doubted now that we know that the globules of blood are individual cells, like those of chyle and lymph. Thus, our age has acquired the honour of confirming the sentence which the immortal *Harvey* wrote two centuries ago, namely, "Utrumque autem et motum et sensum sanguini inesse omnibus fit conspicuum documentis, etiamsi Aristoteles id negaverit."

To be continued.

TRANSACTIONS OF LEARNED SOCIETIES.

ROYAL MEDICO-BOTANICAL SOCIETY, May 9.—Dr. Cooke in the chair.

Dr. Sigmond delivered a lecture on the effect of the tides in the atmosphere on the diseases of the chest. He commenced his lecture by stating that the more immediate object he had in view was to bring before the society a comparative statement of the value of certain plants in the cure of asthma, but in the consideration of this subject he should be compelled to travel somewhat from the ordinary track, for he was desirous of introducing to the attention of the Fellows some views which he had taken, and for whose confirmation he anxiously looked for the co-operation of the members of the medical profession, through the publicity which the society would give to the doctrines he sought to establish. He was about to show the effects produced upon the organs of respiration, when influenced by disease, by certain individuals of the genus datura, one of which, stramonium, was familiar to them all; but others, such as fastuosa, tatula, canescens, metel, and ferox had scarcely been tried; by lobelia inflata, tenella, longiflora, urens, tupa, by nicotiana tabacum, by digitalis purpurea, by cannabis Indica, by laurus camphofa, and by other plants. The point to which he had most to direct the attention of the society was the effect produced during the actual paroxysm of asthma, when instantaneous relief was the great desire both of the patient and the physician. Most of the vegetables he had enumerated, produced their effect by inspiration into the lungs, and thus altering or modifying the air which was breathed in, for whatever benefit might be derived from their use by their internal administration, they were infiuitely more efficacious when used in the form of smoke. They made such a change in the air as enabled the lungs to draw in about twelve cubic inches of air, which might be considered to be about the quantity necessary. The paroxysm of asthma consisted of a struggle on the part of the muscles which act in compressing or expanding the chest in the acts of inspiration and expiration, the excess of exertion bringing on it an associated condition of the other muscles, the consequence of which is, action of the chest without a perceptible interval. One of the remarkable features of asthma is the periodicity of these paroxysms. Shortly after midnight the asthmatic knows, by peculiar precurrent symptoms, that he will experience his attack, and during the presence of the disease he is attacked about the same hour each night until it ceases. This periodicity of the disease had attracted the attention of medical men in all ages, and the greatest anxiety had been evinced by the profession to ascertain its cause. Dr. Sigmond believed, from his own observation, and likewise from the assistance which had been given him by others, that the rarity or density of the atmosphere, as produced by its diurnal tides, which were proved by La Place, by Humboldt, and by observations of meteorologists to take place in twenty-four hours, materially influenced diseases of respiration, and of the nervous system. He looked to these tides as the cause of the periodicity which was observable in fever, in epilepsy, and in a variety of diseases, to which he could not then advert. A weight of air of about 36,000 lbs., presses upon the human body. That the abstraction of the smallest quantity of this would produce sensible effects is proved by the action of the cupping glass. The enormous pressure which is complained of even when the most minute portion of the air is removed becomes a source of disease, and by the practice which has been pursued in France for the relief of apoplexy by exhausting the air round the leg, varicose veins have been instantaneously produced.

It was most desirable that the plan of registering the state of the barometer twice at least in twenty-four hours, as proposed by Sir John Herschell, should be carried into effect. Every military and naval surgeon in the United States had been called on to pursue this plan, and the consequence would be that the attempt of Professor Forbes, which was discussed before the British Association to give us a regular formula of the atmospheric tides would be carried out, and if with this each medical man would give his observations on the periodicity of disease, tables of practical information would be formed, which would be invaluable to the human race. The diurnal oscillations of the barometer are evidently disturbed by many causes, and these, doubtless, influence the coming on of disease when the previous susceptibility exists. The superincumbent column of air may evidently be either expanded or diminished as heat or cold affects the atmosphere, and their sensible effects will be perceived. In smoking the different vegetables which afford relief, it is evident that their good effect is seldom owing to any striking medicinal power, to any marked aroma, to any peculiar flavour, for in the course of his observations he (Dr. Sigmond) had found that some of those which possessed the most power exhibited the least sensible effect, but they modified the state of the air. Eudiometry showed too that there was no change in the chemical state of the gases. He hoped that a future opportunity would be afforded him of showing that the atmospheric tides, four times in each day, produced marked changes in those who were diseased, although the healthy were quite unconscious of what was passing around them. The periodicity of intermittent fever, the evening exacerbation of continued fever, the remissions, were in his mind explained by the phenomena to which he had drawn attention, but he looked to accurate statistic details before he could arrive at all the conclusions which so important a subject must involve.

MEDICAL SOCIETY OF LONDON, May 27.—Dr. T. Thompson, president, in the chair.—*Ovarian tumours obstructing delivery—Ovariotomy.*

The discussion on the case, narrated by Mr. Headland at the last meeting of the society, and which was published in the last number of the *Medical Times*, was resumed by Mr. Crisp, who expressed his regret that he was not present when the case had been described, and enlarged upon the propriety of making an exploratory puncture into the tumour to evacuate its contents; to which operation he observed, there had not been made any allusion during the previous discussion: many successful cases had been placed on record, in which this operation had been performed; six were described by Dr. Denman; of these, three recovered, two were partially successful, and one died. An interesting case of the kind was related to this society by Mr. Neuth: Dr. Lever was called in, a puncture was made into the tumour, and the patient did well. In Mr. Headland's case, although from the extent of disease, a permanent cure could not be effected, yet he thought if a puncture had been made, and the contents of the tumour evacuated, the woman's life might have been prolonged, and he wished to ask Mr. Headland, if such case should occur to him again, whether

he would not make a puncture, or incision, into the tumour. He thought the woman sunk, in consequence of the long continuance of the labour. He was disposed to doubt the fact that the ovaries were in a scirrhous state; the fibrous tumour very closely resembles that degeneration, and might have been mistaken for it.

Mr. Headland regretted that Mr. Crisp was not present at the last meeting of the society, as the ground he was taking for discussion had been then fully travelled over. He then recapitulated briefly the particulars of the case, to shew that Mr. Crisp's objections had been anticipated by the circumstances of the case, and were consequently untenable: he alluded to the occurrence of the laceration of the vagina, which took place early when the os uteri was becoming patent, as rendering the exploratory puncture recommended, unjustifiable and unnecessary. He thought that the cases in which this exploratory puncture had been successively practised, so far from being numerous, were in reality, exceedingly rare, and he concluded by observing, that Mr. Crisp's remark with respect to the non-existence of scirrhus in the ovaries, could not be meant seriously, as it was not to be supposed that practitioners of the standing of Mr. Stedman and himself could have committed so great an error, as to mistake fibrous tumour for scirrhus.

Mr. Crisp observed, that Mr. Headland's case shewed the necessity of making early punctures or incisions, as the laceration of the vagina took place from one or two efforts of the uterus.

Mr. Headland, to point out the inutility of any operation, observed that the examination of the body after death, shewed that the diseased condition of the upper part of the vagina had existed for several weeks prior to the occurrence of labour.

Dr. Waller said that, doubtlessly Mr. Crisp spoke from a thorough knowledge of the facts, but the impression on his mind was that in the cases narrated by Dr. Denman where the exploratory incision was practised. the tumour was an encysted tumour between the vagina and rectum, and not a diseased ovary.

Mr. Crisp answered that the cases were quoted by Dr. Lever as instances of ovarian disease.

Dr. F. Bird narrated the case of a young female, between twenty and twenty-one years of age, on whom he had recently operated for the extirpation of an ovarian tumour. About three years previously, while she was menstruating, a quantity of cold water was thrown over her, and the secretion was at once arrested. She became subject to pain and uneasiness in the right hypochondriac region, and after the lapse of about four months, the abdomen was perceptibly enlarged. The disease ran its usual course, notwithstanding a fair trial was given to iodine, mercury, &c. The patient was at first regular; but, after a time, she became subject to occasional menorrhagia. When Dr. Bird saw her for the first time, about six weeks since, she was much emaciated, and was labouring under great constitutional irritability, the result partly of the annoyance caused by the disease, and partly from the remarks that were made on her appearance, and, on that account, he deemed it advisable, if an operation were to be performed, to proceed with it as early as possible. Dr. Hamilton Roe and Dr. Andrews also saw the patient, and having coincided in opinion with Dr. F. Bird, the 21st of April last was fixed for the operation, at which time the abdomen was forty inches in circumference, and presented dulness on percussion, with evident fluctuation. There could not be detected any hard tumour, and it was so evident that adhesions did not exist, that Dr. F. Bird did not deem it necessary to employ the instrument he has invented to ascertain their presence.—(Vide *Medical Times*, ante.)—An incision was first made, two inches below the umbilicus, about an inch in length, sufficiently large to allow of the introduction of the finger, by which the non-existence of adhesions was clearly ascertained. The incision was then enlarged to four inches, when the tumour was observed to ascend and descend freely and synchronously with the motions of the diaphragm. The sac was grasped with a pair of strong forceps, and punctured: its contents flowed out readily, and it was drawn out of the cavity of the abdomen, and removed. The operation was completed in twenty minutes. Two arteries required ligature, the silks that were used being afterwards carefully plaited together, to prevent the risk of the occurrence of a strangulated hernia between them, which might otherwise have happened. The wound in the abdomen was then brought together, the use of strapping being carefully avoided, cold water dressing was applied, and the patient removed to bed. The temperature of the room was increased previously to and during the operation, and the pulse, which previously was 96, sunk to 88. Great depression followed, and, as in the second case operated on by Dr. Bird, it was a long while before reaction took place. It was requisite to administer wine and water occasionally for the next twenty-four hours, after which well-marked reaction and febrile excitement set in. By the third day there were symptoms of local peritonitis in the right iliac region, which were removed by very little treatment, and the patient has since done well. Perfect recovery was retarded for a few days by the formation of a small abscess near the wound, caused by the division of some fibres of the rectus muscle. The ligatures came away on the seventeenth day. The abdomen is now of the natural size, about twenty-three inches in circumference. The right ovary was the organ diseased; the left is perfectly healthy. There were a few points of interest connected with the case, to which Dr. F. Bird wished to allude;—to the peculiar irritability of the patient he was inclined to attribute the attack of peritonitis. Mr. Key attributed such an occurrence to the age of the patient, but in the second case in which he had operated, the age of the patient was the same, and yet there was not any inflammatory attack. He was led to attribute it to the peculiarity of temperament. With regard to the general question, as to the admission of this operation as a standard operation in surgery, he thought, that from the number of cases that had been placed on record, we were justified in doing so. He thought it was extremely rare for disease to exist in both ovaries at the same time; it was not the case in any of the instances that had fallen under his observation, and there were very few such cases to be found in the records of Guy's Hospital. As regarded the existence of adhesions militating against the performance of the operation, he was of opinion that if they were not very strong, and could be readily separated, there would be a greater probability of a favourable recovery than otherwise, as the peritoneum would be less likely to take on inflammatory action, than when it existed still as a serous membrane. The case which he had narrated to the society was the fourth in which he had operated, and they had all terminated successfully. He was inclined to believe that the operation should be confined to very narrow limits, and if all the cases that had occurred were published, as he hoped would be the case, we should hear of a case where the large incision had been made, the tumour extracted, and the patient died afterwards with symptoms of strangulated hernia; or again, we might hear of a large incision having been made, and no tumour found after all. He was aware there was an old case of this kind on record, but there was still another and a more modern one to be added to the list.

Mr. Dendy enquired what was the nature of the treatment adopted in the attack of peritonitis?

Dr. F. Bird remarked that the treatment was very simple. The temperature of the room had been kept elevated, which he considered to be quite as needful after, as during the operation; and it was then increased, so as to induce free and continuous perspiration, and large doses of opium were exhibited. No calomel was used, nor was depletion had recourse to. Three drachms of Battley's liquor opii sedativus were, in the first instance, given in the form of enema; and although that might be regarded as a large dose, yet it is not so, when the great irritability of the patient is considered. Little or no effect having been produced by this enema, one grain doses of morphia were given every hour until sleep was produced. The tumour which had been removed was a simple cyst, containing others very minute and numerous in its interior. The fluids contained in them were of different colours, and of the specific gravity 1007. There was a small quantity of albumen in the fluids, which otherwise did not present any peculiar characters. The temperature of the room at the time of the operation was 85°; by the number of persons present it was raised to 96°; and after it was concluded, the temperature was lowered to 75°.

Mr. Pilcher remarked that he was one of those who, on a late occasion, expressed the opinion, that when one ovary is diseased, the other is generally found in an unhealthy condition, and predisposed to take on diseased action, whenever an exciting cause is applied. This opinion he gave in explanation of the occurrence, after pregnancy, of disease in the right ovary in Mr. Headland's case. He should be very much gratified at finding the experience of Dr. F. Bird on that point, confirmed by that of others. His own experience in the dissecting room was directly contrary: he had found, when one ovary was diseased, that the other was studded with bunches of vesicles, which had not been carried into a state of ultimate disease, solely because an exciting cause had not been applied. In Dr. F. Bird's case, the exciting cause produced disease in the one ovary by the sudden arrest of the menstrual secretion by the application of cold, by which, probably, local congestion was caused; and the reason why the other ovary escaped could, therefore, be readily understood. The early removal of the diseased organ also precluded the extension of the mischief to its fellow. With respect to the treatment of the attack of peritonitis, Mr. Pilcher referred to Dr. Armstrong's opinion, that if he himself had that disease, and if he were restricted to the use, either of the lancet or of opium, he should prefer the latter, although he believed that the combined use of venesection and of opium offered the greater chance of success; and he stated that he thought Dr. F. Bird's mode of depleting (for inducing free diaphoresis was certainly a kind of depletion) preferable to that recommended by Dr. Armstrong, inasmuch as it removed only the watery particles of the blood, and was consequently effected at a less expense of power.

Dr. Risdon Bennett wished to ask the members what was the result of their experience with regard to the medical treatment of these tumours, without having recourse to an operation, and also what was the best treatment to be adopted in such cases? He had lately observed in the journals several cases published, in which remarkable success was said to have followed the employment of medical treatment, and the patients were restored to health. On a former occasion he had himself mentioned cases in which he had reason to believe that benefit had followed the employment of medicines, but he was not quite certain as to the nature of the tumours. In one case, however, he had no doubt as to the probability of the tumour being ovarian, and also of the line of treatment by which its further growth was arrested. He believed that medicines would do more for the relief of this disease than is generally admitted, and he thought such means of relief should be sought for, notwithstanding the splendid results of this operation, as it is one attended with considerable danger.

Dr. Waller would wish to ask Dr. Bennett the size of the tumour he believed to be ovarian, which had been dispelled by medicines? He had never seen any benefit result from the treatment of ovarian tumours af any size. The early inflammatory symptoms certainly may be removed by appropriate treatment, but when the tumour has attained a considerable bulk, it cannot be cured, and he thought therefore that this operation constituted a very important step for its removal. At another society at which he was present, he was astonished to hear a physician to a metropolitan hospital state that he was in the constant habit of removing these tumours by iodine.

Mr. Pilcher remarked, with respect to the question as to the propriety or non-propriety of the operation, that the observations that had fallen from Dr. Waller and Dr. Bennett brought to his

recollection a case which was supposed to be ovarian disease, in which the tumour, much to his surprise, was removed by absorption. The probability of removal is, however, very remote in such cases, and he was somewhat surprised at the remark made by the hospital physician, alluded to by Dr. Waller, and he was tempted to believe that there must have been some error in the diagnosis of the tumours. The case he had himself alluded to, was that of a woman, a patient at the Surrey Dispensary, who had ovarian disease, for which he directed her to rub in iodine, and also to take it internally. She had an attack of peritonitis, which was treated in the usual way, and when that complaint was removed, it was found that the tumour had been absorbed. He (Mr. Pilcher) could not tell which was the cause of that absorption,—the accidental inflammation, or the treatment that was adopted,—nor he would say positively that it was a case of ovarian disease, as he was at all times unwilling to decide that the disease was really such, until it was far advanced, tumours in the abdomen being so various, and presenting such Protean characters. He did not consider we are justified in regarding ovarian tumours as very curable. When they are so, they form a rare exception to the general rule. Their curability is so slight as hardly to be taken into consideration, when debating on the propriety of the operation. They may certainly burst occasionally into the vagina, and so be cured: or they may be ruptured, their contents discharged into the cavity of the peritoneum, and absorbed; the cyst become contracted, and the patient thus get well, but these cases are very rare. A most important consideration would be, what would be the result if the tumour were allowed to remain, without having recourse to an operation. Are we justified in removing by a dangerous operation, what may be regarded merely as an inconvenience, not affecting life. The last case he had seen was certainly one in which he would not have recourse to the operation. The patient was a lady from the North of England, who was rendered very comfortable by occasionally tapping the tumour, so much so that she had been tapped in the morning, and present at a party the same evening. But, although this is sometimes the case, the tumour may become such an inconvenience as to induce the patient urgently to demand the operation, and under such circumstances, Mr. Pilcher regarded it as justifiable. A lady, in whom the ovarian tumour burst several times into the abdomen, and who was afterwards tapped, after which it became dormant, married a second time, and the latent disease was again brought into action. She demanded the operation, and it was performed because the presence of the tumour was very distressing to her, and produced such an effect on her mind, that she would rather have died, than not get rid of it. Surgeons are frequently placed in this position, and are called upon to operate against their own conviction. This remark is not confined to a diseased condition of the ovary. Sir Astley Cooper states that he has been obliged to remove a sound testicle, and other surgeons have had to amputate a sound organ, on account of the inconvenience of varicocele, or for neuralgia. And so it is sometimes with tumours in the breast. The gland is occasionally removed, although the operation is not really necessary, because the presence of the tumour is a source of worry and anxiety, and by the influence it exerts on the mind, is affecting the general health. The cure of ovarian disease by medicines had been mentioned, but not the way in which it should be attempted. Many years ago, he had injected an ovarian tumour in the same way as is done for hydrocele, with partial success, and he believed, that if the operation had been practised earlier, a cure might have been effected. The patient had been tapped several times previously. He injected the cyst with a solution of sulphate of zinc. Severe inflammation followed, succeeded by suppuration, and the patient was placed in exceeding danger, as much, perhaps, as if the operation had been performed. A pint and a half of pus was discharged, and she finally recovered, there remaining a very small tumour in the abdomen.

The president having called upon Dr. Rees for his opinion respecting the effect produced by promoting free perspiration in the treatment of inflammation, that gentleman stated that perspiration removes not only the watery part of the blood, but lactate of ammonia also, still, however, leaving the most important part of the blood untouched. The specific gravity of the blood after free perspiration is increased, the reverse being the case after venesection, and consequently if one is a depletory measure, the other cannot be. With respect to the question of both ovaries being diseased at the same time, he had seen many inspections, and, in about one half, neither of the ovaries were enlarged. The disease was developed in the cellular tissue contained in the covering of the peritoneum, in a vesicle, the organ itself being in a flattened state. He believed that well ascertained ovarian disease had not been cured in Guy's Hospital. A sufficient time was not granted to new remedies, the old routine of tapping, and nothing else, being always had recourse to. Dr. Rees then referred to a paper by Mr. Brown, which had been read before the Physical Society of Guy's Hospital, and in which he (Mr. Brown) recommended the use of mercury, and well-regulated pressure (vide *Medical Times'* Periscope.) There is a case in which the employment of pressure is at present being tried. The patient is 70 years old. Pressure is maintained by bandaging, but the fluid is slowly collecting—very slowly indeed—but still it is collecting. He was afraid to give mercury on account of her age. He thought every remedy that had been proposed should be tried, before the operation is performed. He had heard of a case, occurring in a young person, in whom a cure was effected by iodine; but, in that instance, the tumour was not a large one.

Dr. F. Bird remarked that two of the cases in which he had operated confirmed Dr. Rees' view of the origin of the disease in a single vesicle, but in the other two the entire ovary was involved. In the case before the society, the ovary was partly healthy. He had not operated in any one case in which treatment had not been tried previously, and failed. In a case which had been tapped more than once, he had employed Mr. Brown's plan; but at the end of six weeks tapping was again required, and the patient has, since that operation, again become full. It had, consequently, not been successful. The patient had disease of the heart, and therefore he did not operate. Some of Mr. Brown's cases, he thought, were very doubtful ones. With regard to the observations that had fallen from Mr. Pilcher, the average duration of life in ovarian disease was not so long as he thought; some authors considered it to be seven years, others four, and others, again, only three; and, although, in some instances, it might be very protracted, yet there were others in which it was of much shorter duration. He saw a patient in December last, who was timid, and unwilling to submit to the operation. She was tapped, and there was then decidedly no solid growth. She has been tapped several times since, and each time, the quantity of fluid drawn off was diminished, and the solid growth more and more evident. The case will sooner or later terminate fatally. He had lately been sent for to operate in a case in which it was decided, by several medical men, that no other plan of treatment was advisable. He found it to be a case of tympanitis, which was readily removed by a few doses of galbanum.

Previously to the adjournment of the society, the President, in a neat speech, recapitulated the many services rendered by the late President, Mr. Pilcher, to the society, and presented to him the thanks of the society, printed in letters of gold on vellum. Mr. Pilcher acknowledged the honour conferred on him in a warm and expressive manner, and the society then adjourned to the last Monday in next September.

Sir James Graham was to have brought on his bill for regulating the Medical Profession, on Thursday night. Though a Government night, Mr. Roebuck and other gentlemen were allowed precedence, and it was understood that the bill is postponed till Tuesday next.

HOSPITAL REPORTS.

SURREY DISPENSARY.

CASE 1.—*Acute Rheumatism, with Inflammation of the Pericardium.*—Philip P., æt. 27, residing at Elizabeth Place, Castle Street, was admitted under the care of Dr. Aldis, April 30th, 1844: pulse 108; skin hot; tongue white, red at the edges; bowels open; urine free; complains of pains in both the legs, aggravated by warmth; no sleep; the ankles are swollen and tender; the right wrist is swollen and red; pain in the chest on inspiration shooting to the back; orthopnœa; a loud murmur accompanies the first sound of the heart.

Was attacked a few days ago with pains in the back, stomach and chest, with difficulty of breathing; could not lie low in bed. Was a patient in Guy's Hospital four years ago for a similar attack, when he was cupped over the cardiac region.

V. S. ad ℥xii
℞ Hydrarg. chlorid, gr. ii
Opii gr. ¼.
Fiat pilula 4tis horis sumenda.
℞ Haust. cathart. alterno mane sumendus.

May 2.—Pulse 96, full and strong; tongue furred; bowels open; blood much buffed and cupped; coagulum large; feels stronger in his legs; can move the right arm with less pain; swelling of the right wrist much diminished, as well as of the ankles; left wrist swollen and very painful; murmur of the heart less distinct; orthopnœa.

V. S. ad ℥x.
Rep. Pil. calomel c. opio.
Haust. antimon. tart. 6tis horis.
Haust cathart. alt. mane.

4th.—Pulse 84; skin hot; tongue less furred; bowels open; all the swellings subsided yesterday, and the pains abated; but last night the pain became severe in the left knee and foot, without swelling; the murmurs of the heart are much less distinct; can lie lower in bed; no pain in the chest; sleep greatly disturbed; gums not affected.

Emp. canthar. regioni cordis.
℞. Opii gr. i.
Hydrarg. chlorid. gr. ii.
Fiat pilula meridie et nocte sumenda.
Rep. Haust. antim. tart. et haust. cath.

6th.—The rheumatism has left the hands and legs; bowels open. Perstet.

7th.—The rheumatism has reappeared in the hands, accompanied by pain between the shoulders; cardiac murmurs less distinct; pulse 84; tongue cleaner; bowels open.

Rep. Pilula meridie et nocte.—Perstet.

9th.—Pulse 84, soft; tongue yellow, furred; bowels open; wrist and hand less swollen; is sitting up out of bed; pain much less severe; sleeps better; gums tender; bruit with the first sound of the heart; undulation in the vessels of the neck.

℞ Haust. cathart, alt. mane,
℞ Opii gr. i. omni meridie.
℞ Hydrarg. chlorid. gr. ii.
Opii gr. i.

Fiat. pilula omni nocte sum.—Gargarisma aluminis.—To keep in bed.

11th.—Pulse 96; tongue yellow, furred; bowels open twice this morning; gums tender. Can move his arms better, but the wrists are swollen and tender; murmurs distinct with both sounds of the heart.

℞. Haust. colchici S. S.
Rep. Pil opii et pil. calom. c. opio.
Garg. alum.

13th.—Swellings of the hands have much diminished; there is scarcely any swelling in the right wrist, which he can use without pain; is altogether much improved. Pulse 96, soft; tongue less furred, whitish; bowels open three times to-day; swelling, without redness, in the insteps and ancles; took the draught only once this morning, and twice yesterday, as it acted so freely. Bruit of the heart less perceptible.—Perstet.

14th.—Swellings of the joints diminished; bowels open; tongue cleaner.

℞ Opii gr. i, meridie et nocte.
℞ Haust. colchici, omni mane.

16th.—Pulse 84, softer; skin cooler; slight swelling in the left wrist; no swelling in the ankles; tongue cleaner and moister; greatly im

proved. Takes the draught twice in the day, and one pill at night; cough; bruit still perceptible with the first sound of the heart.—Perstet.

Rep. Pilula, bis die.

18th.—Pulse 84; tongue much cleaner; bowels open; feels a great deal better; there is only slight swelling in the left wrist; wishes to leave his bed; slight pains now and then in the hip and knee; murmurs of the heart less perceptible; no cough; lies lower in bed.

Rep. Haust. colch. et pil. opii, omni nocte.

21.—Is dressed and down stairs; complains only of slight pain in the right hand; one of the knuckles is swollen and red. Pulse 96; tongue foul; bowels open.

℞ H. cathart. alt. manc.

℞ Opii gr. i, omni nocte.

He improved very fast, and on the 28th was able to attend at the Dispensary, having no pain in any part of the body.

Case 2.—*Warty Vegetations in the Larynx.*

William D., æt. 2½ years, residing at Green Street, Kennington Common, was admitted, under Dr. Aldis, into the Surrey Dispensary, March 26, 1844. The child suffered from continual croupy respiration, which had existed for about a fortnight. The mother stated that she had noticed a similar noise accompanying the breathing since its birth, at intervals. There was no metallic sound with the cough; orthopnœa, with occasional symptoms of suffocation. Leeches were applied to the sternum; tartarized antimony, emetics, calomel and purgatives were also employed. He appeared to derive most benefit from a liniment composed of linim. saponis ℥j, ol. crotonis ʒii, applied to the upper part of the sternum. This application has been found to be very useful in some cases of aphonia at the Dispensary, connected with chronic inflammation of the larynx.

25.—The mother reported that the child died suddenly in her arms from suffocation; a medical practitioner was sent for, who opened the external jugular vein. The body was examined, the same day, by Dr. Aldis and Mr. Moxhay. The body was rather plump, and the cervical veins loaded with fluid blood. Epiglottis healthy; the ventricles of the larynx were filled with warty vegetations, from the size of a pin's head to a pea, completely closing up the larynx, without ulceration. The lungs and heart were healthy. A preparation of the larynx is at the Dispensary.

WESTMINSTER HOSPITAL.

Injury to the Spine.—Paraplegia.—Thomas Green, ætat. 46, residing at Paul's Cray, Kent, was admitted Nov. 6, under Mr. Lynn. About fourteen weeks previously he fell from a haystack, alighting on his feet. He experienced a jar in the neck, and suffered from giddiness and swimming in the head, which symptoms were relieved by the treatment resorted to by his medical attendant, namely, bleeding, cupping, leeching, and blistering. On admission, there was observed projection of the third, fourth, and fifth cervical vertebræ, with commencing paralysis of the upper extremities, attended with numbness to such a degree that he could not grasp any object with the hand. The left arm was chiefly affected; the inferior extremities were not paralyzed, nor was there any affection of the bladder; some degree of difficulty of breathing existed. The bowels were constipated. A seton was made in the neck, and the bowels kept open by occasional doses of house medicine. *Low diet.*

Dec 9. The paralysis has nearly disappeared, it continues only in the left arm, and that but to a slight degree; the appetite is good and the bowels open. *Full diet.*

15. Improving. *Cont.*

Jan. 1. He can now raise the left arm to the head, and is almost entirely free from numbness.

19. He complains of occasional darting pains in the arms.

29. Has more power in the upper extremities; the tongue is covered with a brown fur, chiefly in the centre; the bowels are constipated, and the health generally deranged. To relieve these symptoms Mr. White ordered him to have a combination of blue pill and colocynth at night occasionally.

Feb. 5. He takes a pill every other night; is improving in every respect.

16. Has nearly recovered the use of his limbs, and directions were given to heal the seton.

19. Discharged.

Cases of Burn.—John Baird, ætat. 6, residing in Bell-street, was admitted into Anne's Ward on the 14th of Dec. under Sir Anthony Carlisle, with a very severe and extensive burn, occupying the whole of the right side, the arm, hand, neck, and chin, the side from the shoulder to the hip also included. The parts were dressed with the linimentum terebinthinæ, and an aperient draught was ordered him. In the course of the next day symptomatic fever was lighted up, for which he was ordered a mixture composed of tartar emetic and sulphate of magnesia in water. By this medicine his bowels were opened and nausea excited. The child was placed on low diet.

On the 17th the dressings were changed, and simple ointment applied; the discharge was very slight, and the parts burned appeared to be sloughing; the boy was very feverish; the pulse small and frequent; skin hot; a feverish flush on the face; he was very restless, and appeared to be in great pain. The bowels were freely opened by the medicine. *Cont.*

20. Discharge still very slight; the pain very severe, and the fever continues. The dressings were discontinued, and a poultice ordered to be applied. Bowels not open. *Cont. mistura.*

21. The parts are sloughing very extensively; the child is sinking; lies on his back, moaning, with his eyes half closed and dim, as if covered with a film; the pulse is small and frequent; the powers of the system appear to be at the last ebb. *Continue the poultices.*

R. Ammoniæ subcarb., gr. xii.
Tinct opii, *m* xl.
Aquæ cinnamomi, ℥ss.

Solve, capiat cochleare minimum tertiis horis. *Let him have white wine.*

23. The stimulant has had very little effect, and the poor boy gradually sank, dying on the evening of the 23rd.

John Smith, ætat. 9, was brought into the hospital, and placed in Anne's Ward, under Mr. Guthrie, in the commencement of January. Both arms, the neck, and part of the face, with the whole of the anterior part of the body, part of the back, and the left thigh were severely burned, the cuticle being in many places entirely removed, in others, especially on the arms, the integuments were of a dark brown colour. The pulse could not be felt at the wrist, and scarcely at the temporals; it was exceedingly small and weak; the boy very restless, screaming with pain, and with difficulty kept in bed. The injured parts were dressed with warm spirits of turpentine, and linimentum terebinthinæ was afterwards applied. A draught containing ether and ammonia, with opium, was exhibited, and was followed by a mixture of ammonia and opium, a dose of which was given every hour, but the system did not rally at all, and he died the next morning.

Burns from the Explosion of the Bicarburetted Hydrogen Gas—Severe Burn of the Hands and Face.—Thomas Ames, ætat. 29, married, a short, well-built man, sanguineous temperament, was admitted as an out-patient January 6, in consequence of severe burns. The face and hands were most extensively burned, the cuticle being in many parts completely detached; the eyelashes and eyebrows were burnt away, the tunica conjunctiva of each eye injected, and the hair of the head, whiskers, &c., much singed. The oil of turpentine was applied over the hands, and then a liniment composed of the oil of turpentine and the ceratum resinæ. Cloths soaked in the Carron-oil (equal parts of linseed oil and lime water) were applied to the face, and he was directed to keep them constantly moist. He had a draught of ether and opium to take directly, and two of Mr. Lynn's pills at night. He was ordered to keep quiet, and to abstain from drinking.

18. Attended again this day; the face less inflamed than the day before, and he is in less pain; the right eye very much inflamed; each hand is covered with an extensive blister, which was punctured with a needle, and the fluid effused allowed to ooze out; bowels freely open. *Simple dressing applied to the hand, and the Carron oil to be continued to the face.*

The inflammation ran so high in this case, that it was not deemed advisable that the man should continue any longer as an out-patient, and he was urgently advised to come into the house. This, however, he refused to do, and was consequently lost sight of.

Burn of the Hands and Face.—Thos. Snow, ætat. 32, unmarried, a workman in the employ of the Gas Company, was admitted as an out-patient January 16. There were severe and extensive burns on the palms and on the backs of the hands, and also on the face, the eyelashes being burnt and the conjunctivæ rather inflamed. The cuticle was detached in many parts, and blistered in others. The oil of turpentine was applied at once to the hands, and the liniment, spread on lint, was used afterwards. As in the preceding case, Carron oil was applied to the face. He was ordered a dose of aperient medicine.

17. Says he is not in much pain in the face, but suffers more in the hands; the eyes are not inflamed; bowels not open. On removing the dressings, the hands appear to be extensively blistered; the cuticle was pierced with a needle, and the fluid allowed to ooze out. *Simple dressing to the hands and Carron oil to the face; a dose of house medicine.*

19. Bowels open; going on well. *Continue dressings.*

21. A slight purulent discharge from the left hand, to which flour was directed to be applied; the face is nearly well.

23. The right hand and face well; the left hand nearly so. To be again dusted with flour.

25. Discharged, cured.

Burns of the Hands.— —— Halford, ætat. 29, married, a workman in the employ of the same company, was admitted January 19. He was burnt on the hands at the same time as the other men, but not being so severely injured as they were, he was treated with the oil kept at the company's establishment. Finding himself getting worse, he came to the hospital, where one or two blisters were punctured, and simple dressings applied. A day or two afterwards flour was used, under which treatment, with an occasional dose of aperient medicine, he got well, and was discharged January the 28th. The face was not injured.

Severe Burns of the Hands and Face.—Edward Shipp, ætat. 29, married, was admitted an out-patient, January 16. This man was burnt on the hands and face, but not so extensively or so deeply as Ames and Snow; he had simply the Carron oil applied to the burns, and he got a dose of house medicine.

17. Going on well; bowels not open. *To have a dose of house physic.*

19. Some vesicles were punctured on the left hand, and simple dressing applied.

21. On removing the dressings, the cuticle was found to be separated, and torn away to a considerable extent; great discharge from the parts. Flour was thickly dusted over the burns, and simple dressing applied.

22. He says that the application of the flour has done him good, and relieved the pain; the face is getting well. The old, dry cake of flour was not removed, but a fresh coating laid on.

23. The right hand is quite well; there is considerable discharge from the back of the left hand, the palm being healed; bowels open. *Continue the flour.*

25. Discharge much diminished; is not in any pain.

28. The secretion is very trifling, and from one spot only, about the size of a sixpence; the face is well, with the exception of the lower part of the right ala nasi. *Flour to the hand; simple dressing to the nostril.*

30. The sore on the hand is nearly healed, and simple dressing applied; he does not require any application to the nose.

31. Discharged cured.

GOSSIP OF THE WEEK.

Ethnological Society.—The first anniversary of this Society took place on Saturday last, Mr. G. B. Greenough in the chair. The Counci

reported that the Society consisted of 157 members, that the donations had been very numerous, that a Journal had been established, and that suitable apartments would at once be provided for the use of the members. Appended to the report was a list of the donations, with their respective donors, and an estimate for the year 1844, having a balance in hand of £228. Owing to the severe indisposition of the President, Rear-Admiral Sir Charles Malcolm, the anniversary address emanated from the Secretary. It commenced with an historical account of the remains of nations long since extinct, and of those since the historic age commenced. A description of the origin, design, incipient labours, and prospective efforts of the Society then followed, and lastly was given the progress of Ethnology during the past year, in the respective countries of Asia, Africa, America, West Indies, Australia, and the Islands of the Pacific and Indian Archipelago, &c. The officers elected by ballot were—

President—Rear-Admiral Sir Charles Malcolm. —Vice-Presidents—The Archbishop of Dublin, Hon. Mountstuart Elphinstone, G. B. Greenough, Esq., J. C. Prichard, M.D.—Treasurer—Samuel Duckworth, Esq.—Secretary—Richard King, M.D. —Councillors—William Aldam, Esq., M.P., Sir Benjamin Collins Brodie, Bart., Sir James Clark, Bart. M.D., Thomas Hodgkin, M.D., Walter K. Kelly, Esq., W. Elphinstone Malcolm, Esq., Thomas May, Esq., Joseph Legg Postlethwaite, Esq.; Andrew Smith, M.D., James Augustus St. John, Esq., Bayle St. John, Esq., W. Holt Yates, M.D., Beriah Botfield, Esq., M.P., William Clift, Esq., Joseph Fletcher, Esq., Captain Grover, Major W. C. Harris, Sir Samuel Rush Meyrick, Anthony Todd Thomson, M.D., R. W. Rothman, M.D., James Whishaw, Esq.

THE MESMERIC EXPERIMENTS IN THE ADELAIDE GALLERY.—Notwithstanding the complete exposure of this imposture, recorded in our last, Mr. Vernon on the following Tuesday was so far deluded by his young patient, as to feel justified in stating that she had since read large printed letters placed in a box, and he expressed a confident opinion, that when he had sufficiently trained this faculty, he could guarantee a successful experiment in clairvoyance. On Thursday he presented himself to realise his promise. A box was produced by Lieutenant Hutchinson, a gentlemen in the audience, which was admitted to be a perfectly fair and proper box, and a single word in large letters having been placed in it, she sat endeavouring to read it (but with her eyes open) for more than *three quarters of an hour*, but unsuccessfully. During the whole of this long period the audience sat with the most exemplary patience, and in almost perfect silence, and Mr. Vernon was compelled to admit a complete failure under the most favourable circumstanees. On Saturday the experiment was again tried, the same gentleman producing another box, containing under cover a single word in large letters. After a trial for *one hour and ten minutes*, she announced that she could not distinguish *all* the letters, but she named, and wrote down *ten letters* which she *could see*, but on the box being opened, the word was found to consist of *four letters* ONLY, and by an odd accident not *one* of the *four* were included in the *ten* she named. The long pent-up indignation of the audience seemed now as if it could be restrained no longer, and when Mr. Vernon with easy complacency announced his intention of repeating the experiments again next week, it burst forth in a volley of hisses and yells from every part of the room. Mr. H. Brookes was now called for, and was proceeding to address the company amidst the most perfect silence, deploring deeply on behalf of mesmerism, that after the previous exposure, this case should have been again produced, when the Chairman (Dr. Jones) abruptly demanded to know if he intended to propose any motion? Mr. Brookes said he had not prepared one, but immediately announced a resolution to the effect—"That the experiments proved that the girl is not clairvoyant, and that Mr. Vernon must have known the case was not a genuine one, or must have been grossly ignorant of the subject of mesmerism." This resolution was received with loud cheers by the great majority of the meeting, and with some consternation Mr. Vernon and a few of his friends. Mr. Vernon, however, recollected an important engagement in the country for half-past four, and quitted the platform amidst the most unequivocal demonstrations of indignation. Mr. Brookes in an animated address, proceeded in support of his resolution, showing clearly that there was not one single feature of reality about the case, dwelling eloquently upon the evils which must at the present moment be inflicted upon mesmerism, cursed as it always had been, by the ignorance and credulity of its advocates and friends by the public exhibition of cases of deception, and enforcing strongly the duty of every lover of truth, and especially every advocate of mesmerism, boldly to stand forward, and rescue the truth from the folly, absurdity, and deception promulgated in such lectures and exhibitions on the philosophy and practice of mesmerism. The resolution was seconded by Mr. Day, and supported by Mr. Gaselar, Mr. Hodson, and Mr. Rumball. Two or three amendments were proposed, but lost, the original resolution being carried by a large majority.

Apothecaries' Hall. Gentlemen admitted Members on 23rd May, 1844.—John Stopford Taylor, Charles Lecson Prince, Joseph Horton, Henry Uwins, William Parkinson, George Priestly Smith, Frederick Hughes Hewitt, Edmund Montgomery Foster, Edwin Callender, William Bramwell Ferguson, William Hatton, William Ravenhill Barrington, Thomas Wright Challinor.

Royal College of Surgeons. Gentlemen admitted Members on May 24th and 27th, 1844.—H. Kingsley, S. J. Remnant, R. H. Donovan, T. Hipwell, N. J. Dampier, R. Ellis, J. M. Moullin, W. C. Byass, T. Callaway, E. J. Protheroe, J. Cowburn, G. F. Wills, H. Fearnside, J. T. Caddy, C. J. Tomkins, T. Willey, W. Bourne, N. Packer, G. S. Penny, K. Tomson, S. Barnes, W. Few, C. Clarke, W. A. Biddle, C. H. Barber.

The College of Surgeons.—Sir R. Peel and Mr. Wakley were under a misapprehension on Friday evening with regard to the statements they made relative to the situation of Mr. Owen, and the liberality or illiberality of the College of Surgeons. Mr. Owen's salary has been gradually but liberally augmented from £80 to £550, which he has received for the last two years, with coals and candles, and nearly the whole of the west end of the building in Lincoln's-Inn Fields for his residence, so that his salary and emoluments from the College are not less than £700 a-year. Mr. Clift, the senior conservator, and the assistant of John Hunter, has a pension of £400 a-year. The assistant conservator, Mr. Quekett, receives £150, with apartments, coals, and candles. There are three students to aid for three years each, at £100 a-year each, and several porters. The expense of the museum was last year £3,653.—*Times*.

Naval Appointments.—Surgeons—J. D. Tweddell to the Prometheus. Assistant Surgeon—R. P. Chapman to the Prometheus. R. M'Crae to the Cygnet.

Obituary.—On the 24th inst. Lacy Gray Ford, Esq., late Physician General of the Bombay Medical Establishment, Honourable East India Company's Service.

Dr. Fleming, an eminent Veterinary Surgeon, and Director of the Veterinary School of Rosenthell, lately died of hydrophobia, after twenty-four hours of frightful sufferings. Dr. Fleming had never been bitten by any animal affected with madness, but about three years back he dissected a dog which had died mad.

The papers give a striking instance, illustrative of the effects of mental emotion on the physical frame. An Irish girl, aged seventeen, who had borne a good character, was lately tried at Stafford for having stolen a gown and petticoat, and was sentenced to seven years' transportation. It is now believed that she merely took the goods to wear on some particular occasion, without any intention of keeping them. She heard the judgment, and remained stupified: in twenty-four hours she was a lunatic, and is now in the infirmary, with no hopes of recovery, She was a remarkably handsome girl; but, from the period of her sentence, her health visibly declined, and her hair has actually turned grey.

The *Staffordshire Mercury* states that a child was recently drowned in the canal near the Ley Colliery. The efforts to find the body were useless, till, at the suggestion of a young woman, some quicksilver was put into a loaf, which, on being placed in the water, floated to a certain spot, and remained stationary. Beneath that spot the body was found!

An interesting discussion took place in the House of Commons on Friday night, on the occasion of voting the supplies. Some objection was made by Mr. Hume to Literary Pensions, to which Sir Robert Peel replied. Among other remarks he said he conceived that the propriety of the application of the funds at the disposal of the Crown for the reward of literary and scientific individuals could not be questioned; and he might mention, among those to whom pensions had been granted, Professor Airey, and Mr. Owen, the curator of the Royal College of Surgeons—men who, having devoted their lives to scientific pursuits and discoveries, had no opportunity of accumulating wealth.

Mr. Wakley said, he did not think that literary men should be excepted from the benefit of these pensions. He must say, however, that Mr. Owen, to whom reference had been made, had not incurred any pecuniary loss by his devotion to science. The College of Surgeons had the power of giving Mr. Owen a reward commensurate with his deserts. There was no institution in England which could afford to pay a higher salary. He was at a loss to understand why Mr. Owen, who was a paid officer of that wealthy institution, should have been selected for a pension.

Sir R. Peel said he had not inquired what amount of salary was given to Mr. Owen by the College of Surgeons. The Crown had granted Mr. Owen £200 a-year, and he had devoted to researches in anatomy and physiology, talents which, if they had been employed in a distillery, or a similar establishment, might have been turned to most valuable account. He (Sir R. Peel) had asked, when the pension was at the disposal of the Crown, what man in England from his scientific attainments was most worthy of it. He was informed that the voice of Europe concurred in declaring that since the death of Cuvier, Mr. Owen was, perhaps, the most eminent for his attainments in this department of science; and it was stated that if a portion of the sum at the disposal of the Crown was allotted to Mr. Owen, he would be enabled to devote a portion of his time and attention to the publication of valuable works.

Mr. Wakley said a right hon. baronet opposite had lately obtained a new charter for the College of Surgeons; and it was now announced to the public, through the Prime Minister, that one of the chief officers of that institution—a paid officer—was absolutely obliged to look to the Government for a reward for his labours. The College of Surgeons was in the receipt of many thousands of pounds every year from persons applying for their diplomas; and yet it was announced that they could not afford to give their own officers rewards commensurate with the great services they had rendered to the community, Mr. Owen had obtained considerable renown; he had bestowed great attention upon the science of anatomy, and especially comparative anatomy; and it was the duty of the institution whose officer he was to give him proper compensation for his services. For forty years the College had been expending their funds for other purposes instead of rewarding their officers.

Sir R. Peel considered that the Government and the College of Surgeons had acted with perfect propriety. It was the duty of the College of Surgeons to attach a certain salary to a certain office, and they ought not to increase that salary on account of the talent of the man who occupied the situation. The sum of £200 a-year was sufficient to procure for them the services of a person competent to discharge the duties of curator; and he (Sir R. Peel) thought the College would not act properly, if they varied the amount of salary according to the personal qualifications of the individual upon whom that office was conferred.

[Our readers know so well our opinion as to the niggardliness of Government in granting honours and pensions to *scientific* men, that we need scarcely mention that *we* do not charge Sir Robert Peel with any serious offence in conferring a pension on one who has made high science so much his debtor, as Prof. Owen.] Scientific men cannot be too much multiplied, and therefore cannot be too much encouraged. Our pleasure would be to see them like some less useful classes—*over*-paid: they would have more imitators; and their *excessive* remuneration (a droll idea in these times and in this country) would soon fall to its level. To argue that a College should alone pension a *savant* for services done not to the College only, but to the country—and not to the country only, but to humanity—is to prove how vulgarly ingenious some individuals can become, just to make a public show of opposition. We class the opposition to Professor Owen's pension in the same category as that shown to the honours awarded to Wordsworth.—ED.]

The Romans are apprehensive of some terrific epidemic, of which we have the obscurest accounts. It rages more especially among the inhabitants of mountainous districts. In the little town of Tivoli, containing about 9,000 inhabitants, ninety persons died in the space of a week. The malady is generally supposed to be contagious, but of this fact there is no positive proof. In every case in which *post mortem* examination has taken place, there has been found congestion of the brain, as prior to, and in, apoplexy. It appears to be the same complaint which has recently prevailed in Naples and Sicily under the name of *torcicollo*. It is clearly traceable to atmospheric causes. After an exceedingly warm April, we have had since the 1st of May several of the coldest days that have been experienced since the commencement of the year. The temperature frequently varies twenty degrees during the day. Winter cloaks, after having been laid aside, are now resumed again. The *torcicollo* is usually fatal in the space of twelve hours. In Rome, however, it has been only sporadic, and without any confirmed character.

Aldersgate School of Medicine.—Avery numerous assemblage of medical men attended the last *conversazione* of the Lectures of the Aldersgate School of Medicine, which was held at Dr. Waller,s, Finsbury-square, when the following prizes were awarded to the successful Competitors of the last Session. Dr. Clutterbuck presided on the occasion, and introduced the business of the evening in a very appropriate address.

Physiology.—Prize—Mr. Richard Blirzard Power, of Maidstone.

Honorary Certificate—Mr. H. Sidley, Plymouth.

Practical Anatomy.—Prize—Mr. R. Lloyd, Dolgelly, North Wales.

Honorary Certificates—Mr. W. Nixon, County Mayo, Ireland, Mr. R. B. Power, Maidstone.

Midwifery.—Prize—Mr. George Hugh Sidley, Plymouth.

Honorary Certificates—Mr. P. A. Lafargue, Leicester, Mr. John Westwood, London.

Surgery.—Prize—Mr. Rowland Lloyd, Dolgelly, North Wales.

Honorary Certificate—Mr. William Nixon, County Mayo, Ireland.

Materia Medica.—Prize—Mr. Edward Govett, London.

Honorary Certificate—Mr. William Nixon, County Mayo, Ireland.

PERISCOPE OF THE WEEK.

Decomposing action of water on amygdaline.—[This and the three following articles constitute the principal contents of the last number of the Lancet.] Liebig says if bitter almonds are finely powdered, mixed with water, and submitted to distillation, an aqueous fluid is obtained with a strong odor of hydrocyanic acid, and exhibiting a milky appearance from a number of small oil-globules being suspended in it. These globules coalesce, subside, and form a stratum of oil at the bottom of the vessel. The oil is therefore heavier than water: it is also volatile, and has a powerful smell and taste of bitter almonds: moreover it is characterized by the property of solidifying, when exposed to the air with the absorption of oxygen, into inodorous crystals of benzoic acid. Neither of these two products of the distillation of bitter almonds with water, namely hydrocyanic acid and the essential oil, can be detected by any means in the bitter almond itself, and the expressed oil is as bland and insipid as that procured from the sweet almond. If bitter almonds are boiled with alcohol, not a trace, either of hydrocyanic acid or of the volatile oil of bitter almonds is found in the spirit; but upon evaporation a white crystalline substance is obtained, of easy solubility in water, which imparts to its solution a slightly bitter taste. This substance differs materially from sugar and salicine by invariably containing a small amount of nitrogen. It is termed *amygdaline*. The discoverer of this substance concluded that hydrocyanic acid and the essential oil of bitter almonds were formed from it, but not being able to solve the enigma, he concluded that the process was effected by an intangible and invisible something, beyond the reach of our senses. All these phenomena now admit of an easy explanation. We know that upon bringing a solution of amygdaline and water into fresh almond-milk, decomposition takes place in the course of a few seconds, and the amygdaline atom, in consequence of a new mode of molecular arrangement, resolves itself into hydrocyanic acid, volatile oil of bitter almonds, sugar, formic acid, and water, the atoms of which, ninety in number, were aggregated into one group in the amygdaline atom; that is the amygdaline is constituted of the elements of all these substances combined into a single group or atom. The solvent power of the water plays a part in this decomposition, as much water being required for the production of the essential oil and of hydrocyanic acid from amygdaline, as will be sufficient for their solution. The amygdaline of the bitter almonds is identical with the vegetable caseine of the sweet almond.

Belladonna in tetanus.—Dr. Hutchinson narrates at great length a second case of tetanus, produced idiopathically, treated with large doses of belladonna, apparently with success. The immediate cause of the attack seems to have been exposure to the night air, in wet clothes, and frequent intoxication. The dose of belladonna which was given was at first only half a grain every three hours, but it was gradually increased until eventually four grains were exhibited every two hours. After a certain quantity of the medicine had been given for a certain time, the system appeared to acquire a tolerance of it, and from this point of improvement the symptoms remained stationary until an increased quantity was administered, when a manifest advancement again speedily took place, continuing for a certain period, when a larger dose was again required, in order still further to influence the disorder. This course was very well-marked and positive, and this encouraged Dr. Hutchinson to increase the dose of belladonna, until eventually the tetanus was entirely subdued. The good effects of the medicine were very palpable; nothing else was administered save purgatives occasionally, which the obstinate state of the bowels required to be of a drastic character. Dr. Hutchinson is inclined from the success attending his practice in this case, and in the one alluded to by us in the Periscope of last week, to urge the trial of belladonna in large doses, in cases of hydrophobia, after the operation of tracheotomy has previously been performed, to prevent the suffocation caused by spasm affecting the muscles of the glottis and larynx.

Spontaneous evolution.—Mr. Edwards was called in the morning of May 5th to a poor woman who had been all night in labour. A midwife was in attendance, and a short time before he arrived, the right arm entered the vagina, and was protruded externally through the vulva. The contractions of the uterus, were very powerful, and to arrest them a hundred drops of laudanum were exhibited, but without effecting the proposed object: when Mr. Edwards examined again, little or no change had taken place, except that the right side appeared disposed to enter the pelvis, and on his pressing this part gently upwards with his fingers, a very sudden change took place. The head and arm which were before closely jammed in the pelvis ascended, the breech and legs at once entered the pelvis, and by one or two powerful contractions of the uterus the fœtus was suddenly expelled, dead. The right side of the face and neck and right arm were very livid and much swollen, although undue pressure on those parts could not have continued more than two hours. This case Mr. Edwards calls one of 'spontaneous evolution,' but we think it is hardly entitled to be classed with the cases already recorded by that designation.

Naphtha in phthisis.—Dr. Powell gives a brief note of three cases of phthisis in which he gave a trial to the internal exhibition of purified naphtha, in two of which it was not of any service, and in the third it was decidedly prejudicial.

Sibbens.—In a communication entitled "Remarks on Sibbens," published in the *London and Edinburgh Medical Journal*, Mr. Wills points out the striking similarity, if not identity, that exists between this disease and that form of the venereal, called the fungoid venereal ulcer. He observes that Mr. H. J. Johnson, in giving an account of this fungoid venereal sore, under the name of *venereal condyloma*, has presented a minute and faithful description of sibbens, as it at present exists in that part of Scotland where Mr. Wills practices (Ayrshire), with this difference, that what Mr. Johnson calls a secondary symptom, is there regarded as primary. This is easily accounted for: Mr. Johnson has been in the habit of seeing the disease in the form it assumes when it is the *result of coition;* whereas the Ayrshire practitioners commonly meet with it as caught by *contact of the lips*, or through the medium of tobacco-pipes, &c. Sibbens, however, is frequently communicated by coition; and then the disease has all the characters of venereal condyloma. Mr. Wills describes sibbens as commencing in the form of a tubercle or condyloma, and not as a pustule, as some authors assert. The tubercles do not rise simultaneously, but in succession, and may be seen both in the simple and ulcerated state in the same subject. They ulcerate much earlier on some parts than on others. On the tonsils and palate, where they usually make their first appearance, they ulcerate early, but can rarely be seen distinctly; in their other haunts—the tongue, cheeks, angles of the mouth, anus, groins, and genital organs—though often clustered, they seldom fully coalesce, and have less tendency to ulcerate. The tubercle may vary in size from that of a silver penny to that of a sixpence, may be either circular or oblong, and more or less raised above the surface. It varies in appearance as in site. In its simple or unulcerated state, when situate on the dorsum and back part of the tongue, it has the appearance of a common wart, and is but little altered in colour from the parts around,—about the angles of the mouth and round the anus, that of a wart also, and whiter than the surrounding parts. The resemblance to a wart would be greater, if the latter had a little more vitality, and a reddish tint. In the groins and arm-pits (where it is very rare) it is deep-red and glossy, and it is here, after the delicate cuticle has peeled off, that it chiefly assumes somewhat the look of a raspberry in miniature, whence the disease takes its name. The condylomata, in the ulcerated stage, when situated on the dorsum of the tongue, are surrounded with little, glosssy, red areolæ, from the natural coating around them being removed, and, when studded over with them, give that organ an oddly mottled look, and it may be that a deep fissure runs down its centre, or the whole coating may have peeled off, giving the sound parts the glossy beef-steak appearance. At the commissures of the lips, and round the anus, it would be difficult to say when, or if, strictly speaking, they can ever be said to ulcerate, their appearance remaining but little changed throughout. Indeed, they may be said to ulcerate only on the tonsils, tongue, and inside of the labia pudendi, and merely to vesicate elsewhere. In front of the scrotum, or on the pubes, the ulcerated tubercle assumes the form of a crust or scab; and on the scalp, also, there is a crust. Sibbens, when caught by coition, is oftener without than with gonorrhea, particularly in males. The tonsils, in sibbens, at the end of a month from their commencement, are generally the chief seat of the disease: they are seemingly in a state of superficial ulceration, and covered with a sort of thin, whitish slough, which attends the disease throughout, and by it alone the experienced eye can at once make a sure diagnosis. In all other sore throats where a slough is formed, or lymph thrown out, the white has a dense appearance, and well-defined border; but, in sibbens, it is thinner, and blended or shaded off, till lost in the surrounding inflammation, which terminates abruptly on the palate. With this state of the tonsils, there is also invariably some enlargement of the glands under the lower jaw. Matters go on thus for five or six weeks, when the condylomata make their appearance elsewhere in the mouth, and by the end of six or eight weeks, begin to rise up round the anus. Between the second and third month the disease is at maturity, and presents the following characters:—when the parts about the glottis have become implicated, the patient is hoarse—this he may or may not be. We look into his throat—the tonsils and edge of the loose palate have a granular appearance, and are as if thinly white-washed. The palate and mouth have a thickened and contracted look—do not rise and fall with their usual freedom—and up from them there is a blush of inflammation ascending even as far as the roof of the mouth, then terminating in a well-defined border. At, or immediately within each commissure of the lips, is a cluster of flat warty excrescences; a few similar ones, it may be, exist on the back part of the tongue, or round its edge, or inside the cheeks; and invariably, at this stage, a bunch of them is formed round the anus, attended with a red blush, extending an inch up on the nates. The disease sometimes, though rarely, attacks the toes. When caught by coition, the inguinal glands become affected early, but have no tendency to suppurate. The tonsils in this form seldom become affected in less than six weeks, and sometimes not at all, during the whole course of the disease. When the virus has been introduced into the system by the mouth, the condylomata often appear on the perineum, groins, and genital organs, by simple extension; but in all cases where they are first met with on these parts, the disease has been caught by coition. The secondary symptoms of sibbens, with the one exception already mentioned, are, as far as Mr. Wills is aware, wholly confined to the skin, and of a trifling kind, consisting principally of pytyriasis-like stains, varying in size, and of a red, reddish-brown, yellow, or slightly leaden colour; they are at times slightly scaly. Psoriasis also is occasionally met with, but ecthyma very rarely. Mr. Wills remarks that we often hear of the constitution being contaminated by the disease, as evinced by destruction of the palate and bones of the nose, sibbenitic ulcers, &c.; but if such cases, he adds, ever do occur from the disease itself, they must now be rare indeed; since after practising in a district of country where yaws are very common, and treating many hundred cases, extending over a series of twenty-seven years, he has not met with anything beyond what has been mentioned. The period of incubation is uncertain; it is said by some writers to be from seven to ten weeks; in one case, in which the disease appeared to have been communicated by inoculation, the complaint was perceptible in a fortnight. Mr. Wills, believes that the virus when introduced into the system has a strong tendency to run its course, and that, like the West

Indian yaws, a first attack affords indemnity (immunity) from a second. The disease is contagious, but direct contact with a mucous membrane is requisite for its propagation. Sibbens is distinguished from the venereal, by the greater number of the sores, by their elevated character, and by the ulceration in the former being much more superficial than in the latter. The former rarely contaminates the system; the latter often. Sibbens and the yaws of the West Indies retain some very important characters in common, such as the whitish ulceration of the tonsils, the fungoid character of the sores, a first attack probably giving immunity from a second, and their appearing to run a somewhat similar course in point of time. The distinction is, that sibbens is never ushered in by constitutional symptoms, never induces a cachectic state of constitution, and the sores are confined to the neighbourhood of the mouth and the great outlets, the reverse being the case regarding the West Indian yaws. With respect to the means of cure, cleanliness is all-important. Mercury has a specific effect, and is at once resorted to, a blue pill being given night and morning, and slight ptyalism is produced and maintained for several weeks. The nitrate of silver forms the best local application.

Umbilical Hernia.—Dr. Bunde, of Fredrikssund, in Oppenheim's Zeitschrift, describes a singular case of congenital umbilical hernia. The infant, a boy, was born with all the small intestines spread over the belly. It appeared that the thin membrane which had encompassed them like a sac, (a prolongation of the extended peritoneum), had been torn during delivery. The umbilical opening whence the intestine issued, was the size of a shilling, and, as several of the bowels were adhering to it, they could not be replaced. The child lived twenty-eight hours after birth. On dissection it was discovered that there was not any room for the bowels in the abdomen, because all the other organs were preternaturally large. The portion of the navel-string which had passed through the sac was very thin, but near the placenta it was an inch thick.

Medical Witnesses.—Mr. Grantham has written a letter to the editor of the *Medical Gazette*, complaining of the length of time medical men attending criminal courts of law as witnesses are detained in attendance, and pointing out the injury that must necessarily accrue to them as regarded their practice, and also to their patients. We fear the evil is beyond remedy, depending on the proverbial delays of the law.

Sea-side air as a remedial agent.—M. Guastalla, of Trieste, in a communication published in the *Annales de Therapeutique*, observes that physicians have, from the earliest times, recommended marine atmosphere for various diseases, but yet were ignorant of the true principles on which the effect depended; at first it was thought that marine atmosphere contained a larger proportion of oxygen than the atmosphere of towns, as it was supposed that sea-salt entered into its composition. Berzelius has proved that the air of the sea-side contains no acid or salt in combination with itself, and that the vapours rising into it are purely aqueous, but during the prevalence of high winds, and when the waves break violently upon the beach, a quantity of natural sea water is driven into the air, and may be conveyed to a greater or less distance. Under this circumstance sea-air does contain, in a state of suspension, sea-salt and muriatic acid, which are inspired into the lungs, and there absorbed and conveyed into the blood. From the experiments of Albers and others, it has been shewn, though at first chlorinated respirations irritate the nose, the eyes, and the bronchial mucous membrane, yet, when absorbed, they exert powerful antiphlogistic influence in chronic inflammations of the chest. Sea-air contains very little carbonic acid, and consequently is purer than the air of towns. The free ventilation on the sea-side also prevents mephitic particles from accumulating, as they often do in inland situations. The aqueous vapour constantly rising into the air from the sea renders it fit for respiration in a number of diseases which are increased by breathing a drier atmosphere; from the same cause the sea-side is milder and less liable to sudden changes. These circumstances explain the undoubted healthiness of seaports and islands. It has been observed by many practitioners residing in seaport towns, so situated as to be exposed to the constant influence of sea-air, that inflammatory affections are less severe than in inland situations, and that it is absurd to attach any weight to the statements of some authors, that sea-air is exciting and injurious to phthisical patients. Laennec was so impressed with the importance of this remedy in chronic diseases of the chest, that he constructed a marine atmosphere by means of fresh marine plants placed around the beds, and an infusion of such plants were given to the patients, in the wards of the Hôpital de la Charité. M. Guastalla observes that in chronic inflammation of the chest, sea-air is of unquestionable benefit, and alleviates the sufferings to such an extent that they cease to be insupportable or incompatible with life.

Length of the funis.—Mr. Hunter observes, that in his opinion, neither the great length, nor the extreme shortness of the funis is likely to expedite or retard delivery, at least when the contraction of the uterus is strong enough to expel the fœtus, it being clear that a very short funis would be soon torn from the placenta, or the placenta ejected along with the child.

Congenital Ulceration and Gangrene.—Dr. T. B. W. Potts, of Jersey, narrates in the *Northern Journal of Medicine* the following case. In July, 1843, my professional assistance was requested by Mrs. C., a young woman then about the seventh month of her third pregnancy, and apparently in the enjoyment of excellent health. On the 17th of August, I was summoned to attend her in her accouchement: everything went on most favourably, and she was delivered of a male child after an easy labour of four hours. On examining the infant with a view to ascertain its true uterine age, I felt assured that it had not attained its full term by at least three or four weeks. I also observed something seriously wrong with its left foot. After having secured the cord and paid the necessary attentions to the mother, this member was more minutely examined, and a large ulcer was found on the front of the foot, extending from the inferior part of the tibia and fibula to the metatarsal bones; the upper and lower portions of the sore were in a gangrenous state; and the ulceration had proceeded so far that the lower ends of the tibia and fibula were exposed, as also some of the tarsal bones. A line of demarcation commenced to form on the second day after birth, just above the upper edge of the sore, but the child sunk on the sixth day. We are left in doubt as to the cause of this affection; but the question appears to be, whether was it caused by disease—contamination of the system, or by injury, strangulation, or pressure by the cord. The mother admitted having contracted syphilis from her husband previous to the birth of her two former children, who are both alive, and apparently perfectly healthy; but since that period she has had no symptoms of the disease—so far showing, that if syphilitic contamination be the cause of the affection above detailed, it does not necessarily attack every child born of the same parents, even although no steps have been taken to eradicate the disease. Had the cord been firmly entwined around the limb, it might by long-continued irritation have produced ulceration: but neither the funis nor the limb exhibited marks of pressure having been exerted. I may add that the quantity of liquor amnii was very large indeed; and had the fœtus gone on until the full time, it would in all probability have been born with one foot only. In consultation with one of my brethren, it was deemed prudent not to interfere with the knife; as the child appeared very weakly and delicate, and but little hope of benefit from an operation could be entertained.

Obstetrical properties of pulvis colchici.—M. Metta has published, in the *Journal de Medicine et de Chirurgie*, the case of a woman, in whom powdered colchicum was employed with success, as a substitute for the ergot of rye. She had an abortion at the third month, but the placenta not being expelled, and the pains having ceased, ten grains of the powdered root of colchicum were given in two doses. Half-an-hour having elapsed without any sensible effects, the same dose was repeated. The orifice of the womb soon dilated, uterine contractions followed, and the placenta was removed by the hand, in a state of decomposition. The validity of this case is, to our mind, exceedingly doubtful.

Moxas in a peculiar form of paralysis.—Dr. Bull states, in the *New York Journal of Medicine*, that he has found the application of moxas as a curative agent, attended with complete success in that form of local paralysis, caused by the long-continued pressure of the weight of the body upon the nerves of the fore-arm during sleep. The form of moxa which he has used was that of small bits of camphor.

Aneurismal varix.—Dr. Chisholm operated on a girl, twelve years of age, for aneurismal varix at the bend of the arm, caused by a wound of the radial artery inflicted by a surgeon, when performing venesection. Dr. Chisholm cut down upon the injured vessel, and tied it above and below the wound. The patient was dismissed cured.

To Prepare Mezereon Cerate, by M. Pleischl.—Digest the fresh bark of mezereon, collected at the period of inflorescence of the plant, in spirit of wine, for two or three days; pour off the liquor, and add fresh spirit, repeating this process until the bark is exhausted of its soluble parts. Mix the liquors thus obtained together, and submit them to the action of hydrate of lime, prepared with three parts of water to one of quick lime. The hydrate of lime should be used in the proportion of one part, by weight, to three parts of mezereon. Digest these together until the colour becomes a yellowish green, then distil off the greater part of the spirit. Add water to the residue, when a green substance of a soft consistence will be separated, and one part of this is to be mixed with four parts of yellow wax, and eight parts of olive oil, to form the cerate.—*Buchner's Reper.*

French Measures.

The metre is the element of long meaure.
The are that of square measure.
Stere that of solid measure.
The litre that of capacities.
The gramme that of all weights.

		English Inches.
Millimetre	=	0·33937
Centimetre	„	0·39371
Decimetre	„	3·93710
Metre	„	39·37100

Square Measure.

Are (a square decametre)	3·95 perches.
Decare	119·6046 sq. yards.
Hecatare .....11960·4600	„

Solid or Cubic Measure.

Decistre for firewood	3·5317 cubic feet.
Stere (a cubic metre)	35·317 „
Decastre	353·17 „
Millilitre	·06103 En. cubic inches
Centilitre	·61028 „
Decilitre	6·10280 „
Litre	61·02800 „
Decalitre	610·28000 „
Hecatolitre	6102·80000 „
Chiliolitre	61028·00000 „
Myriolitre	610280·00000 „

Weight.

Milligramme	·01544 grs. Troy.
Centigramme.....	·15445 „
Decigramme	1·54457 „
Gramme.....	15·44579 „
Decagramme.....	154·45793 „
Hecatogramme	1544·57938 „
Chiliogramme	15445·79386 „
Myriogramme	154457·93860 „

		lb.	oz.	cwt.
N.B. Mynogramme	=	22	1	·073
Chiliogramme	=	2	3	4·17
Hecatogramme	=	0	3	8·48
Decagramme	=	0	0	5·648

Avoirdupois weight.

A COURSE OF CLINICAL LECTURES ON SOME IMPORTANT POINTS OF SURGERY,

Delivered at St. George's Hospital, by Sir Benjamin C. Brodie, Bart.

Lecture IX.

Gentlemen,—I have two or three more words to say on the disease which formed the subject of the last lecture. In one of the preparations I then shewed you, there is a deposit of fibrous matter between the cysts composing the tumour, and binding them together, thus confirming what I said of the manner in which these cysts are aggregated into apparently one mass. I have on the table a tumour taken from a breast which I punctured; but the result of the puncturing was, that afterwards this solid fibrous tumour was formed, and projected above the skin. The fibrinous matter grows generally from the inner part of the cyst, but it is found deposited on the outside also. There is also another disease of the breast which you must be careful not to confound with this; it consists of a membranous bag filled with water, and is widely different from that containing serum. They are found not only in the breast, but also in various other parts of the body, and are in fact the true encysted hydatids. When they occur in the testis, they are situated either between the layers of the tunica vaginalis, or else between the tunica vaginalis and the epididymis; if they are in the course of the cord, they are lodged in the cellular membrane which surrounds it. I have published some cases of this kind, and so has Mr. Cæsar Hawkins. The fluid they contain is pure water, and will all evaporate. I have seen tumours of this kind dissected out, and have also removed them by external applications. It is necessary you should thoroughly understand this disease, otherwise you will confound it with scirrhus, as has frequently been done. It is important, because this is a local disease and may be cured by operation. I have given no name to this affection, because I think it is an error of modern times to be continually giving new names to diseases, but if it must have a name, I think it should be called sero-cystic tumour. I purpose calling your attention now to a different subject. In my last lecture, I said I should not always lecture on diseases, but sometimes merely on the symptoms of the disease, because I think in this way a great deal of practical knowledge may be learned. It may be all very well to take up one disease in particular and confine yourself to it; but depend upon this, none will succeed in practice who have not made themselves so far masters of the symptoms, as to be able to judge of the circumstances which produce any one symptom in different diseases. Now there is nothing in practice which you will be so often consulted about, as "PAIN IN THE LOINS." It may be produced by a variety of causes; most commonly it is what is called lumbago, a kind of rheumatic or gouty pain in the lower part of the back and loins. It is a disease which is produced by a general derangement of the system, perfectly independent of any local mischief. You find a patient complaining of severe pain in his loins, aggravated whenever he attempts to move, so that he cannot even turn in his bed. If it is simple lumbago, you will find there has been some derangement of the digestive organs, attended with costiveness; an overloaded state of the colon is sufficient to produce this disease. A gentleman consulted me about a severe pain in his loins, which went off when he got up and bustled about: this was nothing but hardened fæces in the colon, and was entirely removed by an active purgative. Sometimes, however, it is more deeply seated; the patient has acidity of stomach after taking his meals, and is troubled with flatulency; the urine also deposits a precipitate of lithate of ammonia; sometimes it stains the chamberpot like a pink saucer; at other times, it is of a yellow or orange colour; the urine comes away clear, and deposits these sediments most abundantly in the morning. When there are none of these deposits, the urine is clear and healthy. I said this disease was rheumatic, but, in truth, it is gout rather than rheumatism, for all those diseases which occur from acidity of stomach approach nearer to gout than rheumatism. The real seat of the disease is in the nerves rather than the muscles; and I say it dwells in the nerves for this reason: that it frequently terminates in sciatica, producing pain throughout the whole extent of the sciatic nerve. That there is inflammation of the neurilemma of this nerve in these affections is proved by several preparations in the Hunterian collection, and in these preparations it will be observed that the neurilemma is much thickened. You may distinguish this affection, then, by its being preceded by costiveness, flatulence, and deposit in the urine. The patient may be much relieved by cupping, but this will not be sufficient for his cure; he should be freely purged in the first instance, and this should be repeated frequently. The acidity of the stomach is to be relieved by the administration of alkaline remedies, the best way of administering which is by combining them with a small quantity of some vegetable acid. Sir G. Blaine recommended them to be given in this way. A scruple of carbonate of potash may be taken in the manner I have described, two or three hours after breakfast, and again after dinner. This state of system, if not speedily relieved, lays the foundation for a variety of diseases. In a large number of the cases of synovial inflammation, you will find the stomach in this state, and you will in vain attempt the cure by local remedies; the constitutional symptoms are those principally to be attended to. You will also obtain great benefit from the exhibition of small doses of colchicum, from i. to ij. grs. of the acetous extract, at bed time, for several successive nights. I am not in the habit of giving this medicine in large doses. There is another form of the disease which is very similar to this, in which there is intense pain, extending down the limb, and attended with a good deal of fever; by and by the limb becomes numb, and the muscles do not obey volition; then the pain in the back subsides, and the patient is left in a state of paraplegia. This is not a very common disease, still you may meet with it; it is similar to lumbago, but more intense. If the disease is allowed to go on, the paraplegia is hopeless: the symptoms resemble those of inflammation of the spinal cord; but as patients do not die of this malady, it was very long before I had an opportunity of confirming this opinion. I was called to see a gentleman who was suffering from severe pain in the loins, accompanied with incipient paraplegia of the lower limbs. I prescribed a course of mercury, but it had no effect, and he went into the country again, not at all relieved. About twelve months after, I saw him again; he was in the same unfortunate condition. Like the King in the Arabian nights, his lower limbs were like marble; it so happened that when I called there, I was on my way to Dr. Davies, to see some preparations, and there I saw the spinal cord and corda equina encrusted with coagulated lymph; he described the symptoms of the patient from whom it was taken, and they entirely corresponded with those of my own patient, only that his patient died, whereas mine recovered. I suppose if allowed to run its course, many would die; still more would remain paraplegic. But I believe much may be done for this distressing affection. If there is inflammation of the cord, treat it as you would inflammation of the membrane of the cord; purge the patient, cup him in the loins, and bring him as soon as possible under the influence of calomel and opium. I am sure I have saved many by this treatment. Again, pain in the loins may be the consequence of diseased kidneys; this is sometimes a nice point to decide, as you cannot judge from the pain; the kidney may be much diseased without giving much pain, or the patient may suffer the most exquisite pain if there be a calculus; but in this case it will only be felt whilst it remains in the ureter. No pain varies so much as that produced by calculi, but generally it is aggravated by any excess. Sometimes, the patient has great weakness in the loins; the pain, arising from such weakness, being relieved by placing a cushion under him when he lies down; but the nature of the pain is not sufficient to enable you to say whether or not it originates in the kidneys.

Swelling and inflammation of the testicle, accompanying severe pain in the loins, is generally indicative of disease in the kidneys. If there is cutting pain on making water, attended with sickness, the same disease is to be suspected, as nearly all the diseases of the kidneys are marked by the irritable state of the stomach. When this is the case, the patient is languid, incapable of exertion, his appetite is bad, he loses flesh; but if these symptoms are not sufficient to satisfy you as to the nature of the disease, you must examine very carefully the state of the urine. In most cases, where pain in the loins is the result of diseased kidneys, the urine is found to be albuminous. This may be known by boiling a small quantity, when it will become opaque from the deposition of its albumen; or the same thing results from the addition of nitric acid; if it should be voided opaque, it is rendered more so by the means I have stated. Sometimes the urine deposits pus, or something so much like it as not to be distinguishable from it; as the disease goes on, other symptoms occur which clearly prove it to be in the kidneys. If there be a calculus formed there, it will some day or other escape into the bladder; but if its passage from the kidneys should be obstructed, masses of lymph are formed, which, passing down the ureters, produce the same distressing pain in the loins and testicles as that arising from stone. These masses of lymph sometimes present a laminated appearance, and are of an oval form; at other times they are found mixed with pus. Occasionally there is a large secretion of mucus in the kidneys, which, in its passage through the ureters, produces very severe pain. But you are not to conclude that a patient has diseased kidneys, merely because he has a pain in the loins, as there are many other symptoms to be considered. Caries of the vetebræ is another cause producing pain in the loins. When the vertebra are affected with scrofulous disease, the cancellous structure is infiltrated with cheesy matter. Ulceration of their cartilages is also found in children of a strumous habit. There is another disease attended with the same symptom: it appears to be a kind of rheumatic inflammation of these bones, or cartilages, or it may be of both. It occurs chiefly in adults, and is in no way connected with a scrofulous diathesis. Either of these causes, then, may produce pain in the loins; the difficulty is to determine from what cause it arises in any particular instance. In scrofulous disease, the pain is generally very trifling, sometimes so slight as to be scarcely observable; perhaps, when the patient is walking, he strikes his foot against a stone, which jars his back and produces slight uneasiness; he also feels it on stooping, or a slight blow may give rise to it. But, in many cases, the symptoms are so slight that you are not justified in setting it down as diseased vertebræ till the appearance of lumbar abscess, which is a result of disease of the bone, and not of the soft parts.

Mr. Abernethy was unquestionably wrong in his opinions on the origin of this disease. I do not recollect ever to have examined a case where the bone was not diseased. In the other form of disease which I mentioned, the pain in the loins is considerable, and is aggravated by motion; but still the pain is very different from lumbago, coming on gradually, whereas the latter, as you are aware, comes on in paroxysms. Again, in lumbago the pain extends to the hips and thighs, but this is confined to the back. If allowed to go on, its nature becomes plain enough at last. Here the bodies of the vertebræ are affected; the consequence of which is a tilting up of their spinous processes, ending at last in lumbar abscess. This elevation of the spinous processes is what is called angular curvature. Lumbar abscess may then be the result of inflammation of the vertebræ as well as of scrofulous disease; the distinction being that in the former cases the matter does not escape externally, but in the latter it does. It is quite an extraordinary thing, the extent to which caries may take place in bones, without matter being formed. But pain may occur in this region when the disease is in the vertebræ above; in disease of the dorsal vertebræ, for example, the pain is referred to the loins: this is of course sympathetic pain; but when it has gone on for a year or two, it is felt in the actual seat of disease also. I said that when there was pain in the loins, with deposits in the urine, the kidneys were always diseased; but I am not quite satisfied that this sign is sufficient. I attended

a gentleman some time ago, with Dr. Prout; we examined his urine, and thought he had mulberry calculi, and treated him accordingly; his urine was sometimes of a greenish colour. When he struck his foot against the pavement in walking, he suffered slight pain in the back, which led me to suspect some disease of the spine. But the knowledge we then possessed of these diseases was insufficient to determine whether or no such was the case. He went into the country, but I saw him again some time after, and then, on examination, I found very considerable angular curvature of the spine, two or three of the vertebræ being affected; I then treated it as caries of the spine, and he recovered, the urine no longer remaining albuminous. You must have observed in patients brought in here after a fall, how frequently the urine is deranged; it is not then to be wondered at if it should be considerably affected when there is actual disease in the vertebræ. In these latter cases, however, the urine is rendered ammoniacal as well as albuminous. There is still another disease which I must mention as producing pain in the loins; it somewhat resembles fungus hæmatodes; in this disease, it is the lumbar nerves which appear to be affected; it is attended with very severe pain, but it is not at all common. You may be led to suspect the presence of this disease, by the absence of those symptoms which I have described as indicative of the other affections of this region: by the pain extending down the whole of the limb; and your diagnosis will be rendered certain by a tumour being felt in the loins, which may be detected by pressing upon the abdomen. Weakly persons are very subject to pain in the loins, independant of any disease of the part; half the delicate women in this town, from their habits of living, suffer from this pain, and you can never ask an hysterical young woman to relate her symptoms, but she will mention pain in the loins. I have seen at least forty cases of this kind. With such persons, you will always find there is exquisite tenderness of the integuments over the part; but this is only so long as the patient's attention is directed to it; avoid this, and you may press it as much as you please. This is to be detected by the cold hands and feet, irregular menstruation, in some cases the existence of some other discharge, and by the sensibility of the skin when the patient's attention is directed to the part. This class of patients are not to be implicitly relied upon; as they will sometimes tell you the pain is slight, at other times severe, but most frequently they endeavour to exaggerate their symptoms; it is, therefore, necessary that you should be very careful in distinguishing between this and other affections. I need not tell you how important it is to distinguish actual disease from nervous debility.

COURSE OF LECTURES ON THE THEORY AND PRACTICE OF MEDICINE.

Delivered by C. J. B. WILLIAMS, M.D., F.R.S., Professor of the Practice of Medicine, and of Clinical Medicine, at University College.

Softening of the heart; fatty tumours; cancer.—At the conclusion of the last lecture, I shortly noticed the subject of softening of the heart. When softening is the result of pericarditis, or more particularly carditis, it is accompanied with increased redness of the tissue. There are cases of softening of the muscular substance, however, without an increased redness. But then it appears to be rather depending on a modification of the nutritive functions. I do not know of any positive diagnostic signs in this state; but I have had reason to suspect the existence of softening from the combination of the symptoms: there being a weak pulsation and a fluttering action of the heart, with a disposition to palpitation, and irregularity of the rhythm, while, at the same time, the signs of the dilated heart or of valvular disease are absent. Though I cannot name a case in which softening has been positively diagnosticated, my suspicions have been fully borne out on reference to the post mortem examination. The treatment for such a case must be the same as for dilatation. Tonics, with a soothing regimen; nourishing diet; taking care to avoid all things that tax the heart with undue exertion: a degree of quiet is necessary. The preparations of iron are the best tonics.

There are *other changes in the structure of the heart* occasionally met with: such as depositions of pus in the muscular substance, and this is called abscess of the heart, or it may present itself as tubercle. There is sometimes a conversion of the substance of the heart into a fatty kind of matter. In various instances, there is a good deal of natural fat in the heart encroaching to a great extent on the muscular structure, and where this is excessive it amounts to disease. Sometimes perforation or rupture of the heart are the results. This lesion is apt to occur in persons with great disposition to corpulency, and is then manifested by fits of palpitation and great weakness, seeming to arise from this accumulation of fat about the heart. The symptoms are dulness in the region of the heart, usually, with a diminution of the impulse and the sounds; the fatty matter, instead of contributing to the production of the sounds, obscures them; it muffles or diminishes them to a great degree. There is another kind of fatty degeneration about the heart, which I have seen in a few instances; when the substance seems to undergo a species of transformation of texture, becoming paler in colour, something like grease, of a yellowish appearance. In two of these cases, which I met with, I was unable to obtain the previous history; though I have no doubt the symptoms are much the same as in softening of the heart, and diminution of its power. I need not dwell on the subject of *cancer of the heart*, as I consider that a matter too uncertain for diagnosis, and therefore not claiming much of our attention. One case of cancer of the heart, terminating in sudden death, came under my notice; it was confined especially to the substance of the heart, without producing any other disease. I have, too, seen some cases of valvular disease terminate in this sudden manner.

There is another affection which I must advert to, and that is—*Polypus of the heart—Polypoid concretions.* It has often been a matter of question, where these tumours have been found in the dead body, whether they were formed after death altogether, or existed in part before death. If they are formed for any considerable time before death, I have no doubt but they must produce impediments to the circulation; and there is a certain class of symptoms resulting from this disease. The arguments on which it is contended that these polypi do form before death, and from some diseased action, are: in the first place—that clots are sometimes found, exceedingly tough and firm; not clots of coagulated blood merely, but of fibrine, which is extremely firm, very tenacious, and exhibits different degrees of solidity in different parts, as if one part had coagulated some time before the other parts. Further than that, there has been found, in some cases of these concretions, not merely a fibrinous matter in its usual state, but fibrinous clots which appear to have been softened for a long time, and very closely allied to tubercle. Gulliver has thrown considerable light upon this subject, by shewing this substance to be actually broken-down fibrine, and not pus; and he has shewn that similar matter may be produced by keeping fibrine for a time—two or three days—in a temperature like that of the human body, and protected from the air. These fibrinous clots are found in the large veins, and in other vessels. This argument goes in favour of the supposition that these clots do sometimes form before death. Another conclusive argument in favour of the opinion that the fibrine is formed before death, is, that the clots so formed are found attached, for instance, to the *carneæ columnæ*, passing through their fibres. In several instances, I have observed the tendons of the mitral valve passing through the clot, which, instead of pressing the fibres closely and firmly together, has formed around them a sort of oval hole, the tendons passing through it to their attachment; pretty obviously shewing that these tendons have for some time continued to be in motion, and have thus wrought out a sort of channel for themselves. This is a most conclusive fact that polypi are formed before the motion has ceased in the heart. They form sometimes a sort of mould of the ventricle, or of the auricle, in whichever cavity they may be found. You will, in such cases, expect a greatly weakened circulation; and also it is not at all improbable that there may be excessive gasping and faintness, and symptoms of obstructed circulation, with lividity.

With regard to the physical signs: a muffling of the sounds is produced, and the natural pulsation of the heart is converted into a sort of tumultuous action; there may likewise be a kind of murmur or a whiffing sound produced. In some instances in which polypi have been supposed to exist, and the circulation has been extremely weak, the symptoms have afterwards disappeared. I have seen three or four instances where I have been led to suspect this was the case. I have found cases of diseased heart with a tumultuous action, no pulse at the wrist, or scarcely any, and the various signs of an obstructed circulation; and in the course of a few hours, the action of the heart has returned, and the symptoms have greatly dissipated. With such a case as this, the treatment should be to try to break up the clot thus formed, or to prevent its increase. Alkalies or solvents may be used, as the salts of potash, &c. It becomes a question whether injecting these substances into the veins might be of any use? If anything of the kind is to be done, I should prefer the salts of soda. The chief thing is to prevent the formation of the polypi; so that whenever there is a failing of the action of the heart, we should administer a stimulant, which prevents the torpid action, and consequently the accumulation of the blood in the interior of the heart. An inflammatory state of the blood, tending to deposition of its fibrine, where the blood abounds in fibrinous material, constitutes a state in which polypus forms in the greatest abundance. Under these circumstances, blood-letting may be a preventative. However, this is a matter too speculative to occupy much of our attention.

Now, as we before said, *rupture of the heart* may result from fatty accumulation and from softening; it may also occur from partial dilatation or aneurism of this organ. An aneurismal pouch, or partial dilatation of some portion of the walls of the heart, will terminate in rupture. The effect of rupture of the heart, is, of course, instantaneous death.

Now, we come to a subject of much more frequent occurrence, and more important in a practical point of view:—*Disease of the valves and orifices of the heart.* We have hitherto considered diseases of the muscular fibres and of the membranes covering them, and we have now to attend to the lesions of the mechanism by which the circulating current is directed and conducted from the heart. We now come more especially to the diseases of what may be termed the hydraulic apparatus of the heart, in contra-distinction to that of the muscular structure, or the dynamic apparatus of the heart.

Now, it is desirable to divide the diseases of the orifices and valves into two great classes. First, there are the obstructive lesions—where there is more or less obstruction to the current of the blood in its proper channel; and secondly, those that occasion the blood to take a reverse direction, or a backward course, and these may be called regurgitant diseases. Now, the lesions that produce these different affections, are very numerous, and I will describe the chief of them under different classes.

First of all, those which are allied to the affections we have already considered, as connected with *endo-carditis.* 1stly. Under this head may be mentioned a thickening of the *endo-cardium*, causing a similar condition in the valves. Sometimes this resembles a deposit of lymph, as in cases of recent endo-carditis,—a sort of fibrous matter on the surface. This may occur in various parts. It is found at the semilunar valve, giving rise to a thickening of the margin of the valves, and often taking a peculiar shape from the contact of one valve with another. It very commonly happens that there is a thickening of the membrane, deposited in the shape of a festoon, or what is called a scutiform thickening of the valve. The pressure of the valves against one another modifies the appearance of the deposition; generally, the valves are thickened to a considerable extent, there being little vegetations round their margins; the orifice of the valve is sometimes, also, a little fringed. In one case that I witnessed,

there were as many as eighteen of these fibrinous tumours, connected with the cords of the tricuspid valve. Another effect of this deposition, is adhesion of one valve to another; this is a very common lesion. It is very common to find two of the aortic valves adherent to each other; so that, instead of having three valves, you have but one valve entire, and the other two adherent, the intermediate portion forming a sort of projection between them. The effect of this is to cause an obstruction to the passage of the blood. The same thing may occur in the mitral, and more rarely in the tendons of the tricuspid valve.

2ndly. There is another class of lesions included in some of the depositions I have already mentioned. Besides a deposition of fibrine on the endo-cardium, there is a thickening of the fibres and texture of the valve beneath this membrane, and the formation of a tense yellowish-white structure, so that the muscular portion becomes so altered, as to a great degree to present that peculiar appearance which constitutes hypertrophy of the texture. This appears to be a deep-seated lesion, connected with a change in the muscular structure, besides an affection of the endo-cardium. Well, then, this probably arises from the formation of a sub-serous coat or texture, most commonly in the *laminæ* of the valves, and the tendinous cords; and in connexion with this hypertrophy, there is very commonly a sort of elongation in the fibres; and I have often found that where these deposits have taken place, there is an impaired elasticity, and a disposition to contract at one time, and to elongate at another, and, on that elongation, to break; thus producing great irregularity in the apparatus of the valves, and interfering with their proper functions. Sometimes this may lead to rupture of the heart. Frequently, in addition to this, there are small osseous deposits in the thicker portions of this fibrinous matter; and sometimes the tendons are quite thickened in this way. There may be various degrees of this. There may be a mere thickening —not interfering with the action of the valves, which is comparatively rare. Then there is thickening with shortening of the valves, causing a partial closure of the orifice; and thickening with elongation, causing an irregular enlargement of the opening. For instance, suppose thickening with elongation to take place, it has the effect of rendering the affected side of the valve quite loose, so that it never becomes tightened, and it cannot act perfectly at each systole; the blood gets behind it, and is forced by regurgitation backwards into the different cavities. This will, eventually, produce various lesions of the heart itself.

3rdly. Another thing to be considered is that affection of the orifices, in which there is an osseous or cartilaginous rigidity, especially at the aortic orifice, causing thus an obstruction to the circulation. Deposition is extremely common at the root of the aortic valves, causing obstructive disease, without any actual projection of these processes. The most remarkable form of deposition of osseous matter is a cohesion of the valves, causing almost a complete closure of the orifice; or so reducing it as to make it only capable of admitting a tube of the size of a crow-quill. The same thing occurs with regard to the left auriculo-ventricular opening. This adhesion of the *laminæ* of the valves reduces the orifice to one-fourth or one-fifth of its natural size, causing obstructive disease. This state is always combined with regurgitant disease. You scarcely ever have this, without some regurgitation into the ventricle, or the auricle, through this narrow orifice.

4thly. There is another kind of thickening, attended with a sort of disposition to ulceration, or at least, to rupture. This usually affects the aortic valves, and is one of the most serious diseases to which the heart is liable; in which the valve is broken down, leaving only a rim, or a sort of cord across the orifice of the artery; the other valves are here very much diseased likewise; it is generally the result of a degree of acute inflammation, involving not only the membranes, but also the deeper-seated structure. Persons addicted to habits of intoxication are subject to this form of disease.

5thly. There is atrophy of the substance of the valves; this may take place simultaneously with thickening of their lower portions; and if it is extensive, it must produce serious results, leading to considerable regurgitation. Shortening and atrophy of the valves is not a very common disease. It may, however, vary very considerably in extent, the laminæ, in some cases, being much longer than in others. With valvular imperfection, there is generally hypertrophy, or dilatation of the heart, or both. I have already mentioned that this combination has been usually considered a great aggravation of the mischief; but I am quite sure, in many cases, it is so far from being an aggravation, that it is rather a compensation; and the effect of this, at least of hypertrophy, and, perhaps, partly of dilatation, is a sort of counteraction to the imperfections of the valves. When there is obstructive disease, the blood is not forced with freedom through the orifice, and increased force is required to propel it with sufficient power. On the other hand, when regurgitation takes place, the same thing may be said. When there is obstruction to the passage of the blood from the auricle to the ventricle, dilatation is the morbid consequence. If there were no receptable for the blood to regurgitate into, it would press on the affected parts, and rupture would be the consequence. The same sort of thing is found to take place, naturally, in diving animals. There is no doubt that hypertrophy is a great cause of evil in many instances, and it does not compensate for the mischief occasioned by the increased violence of the circulation. Dilatation, too, may be said to have a bad result in many instances, because it is accompanied by weakness of action. All the lesions I have been considering, affect the left side of the heart infinitely more than the right side, at least generally speaking; and the reason for this has been variously ascribed. It has been attributed to the stimulating quality of the arterial blood. But there are several causes; first of all, there is the more active function of the left side of the heart: this increased activity, therefore, predisposes to disease. 2ndly, there is the different structure of the left side of the heart; the left side is altogether stronger and thicker than the right: but this very strength and thickness offer a greater facility to the increase of disorder, when it is once induced in the walls. 3rdly. We must consider the more extensive relations of the left ventricle. You cannot disturb any part of the body, without the left ventricle bearing a portion of the disorder. Violent exertion, sudden chill, or any check to the circulation, all bear more on the left ventricle than on the right; and the result of this frequent exertion or interruption imposed on the left ventricle, renders it more liable to disease than the other.

CLINICAL LECTURES ON MEDICINE;

Delivered at the GREAT CHARITY HOSPITAL, Berlin, by Dr. SCHONLEIN, first Physician to the King of Prussia, founder of the Natural System of Medicine in Germany, and Professor of Pathology and Therapeutics in the University of Berlin.

Prepared from the German expressly for "The Medical Times."

LECTURE XIII.

Peritonitis Puerperalis.—Metritis Septica.—Phlegmasia Alba Dolens.—Collapse.—Apparent Hardness of the Pulse.—Phlebitis in different External Veins.—Attack of Shivering.—Abscesses on the upper part of the Right Thigh and on the Right Arm.—Pneumonia.—Exhaustion.—Death.—Result of the Post Mortem Examination.

July 25th, 1842.—Therese Müller, needlewoman, twenty-one years of age. The girl was safely delivered, after a natural pregnancy, in the night of the 22d instant. The delivery was quick and easy, but morbid symptoms developed themselves in the abdomen ten or twelve hours afterwards, which rendered bleeding necessary. Having, without any material benefit, instituted a second venesection, as well as a local abstraction of blood, she was brought to this division of the hospital and placed under an antiphlogistic treatment. Another pound of blood was drawn from the arm, which is here shown to you; it certainly contains much serum, but is strongly cupped and buffed. Leeches were again applied to the painful spot on the abdomen, grey mercurial ointment was abundantly rubbed in, and calomel administered internally (three grains every two hours); four characteristic evacuations have taken place. The present state of the patient is as follows:—The abdomen (considering the woman has been recently delivered) is not so very much distended; the uterus projects a little over the *symphysis pubis*; it is firmly contracted, though rather painful upon pressure, as is the whole of the lower part of the abdomen; the left inguinal region is, however, more particularly the seat of pain. The pulse is excessively frequent, almost 150 per minute; the skin moist, and at the same time very hot; the urine scanty, of a dark colour. The lochia have appeared, but have a very offensive odour, which circumstance is not one of the most favourable indications. In this case, there is evidently a degree of inflammation set up in the peritoneal covering of the uterus; but the state of the mucous membrane lining the interior of the uterus is not altogether so evident, and an examination of these parts must be instituted before we can pronounce a more decided opinion, or have recourse to astringent injections into the vagina.

Prescription.—Application of sixteen leeches on the left inguinal region. Continuation of the calomel (gr. j. every two hours.)

July 26th.—We have to distinguish three series of symptoms:—1st, the local phenomena of the disease; 2ndly, the reflex symptoms; and 3rdly, the effects induced by the medicine. We must consider these separately, in order to obtain a clear conception of the state of the patient. With regard to the first, the spontaneous pain in the abdomen has ceased; the abdomen is soft, and even the left inguinal region is scarcely painful upon pressure. The uterus may still be felt over the symphysis pubis, but is more flabby. On examination, we found the vagina covered with a tenacious, fetid, and reddish mucus; the mouth of the uterus soft and flabby, and feeling cold to the touch; thus confirming our yesterday's conjecture, as to the septic state of the mucous membrane of the uterus, a state which Boer has termed "*metritis septica.*" The peritoneal symptoms are therefore of secondary importance, and their disappearance is no guarantee for pronouncing a favourable prognosis. The patient is in much the same state as we found her yesterday. Respecting the effects of the medicine, three greenish stools have taken place, and we perceive a commencing mercurial odour in the breath.

The patient still complains of violent pains in the small of the back, which she attributes to the position she has continued in for some time; but which I am more inclined to consider as symptomatic of an extension of the inflammation to the posterior peritoneal folds, and which, it is much to be feared, may run into suppuration. The circumstance of the tenderness of the abdomen on pressure having diminished, ought not to quiet our apprehensions; for you know that the pain, even in ordinary peritonitis, is frequently limited to a small spot, and thence suddenly and rapidly extends itself over the whole of the abdomen; this is especially the case with regard to puerperal peritonitis, more particularly where the internal mucous membrane is also affected.

Prescription.—Discontinue the calomel powders; give an infusum digitalis, with aq. laurocerasi, for internal use; ℞ inf. herb. cicutæ, (℥ss.) lb.j., calcis chloruret. ℈ij. M. ft. inject.

July 28th.—We yesterday remarked a decrease of the peritoneal symptoms to be very probable, without, however, (in as far as their existence is connected with the septic state of the internal membrane of the uterus,) affording us a guarantee, that they will not make their appearance at a future period. We also expressed a fear lest the disease should extend from the mucous lining of the uterus in the direction of the veins;* this latter circumstance has now taken place, although it has attacked, not the veins of the uterus, but the veins of the right thigh. This appearance of inflammation in the veins of the thigh, in the puerperal state, is a phenomenon which was first described by White, under the name of *phlegmasia*

* See preceding case.

alba dolens. Although this symptom had no doubt been previously met with, White was the first who directed especial attention to it. The direct connection between phlebitis uterina and the puerperal state is readily comprehensible; but I cannot say the same of the ætiology of inflammation of the veins of the lower extremities; for the latter have no direct communication with the venous trunks coming from the uterus. The patient complained of pain in the right thigh, even at the time of her reception into the hospital; we then thought it singular that the left thigh was not affected, as the inflammation seemed to be seated in the left inguinal region. To-day we find the external veins of the thigh swollen and painful, and we may count seven small abscesses, which are connected one with another. This phenomenon certainly does not surprise us, but must be considered as unfavourable. The peritoneal symptoms are very moderate; abdomen but little distended, and nowhere painful; the troublesome pain in the small of the back has also abated. This pain in the back might, perhaps, afford us a key to the affection of the thigh, since, according to Breschet, the connection of the veins of the pelvis with those running along the spine, is clearly proved. The examination of the uterus does not lead us to infer a similar morbid process in the veins of this organ; a swelling is still certainly perceptible over the symphysis pubis, but it is perfectly painless, hard and firm. The examination *per vaginam* also exhibits a favourable change; the flux has no longer so bad a smell, and the warmth of the internal parts has returned. The constitutional symptoms are the same; pulse small, 140 per minute; tongue drier; urine scanty and thick. Thus, we might be satisfied with the state of the patient to day, if this new episode had not taken place; it is better, however, that it has occurred in the veins of the thigh, than in those of the uterus.

Prescription.—Embrocations of ungt. neapolitan. on the right thigh, and cataplasms over it.

July 29th.—The phenomena of the peritoneal affection no longer cause us any particular apprehensions, especially as we have reason to be satisfied with the state of the mucous membrane lining the uterus. The discharge is no longer fetid, and is already approximating to the mucous form; we may, therefore, hope for the speedy disappearance of the peritoneal symptoms. With regard to the affection of the veins of the right thigh, there is still, certainly, a pain along the course of the vein, which is swollen, and presents a cord-like appearance; but the inflammation makes no progress. Finally, with regard to the fever, and the general state of the patient, she feels herself very weary, faint, and powerless; the pulse is certainly less frequent, (130 per minute,) but wiry and smaller, likewise giving the impression of great hardness; it sinks, however, as soon as it is pressed with the finger.* There are copious watery stools; skin soft; urine unchanged. To this we must add a superficial sore, caused by the decuhitus, on the os sacrum, which has an irritating and exhausting effect upon the patient.

We may, therefore, state, as the result of to-day's examination, that the symptoms of the *peritonitis* and the *metritis septica* have almost entirely disappeared; that the inflammation of the veins has maintained itself at the same point, while the exhausted state of the patient alone forms a menacing feature; the amclioration of the fever is, however, a favorable symptom.

We must now principally pay attention to the state of the strength in our patient, and we shall, therefore, administer an *emulsio chinata*, mutton broth, milk, with the yolk of egg, and similar means.

August 8th.—It is indisputable that a considerable amelioration has taken place in our patient since the last visit; but many things still remain which cause us some misgiviugs as to the result. Let us first consider the favorable changes: the symptoms of the puerperal peritonitis have entirely disappeared; the abdomen is of a natural form, soft, and everywhere free from pain, even in the left inguinal region. The phenomena presented by the mucous lining of the uterus—the *status septicus*—have also disappeared; the uterus is contracted; the examination, *per vaginam*, proves no morbid change in the internal genitals; there are only slight remnants of a leucorrhœal discharge. Secondly, with regard to the symptoms of inflammation of the veins of the right thigh: they are likewise on the decreasc; complete resolution has taken place at most spots; suppuration only shows itself at one small point; the abscess has discharged itself externally, and is already healing. Thirdly, the constitutional symptoms have moderated: the pulsc is no longer so weak as it was, and its frequency is diminished to 120; the patient enjoys better sleep; the sore on the back, which had extended pretty far, is in progress of healing. These are the favorable symptoms, which, when compared with the former state, arc certainly calculated to satisfy us. But we have now to state the unfavourable feature of the case, namely: the re-appearance of inflammation of the veins in different parts of the body, although only existing in a limited degree, and on the superficial parts. Phlehitis has developed itself, not only on the right arm, where we were ohliged to open a vein, but also on the left foot; and its re-appearance at such isolated localities is difficult to be accounted for. You will undoubtedly conceive that a two-fold possibility forces itself upon our minds, with the re-appearance of these lesions: firstly, the extension of the inflammation towards the internal veins, and thence towards the heart; and secondly, its termination in suppuration, and the consequent re-absorption of pus, and metastatical deposits of puriform matter in various parts of the hody.

On the abatement of the inflammatory symptoms, we first administered an *emulsio chinata*, and some days subsequently, an infusion with *acidum phosphoricum*. The recently developed inflammation of the veins we shall treat locally, as the former, with embrocations of grey mercurial ointment, and cataplasms.

August 11th.—We have had to battle with a series of *after*-incidents, subsequent to having removed the most dangerous phenomena (the peritonitis and metritis septica). Phlehitis developed itself on the right thigh, a week subsequent to the accouchement; we succeeded in bringing about resolution, with the exception of a small spot, which, however, after the discharge, closed up of itself. Thus we hoped the matter had terminated; but the same phenomena have now made their appearance in other superficial veins, and where resolution can no longer be obtained: a slight abscess has already formed itself at the sole of the left foot.

The realization of that, which I previously described as an eventual possibility, seems, therefore, now to be unhappily very probahle: that is to say, that suppuration, re-absorption of pus, and the development of typhoid phenomena, may take place; and which, in this instance, are more to be apprehended, since the frequency of the pulse, although diminished, is still excessive (120), and as the diarrhœa continues.

Let the patient again take an emulsio chinata, and morphia (gr. $\frac{1}{4}$), on account of her uneasy, sleepless nights.

August 13th to 23rd.—We regret to say that the fears we have expressed, lest the re-absorption of pus should take place, are more and more confirmed. The characteristic violent attacks of shivering, with subsequent heat and absence of all *crises*, commenced on the 14th; they were repeated at indefinite intervals, one taking place almost daily. Phlebitis also formed itself on the right foot; two larger abscesses appeared on the upper part of the right thigh, which were obliged to be opened; the same procedure was resorted to on the right arm. Pneumonic symptoms developed themselves subsequent to this, consisting in a slight cough, and pain at the chest, which indicated a formation of secondary deposits of pus in the tissue of the lungs; crepitation was perceived at the base of the right lung. The phenomena of the inflammation in the external veins of the skin diminished, in the same ratio as the symptoms just now described exhibited themselves. There is no painful locality in any part of the abdomen. The strength of the patient gradually decreased with the development of these phenomena; the feet and legs commenced to swell œdematously; the frequency of the pulse continued at the enormous rate of 150, or more, per minute, at the same time that it became smaller; the hrain grew more disturhed. Acidum muriaticum was added to the emulsio chinata; subsequently, aqua oxymuriatica was given, and claret administered as a beverage. The patient expired on the 23rd inst., after having endured a great amount of torture.

Result of the Post-Mortem Examination.—There is nothing anomalous in the cavity of the cranium. A little serous fluid was found in the pleural sacs; some old adhesions were also met with in the right side of the thorax. A few lobular abscesses were found in the inferior lobes of both lungs, especially in the right; they may be seen, externally, under the form of small, circumscribed, yellow spots; some parts of the lungs were hepatised; the upper lobe of the right lung was infiltrated with pus. There was nothing abnormal in the heart. The liver pale, and rather void of blood, otherwise normal; so, also, the spleen, the pancreas, the kidneys, and the whole intestinal canal. The veins of the uterus, as also of the ovaries, are almost throughout filled with pus, so that they seem, as it were, injected with a yellow fluid, in all their ramifications. Purulent exudation was also found in the vena cava inferior, near its junction with the liver. A plastic lining, as well as a quantity of dirty, puriform matter, was found in the whole of the right vena iliaca. The exudation extended itself as far as the centre of the vena cruralis, and thence down into the smaller and more superficial veins of the skin, which were enlarged in volume, and thickened in their walls, presenting almost the appearance of arteries. The veins are certainly enlarged and thickened in the right leg and foot, but contain neither a plastic exudation nor pus. The same was found in the right arm, as also, in the veins of the abdominal parietes of that side. The veins, throughout the whole of the left side, exhibited no morbid change.

Mr. C. D. A. Newman, Assistant Surgeon of her Majesty's Steam Vessel, Lucifer, was last week tried by a court martial, and dismissed from the service, for having drawn a bill upon Government without authority.

---

* Schönlein remarked, in the case of a female convalescent from a violent pneumonia, which had assumed a nervous character, that apparent hardness, and fulness of the pulse, is very frequently observed, subsequent to the application of strict antiphlogistic means; and this the more deserves to be taken notice of, as it is usually combined with an anomalous frequency of the beat, and may thus easily lead into errors, founded upon the interpretation or the estimation, which is put upon the quality of the pulse. This hardness of the pulse is very common in women, and particularly in chlorotic females; and if this be combined with a violent beating of the heart, the medical man may readily be induced to suspect the presence of inflammation, and be led again to have recourse to the lancet. But if you will press the pulse, in such a case, you will find that it sinks instantaneously; whilst, if you only gently touch it, it will appear to you like a tense cord. A strong bellows' murmur (*bruit de diable*) of the arteries also combines itself with this in individuals, in whom considerable abstractions of blood have been rendered necessary, as likewise in chlorotic patients, which is particularly distinct in the carotids; in many cases, it is so powerful that it is audible on merely applying the ear near the arteries. This fact shows us the indispensable caution requisite, when judging of morhid states, and the necessity of depending, not only upon one individual symptom, hut upon the reciprocal connection of all the existing phenomena. On comparing the skin, the urine, and the other secretions, with the pulse, we shall then find what interpretation is to be put upon the changes which take place in the latter.

ON THE APPLICATION OF THE PLUG IN CASES OF UTERINE HÆMORRHAGE.

By CHARLES CLAY, Member of the Royal College of Physicians, London, Graduate of Edinburgh, Author of "Peritoneal Sections," and Lecturer on Medical Jurisprudence, &c., Manchester.

(Continued from p. 172.)

It would have been easy to extend the list of opinions on this question to a very considerable length, but it would only be tedious and unnecessary. I shall now make some observations on this unsettled question, and the opinions given respecting it. It is evident from the number of authors quoted, embracing many of the greatest names known to obstetrical science whether of ancient or of modern days, *that the great mass of evidence is decidedly against the use of the plug.* For this purpose we must divide midwifery writers into four classes. 1stly. Those who advocate the use of the plug without reserve. 2ndly. Those against its use. 3rdly. Those who advocate its limited application only; and 4thly. Those who are silent on the subject. The first division, viz.: those who are enthusiastically in favour of its application in all cases of hæmorrhage,are very few; Leroux, Millot, Hoffman, Tourette, with a few others of less note, comprise nearly the whole of this class. Tourette is particular in insisting on its being the best remedy even after delivery; whilst those against its use are very numerous embracing names of the highest celebrity. To these may be added the very numerous list of writers who are silent on the subject; who must have been opposed to its application, otherwise they would have included it as a remedy. These classes are still further strengthened by those who advocate the limited application of the plug only, as of use in cases during the early months of pregnancy; and where no little caution must be exercised, when used.

With respect to one part of our subject, namely: the application of the plug in hæmorrhage after delivery, very little need be said; I believe, every writer of the present day, of any practical experience whatever,would condemn the use of it. Under such circumstances,there have been too many fatal cases on record, arising from this application, to sanction its continuance; and the sweeping condemnation it has met with, will, it is hoped, ever prevent its revival or employment, except in the most isolated districts, where the march of intellect never reaches, and where ignorance reigns without check or desire to be improved. I feel no hesitation in declaring the application of the plug,after delivery, the very worst practice, and contrary to the dictates of common sense. Its inability to check the vessels pouring out blood, its confinement of the discharge, causing it to be accumulated internally, and lastly its preventing more valuable means being adopted, answer no other purpose but that of hastening the death of the patient, and wrecking the character and prospects of the practitioner adopting it. As I have already intimated, this part of its application is now so nearly exploded, that I shall proceed to consider at length only its application in the early months of pregnancy, and previous to the uterus being emptied of its contents: it is at this time that some few modern practitioners consider it a legitimate application; but I hope to be able to prove that, even then, it is by no means the valuable remedy it has been thought.

In order to place this subject of uterine hæmorrhage in the simplest possible view for the study of the application of the plug, one or two general premises are necessary. First: all hæmorrhages of the early months, and previous to the uterus parting with its contents, *are the result of uterine action, producing lesion of its internal vessels in connexion with the placenta.* On the contrary, all hæmorrhages, after the expulsion of the uterine contents, *are entirely owing to the want of uterine action, the uterus itself having lost its contractile power;* in consequence of which, the mouths of vessels,supplying the flow of blood, instead of being closed by uterine action (the whole uterine mass occupying less space,) are left open, facilitating the efflux which either proceeds externally, or accumulates internally within the walls of the uterus; either case being one of considerable danger to the patient. When hæmorrhage takes place, from whatever cause it may arise, the first indication is *to check the discharge.* In accomplishing this,however, the cause must be borne in mind, which, if duly considered, will lead to the best conclusions as to the means to be adopted. If the cause then be uterine action, the energy of the practitioner *must be exerted to allay that action*; it would be an absurd position to excite a continuance of that action,which is the cause of mischief, as a means of cure. On the contrary, where hæmorrhage arises from the want of uterine action, every means must be adopted *to excite uterine action;* for, as long as the state of inaction continues, so in proportion increases the danger of the case; I consider this to be the most reasonable and common sense view of the matter. Having already stated that the application of the plug, in cases of hæmorrhage after the uterine contents are expelled, is generally esteemed bad practice (and all but obsolete), in consequence of its tendency to produce a still greater mischief than the one it is intended to remedy, viz.: *internal hæmorrhage,* the indications of which are often never seen until it is too late to save the patient; it will not be necessary to extend my observations upon that part of the subject; but I shall proceed at once to consider the application of the plug before delivery, or, in the earlier months of pregnancy. The cause of hæmorrhage, in these last species of cases, I have distinctly averred to be *uterine action,* and that the indication of cure should be *to allay that action.* Now, I will meet this by the following declaration, viz.: *that the plug in all cases produces irritation, consequently is an exciter and promoter of uterine action, and, therefore, can never be considered as a legitimate means of allaying uterine action.*

I am perfectly aware of the argument that may be put forward by some to meet this position, viz.: "That as the plug produces irritation, consequently uterine action, it may induce the uterus to expel its contents, and thereby put an end to the symptoms of hæmorrhage." I do not deny this; it is indeed the most probable result of such interference; but I trust there are but few in the profession who would so recklessly substitute what, in many cases, would be a greater evil,to do away with one of less magnitude. I fearlessly maintain such is not the duty of the accoucheur or medical practitioner, under any circumstance. A pregnant female is under his care, and it is his duty to do all he can to assist nature in completing that process begun for a wise end,but in which some accidental circumstance has rendered it necessary to seek the aid of artificial means. It is true, the practitioner may be unsuccessful; the result may be contrary to his expectations; but if he has pursued *the right course*—if he feels conscious of having done his duty,and has not outraged the dictates of nature and common sense, how much more are his feelings to be envied than of those, who, by pursuing an opposite course, blast the cherished hopes, and risk the life of their patient, without adding an atom of credit to their own characters as practitioners. The lamentable consequences of exciting expulsion of the uterine contents,as a means of cure for hæmorrhage, &c., are too frequent and notorious not to confirm the observations here made, and fully justify the severity of these remarks, although they may be unheeded by those who practice the plug, so often as to become hardened against better feelings.

But the question may be asked of me, how do I prove the plug an irritant, and promoter of uterine action? To which I answer, independently of other sources, from the admissions of those who advocate the plug practice. For this purpose, I direct the reader to the following points for consideration.

1stly. In many cases, pessaries produce great irritability, followed by profuse menstrual and leucorrhœal discharges, accompanied by violent uterine pains,and have frequently to be taken away, from the inability of the patient to bear the pain and general irritation, caused by their presence.

2ndly. The introduction of a small foreign body up to, or within the uterine cavity, will produce menstrual discharges; in cases of long standing, dysmenorrhœa, accompanied by uterine pains more or less severe.

3rdly. M. P. Dubois (Paris) states: "The plug will, in the first place, arrest hæmorrhage; then by the retention of the blood, the presence of the plug *will irritate the neck and orifice of the uterus,* and will induce expulsive contractions, dilate the os uteri, allow the rupturing of the membranes, and termination of the accouchement."

4thly. It is stated in Dr. Blundell's system of midwifery, that: "in many cases, the irritability of the parts caused by the presence of the plug is so great that it cannot be borne." (Vide page 785.)

5thly. Dr. Duncan Stewart states: "Although stuffing the vagina, in such cases, might at first check the hæmorrhage, it is not a remedy which could be employed with safety or advantage, as it would be apt, *by irritating* the os uteri, to excite the uterus to contraction, necessarily rupturing more vessels, increasing the discharge, and destroying the chances of enabling the patient *to go on to the full period of pregnancy.*" (Vide p. 48.)

6thly.—In the procurement of premature labour, when such a means is necessary, Professor Kluge uses a plug of sponge, the irritation from which produces the expulsion of the ovum most effectually.

7thly.—Dr. Schöller recommends, where it is necessary to produce premature labour, "that the vagina be stuffed with charpic, renewed every twenty-four hours:" he says further, "*by this means, the action of the uterus is easily and speedily excited.*"

8thly.—Velpeau and Chevreul admit that,if you really want to expel the contents of the uterus, the introduction of a plug will be very effectual. From these positive assurances, on which not the slightest doubt can exist as to their accuracy, is it for a moment to be questioned that the plug *does not excite uterine action?*—and if so, how can it be used as a legitimate means of cure for hæmorrhage, that arises from *such uterine action being established prematurely?* It is evidently the intention of most who use the plug, to stay the hæmorrhage, and prevent the uterus from ejecting its contents; but the very opposite is often the result; not only expulsion of the contents, but all the consequences of it, as fever, &c., which, if it should occur, is often of a dangerous character, and not unfrequently fatal on the third day; beyond which, however, if the patient survives, ultimate recovery may be looked for.

I do not deny the possibility, that the application of the plug may have been attended, in some instances, with fortunate results; but this is only in the earlier months of pregnancy; and the difficulty of pointing out a case suitable for its application, and its extreme rarity *(even if admitted,)* is so great, that I feel confident the plug might very well be dispensed with altogether in practice, without diminishing the means of rendering effectual assistance. From what I have already advanced, it will be readily conceived that I am no advocate for the plug, under any circumstances, believing very little, if any, good can be effected by it; whilst there is every probability of adding greatly to the mischief by its presence. It is not my intention, at this time, to canvass the general treatment of uterine hæmorrhages, having already done so in the *Medical Times,* (vol. vii. page 412, &c.) But I will, before I conclude these remarks, briefly notice a few of the most valued means of assistance in such cases:—first, with respect to opium. In cases of hæmorrhage, during the early months of pregnancy, there is not in existence a more valuable means of cure than opium; the object is to allay uterine action; and certainly, if properly exhibited, opium will do so in almost all cases most effectually. I should have extended my observations on this subject, more particularly, but the appearance of a series of valuable papers just published by a fellow townsman, Mr. Thomas Dorrington, in the *Provincial Medical and Surgical Journal,* within the last few weeks, renders it unnecessary. I fully coincide with that gentleman's views, and could add many practical illustrations to bear out those he has so ably given. I will merely add, very briefly, that the error in exhibiting opium lies, not so much in the drug itself, as in the timid and trifling doses given, and in the preparation used, when it is required to give opium at all in such cases; a bold dose of three or four grains of the solid crude opium is infinitely better than other formulæ. Neither the tincture nor the powder are to be in the least depended upon; they fail or vary (as to strength) so much, that

the practitioner scarcely ever knows the dose he is giving, and the result is not, as expected, a sedative, but, *on the contrary, a highly stimulating effect.* By the use of the crude opium, all that can be effected by opium is secured, whilst there is less chance of being deceived by the manufacturing adulterations of the chemist. Opium is a most valuable remedy for checking hæmorrhage, when arising from uterine action: that is, in cases prior to labour. The compress is also a most valuable agent, more adapted, however, to cases of hæmorrhage after delivery; when applied, it is not merely the circular pressure of a bandage round the body that should content the practitioner, but the downward pressure on the uterine region that ought to be effected: and this can only be accomplished by a well formed pad on the lower part of the abdomen, immediately over the pubes, well bound down by the bandage before alluded to. In extreme cases, pressure on the aorta has been proposed, and I think with great probability of success; it is, perhaps, more applicable to hæmorrhage before, than after, delivery. I cannot speak from experience, but should be inclined to think, in cases after delivery, diminishing the supply of blood to the uterus, by pressure on the aorta, would render it less liable to be stimulated to contraction. I have no faith in astringents exhibited as internal medicines; simply, because there is no time to be lost, and it would indeed be absurd to wait for the action of such means. As injections, they might be of some use, if they could be approximated to the mouths of the vessels supplying blood, which is next to impossible, on account of the clots or coagula. Of these, tannin has of late been highly spoken of. Of the secale cornutum, I have had extensive experience; and where the drug can be obtained good (but there lies the difficulty!) it is a powerful agent in promoting uterine contraction; and, therefore, available in cases after delivery. In cases before delivery, it cannot be advisable to exhibit it, unless it be the intention to empty the uterus of its contents. I have scarcely, if ever, seen a case of uterine hæmorrhage, after the exhibition of the ergot during labour; but as I have stated, the great difficulty is in obtaining good active ergot; if it is beyond one year in age, it is not worth any thing; druggists invariably sell the growth of two or three years together—(vide my paper on the Secale Cornutum, *Medical Times*, Sept. 3, 1842.) The cold douche is also an excellent remedy, but more particularly applicable to cases after delivery; it is a powerful stimulant, and, when applied, should descend on the abdomen from a considerable elevation. Friction, which is only applicable in cases after labour, from want of contraction, is another valuable adjunct to the means employed; whenever it is necessary to be used, one caution must be observed:—*it is not to be friction of the abdomen,* but grasping the abdominal integuments in the hand, *and then making friction with them on the uterine mass;* with this simple precaution, it is doubly effective. In my next communication, I intend to examine the question: "Is artificial support really necessary to the perinæum during labour?" in reference to the subject of lacerations of that part.

PARISIAN INTELLIGENCE.

(FROM OUR OWN CORRESPONDENT.)

Paris, May 30, 1844.

On Diseases of the Eye, by Professor Velpeau.—In my last lecture, (*vide Medical Times*, vol. x. p. 148,) I enumerated the different remedies recommended in the treatment of blepharitis affecting the edge of the lids, and the lashes; to-day, I purpose describing the various methods recommended in that which attacks the conjunctiva palpebralis; but before so doing, I wish to add a few reflections on the variety I have called *blepharitis exulcerosa.* It is, as you doubtless remember, characterised by small red ulcerations on the edge of the lid, accompanied by a burning pain, and is promptly cured by the application of caustics. The nitrate, or azotate, of silver, and mercurial preparations, are here very useful; the former may be applied in the solid state, a method which must never be followed in the other varieties of blepharitis of the lids. These cauterizations ought to be performed only every third, fourth, or fifth day; generally, two or three are sufficient to obtain a cure; for, as soon as the disorder is modified by the action of the caustic, it soon disappears if left to itself; whereas, if you continue to cauterize, you substitute, for the ulcers of the blepharitis, others which are got rid of with far greater difficulty. If, however, you prefer other means, such as ointments or collyria, they must be powerful, if you wish to obtain any benefit from their application. Among the ointments, you may prescribe those containing the *nitras argenti*, or those which owe their properties to the presence of the oxide of mercury, such as those of Desault, Dejean, Farnier. In conclusion, let me impress on your minds, how important it is not to neglect this disorder; for, though it heals promptly, when treated in the manner just described, it may, if neglected, give rise to various accidents, such as vegetations or granulations, which may unite together, and assume a cancerous aspect.

Treatment of Blepharitis of the Conjunctiva Palpebralis.—Here the disease is not, as in the preceding case, limited to a very small space; on the contrary, it is more diffused; forms spots of various sizes, and is more dangerous, because a more considerable portion of the organ is affected. It is, in these cases, that remedies which act in a general manner are useful, and consequently collyria ought to be preferred to ointments. When the latter are applied on the surface of the conjunctiva, the movements of the lids, the increased secretion of tears, caused by the disease itself, or by the remedy employed, and the secretion from the mucous membrane or glands, tend to reject them from the eye, or by interposing themselves between the diseased tissue and the remedy, prevent their acting on the conjunctiva. But, must it be concluded from these remarks that ointments are useless in conjunctivitis palpebralis? I am far from asserting such to be the fact; but I think that in the generality of cases, (and I will now explain to you the reasons by which I arrived at this conclusion) that as a general rule, collyria are preferable in blepharitis conjunctivosa, whilst, on the contrary, as I previously stated, they are of but little use in that which affects the edges of the lid. When a collyrium is employed, it mixes easily with the secreted liquids, and remains between the eye and the lids, precisely on the seat of the disease, as long as it may be requisite, in order to obtain a beneficial result. Now, is it not rational to suppose that a substance is more or less efficacious, according as it is made to act more or less on the seat of the disease? It is on this account that external or surgical remedies produce greater effects than medical ones. In all diseases to which our frame is subject, the end to be sought for is to keep the topical remedy as long as requisite, in immediate contact with the affected part; and in blepharitis conjunctivosa, this result is to be attained chiefly by collyria, of which an immense number have been recommended. The substances to which the majority owe their curative properties, are—acetas plumbi, sulphas zinci, sulphas ferri, sulphas cupri, cadmium, alumen, deuto-chloruretum hydrargyri, and nitras argenti. There are some, however, which are more frequently employed than others; for instance, those containing the sulphas zinci et cupri, alumen, nitras argenti, and the preparations of mercury. Cadmium, phosphorus, and cod's liver oil have, likewise, been of late highly recommended. Among these, there are several which I have frequently prescribed.—1° ℞ deuto-chlorur. hydrargyr. gr. j. Aquæ distillat. ℥j. M.; introduced under the lids, or simply used as a lotion. This is a very active remedy, and needs great care in making use of it; because, if the patient were to swallow it, symptoms of poisoning might take place. But with the exception of this inconvenience, which may easily be avoided, it may be considered as a safe and useful remedy, and be employed as a discutient, not only in cases of a syphilitic origin, but likewise in ordinary ones. —2° Sulphat. zinci gr. j. Aquæ distillatæ ℥j. M. This collyrium is especially useful in blepharitis mucosa, and blepharitis glandulosa; but, in order to obtain all the advantages it is susceptible of producing, it must be employed in a peculiar manner. The dose of the sulphate must gradually be increased one-fifth of a grain daily, until it has reached grains ij.; and afterwards the activity of the collyrium must be decreased by augmenting the dose of the water, until the primitive proportions are attained. The same remarks are applicable to the solutions of sulphas cupri, which must be employed in a similar manner. Though these two last collyria are less efficacious than the first, yet it is necessary you should be acquainted with them, because some cases resist the action of certain remedies, and yield to others which daily observation proves to be less active. It may, therefore, be established as an axiom, that in the treatment of diseases of the eye, the practitioner must first prescribe such remedies as experience has indicated to be most efficacious, and should they fail, employ successively the other preparations. 3° Solutions of cuprum aluminatum, oxydum zinci, have also been highly recommended, and they may be useful, inasmuch as their mode of action is very similar to those already described. All these collyria may be employed with advantage in blepharitis mucosa, but that which appears to be the most efficacious is a solution of the nitrate or azotate of silver, especially if the disease present a disposition to assume the purulent form. Thus, experience teaches us that blepharitis granulosa yields principally to collyria containing mercurial compounds: blepharitis glandulosa to those of the sulphas cupri, oxydum zinci, &c.; blepharitis mucosa to those of the salts of silver. But, in establishing these precepts I am far from wishing it to be understood that I consider them without exceptions; on the contrary, no fixed rules can be laid down, because, as I have just stated, these affections sometimes yield to remedies which in the generality of cases are without effect, whilst they resist those which ordinarily effect a cure. I must warn you that, of all the varieties of blepharitis, the most difficult to be got rid of is the blepharitis granulosa. I have seen it, when it has reached the chronic state, resist all the remedies employed: collyria, ointments, and even cauterisations. You must, therefore, bear in mind, when you are consulted by a patient affected with this disorder, that you will not easily triumph over it, nor allow hopes of a speedy cure to be entertained; on the contrary, you must say that in all probability the treatment will be long and tedious.

If, after employing all the remedies just enumerated, you perceive that no amelioration takes place, more active remedies must be had recourse to, for instance: cauterizations with the sulphas ferri, sulphas cupri, nitras argenti, combined with other general remedies, such as simple or mucilaginous tepid baths, blisters to the arm; and, above all, examine carefully if the constitution of the patient is not the cause of the tenacity of the disease, and, in that case, order appropriate remedies. Before terminating, I must not omit mentioning a variety of blepharitis glandulosa, which offers certain peculiarities worthy of your attention. It is very slight; the patient perceives in the morning that the lids are irritated, and that a small quantity of matter has accumulated itself in the inner canthus, but all these symptoms disappear during the day. If, here, you order an irritatating lotion, instead of curing, you aggravate the disease; on the contrary, it yields promptly to mild and soothing lotions, or a very feeble solution of acetas plumbi crystallisat., or even common water. In blepharitis diphtherieosa, collyria seldom do any good; ointments are far more efficacious, and that which contains the proto-chloruretum hydrargyri (precipité blanc*) appears to produce the most beneficial results.

If, now, I give a *resumé* of what I have said of the treatment of blepharitis conjunctivosa, the following rules may be established:—1° *Blepharitis mucosa* must be treated with collyria containing nitras argenti.—2° *Blepharitis granulosa*, with

* *Précipité blanc*, obtained by pouring a solution of hydrochlorate of soda into a weak solution of proto-nitrate of mercury.

those containing deuto-chlorurctum hydrargyri; cauterisations with sulphas cupri, sulphas ferri, and nitras argenti.—3° *Blepharitis glandulosa*, by collyria, containing alumen, sulphas ferri, sulphas zinci, oxydum zinci, cuprum aluminatum, &c.—4° *Intermittent blepharitis*, disappearing during the day, by a weak solution of acetas plumbi, and emollients.—5° *Blepharitis diphthericosa*, by an ointment containing the proto-chloruretum hydrargyri. It must not, however, be forgotten that sometimes slight modifications are requisite.

It was my intention to have continued these lectures by the description of *blepharitis purulenta;* but several patients having been reeeived in the hospital affected with *cataracta*, and the season being favourable for operating, I will, therefore, in my next lecture, commence the description of this disease.

On Sub-Cutaneous Surgery. — By Dr. Jules Guerin, M.A.M. *Introductory Lecture.*—(At the present moment, in which myotomy and tenotomy are objects of such animated discussions, it may not be uninteresting to lay before the medical public the opinions of Dr. Jules Guerin on this subject, by giving the lectures delivered by this distinguished orthopœdist at the Children's Hospital, Paris.)

In 1835, 1836, and 1837, several surgeons, among whom I may be included, divided the tendo achillis to cure the deformities of the feet (varus and valgus). This operation, performed in as many different ways as there were different operators, attracted the attention of surgeons more on account of its therapeutical than its physiological importance. What appeared the most extraordinary, was the facility with which the foot was restored to its right position, as soon as the tendon was divided, and this caused a much more important pathological fact to pass unpereeived. It was an almost general remark that the wounds in tendons cicatrized promptly; but this was attributed to the nature of the divided tissue or the smallness of the opening made in the skin, because inflammation very rarely attacks tendons, and because in similar cases a wound heals the sooner according as its external opening is smaller. Imbued with these ideas, the benignity observed in the phenomena of cicatrization, was supposed to depend on the extent of the tegumentary incision. This opinion, professed by some of the most eminent surgeons, was generally reeeived, and this though several cases were recorded which were complieated with erysipelas, phlegmon, abscesses, and other accidents produced by inflammation. Now, ought it not to be concluded that, since the results produced were so different, the causes which gave rise to them were equally so? Evidently: and yet the contrary opinion prevailed. The presence of a certain number of very intense inflammatory accidents confirmed the idea that, when the inflammation did not exist, it was because the accidents were less intense; and this difference was attributed to various circumstances, such as the influence exercised by localities, age, temperament, constitution, &e. The attentive examination of numerous facts does not confirm this opinion. Led instinctively to operate differently from other surgeons, I obtained naturally a different result; and I never observed inflammation ending in suppuration, though I have operated in all classes of society, high and low, rich and poor, on patients of a plethoric, nervous, or scrofulous eonstitution. I, therefore, considered it my duty to seek elsewhere the reason of this difference, and was led to the following conclusions—1° That cicatrization of tendons takes place without inflammation, and by a peculiar order of phenomena, which I call *immediate organization.*—2° That the immunity offered by tendons, and the immediate organization of the parts divided by sub-cutaneous incisions, is owing to their being kept from the contact of the atmosphere.

But, had I emitted this opinion as an hypothesis, it might have been contested, and it would probably have undergone a fate similar to that of the various opinions which have from to time been proposed since the origin of medical science. In fact, if the idea of attributing the development of the inflammatory symptoms to the action of the atmosphere, is ancient, the contrary opinion is equally so. Therefore, to prevent any objection, I performed a series of experiments in order to prove: 1°, that it is not to the nature of the tendons that the absence of suppurative inflammation is to be attributed, but because their wounds are not exposed to the contact of atmospherie air;—2°, that all the tissues of our body, divided under the skin, with the precautions recommended in operations on tendons, partake of the immunity presented by the latter. Numerous experiments of different kinds led me to conclude that such was the case. In some, I showed that the muscles, aponeuroses, arteries, veins, nerves, cellular tissue, and even bones, when divided in this manner, like the tendons, heal immediately, and without presenting the least sign of inflammation or suppuration. In others, on the contrary, that tendinous parts, when wounded and kept in contact with the atmosphere, present the ordinary phenomena. This established, I passed to another order of facts, and found that large effusions of arterial and venous blood, formed under the skin, were absorbed, changed in nature, or remained stationary, without producing the least reaction. I naturally concluded that the law which presided over immediate organization was the same in all parts, for solids as for liquids effused, and for the eavities which contained them, and that the only difference was relative to size. In this respect, as in many others, solid tissues may be considered as an agglomeration of small eavities filled with liquids, the cellular tissue especially—a tissue which forms part of the composition of the different organs, and is present in the parietes of all the cavities. The following experiments were performed, with the view of elucidating this question. I opened, by sub-cutaneous and direct incisions, various articulations, the thorax and the abdomen; I thus produced serous or sanguinolent effusions; but I remarked that, in these cases, cicatrization took place sooner or later, and with or without presenting suppurative inflammation, according as they were or were not exposed to the influence of the atmosphere. I do not mean, as it has been erroneously attributed to me, that suppurative inflammation is produced by a momentary exposure to the air, or from the presence of a few bubbles of gas; on the eontrary, I consider a permanent contact neeessary. But it is not the moment to enter into the details of these experiments, which I only mention in a general manner. I will also enumerate, with the same intention, numerous pathological facts, hitherto without value, but which at length have been explained by experiments on animals. It is on this account that luxations, fractures, and other lesions without division of the skin, get well so soon; whilst, on the contrary, healing takes place so slowly when such complication exists; that all liquid collections, abscesses, effusions, remain so long indolent when unopened, and give rise to accidents, as soon as exposed to the action of the air. From these facts, I concluded that surgeons in general might take advantage of the immunity attendant on sub-cutaneous tenotomy, and I resolved, therefore, to perform different operations by the sub-cutaneous, instead of the ordinary, mode; and alone, or aided by several colleagues, I obtained a result which enabled me to assert that this method is useful:—1°, in *a scientific point of view*, from the knowledge and generalization of the fact, that neither inflammation nor suppuration takes place in sub-cutaneous wounds, when preserved from the contact of the air, but, on the contrary, they unite immediately; 2°, in *a practical point of view*, because sub-cutaneous operations may be performed with the intention of preventing the development of inflammation or suppuration. This method has, therefore, its peculiar rules, principles, and mode of application, and, in studying it, the following divisions may be established:—1°. The theoretieal or scientific part.—2°. The practical part.—I will now endeavour to give an idea of the number, the extent, and the importance of the questions comprised under these two heads, and the order in which I entered on examining them.

I. *Scientific, or theoretical part.*—Before proceeding any further, I will indicate, in a summary manner, the principal characters of this division. The facts, as I have just stated, which form the basis of the sub-cutaneous method, are the harmlessness of all sub-eutaneous wounds made according to the rules laid down, the immediate organization of the divided tissues, and the unalterability of the effused liquids. This method may be considered,—1°. According to the various tissues which may be divided by the operations—cellular tissue, tendons, aponeuroses, muscles, arteries, veins, nerves, cartilages, bones, &c.—2°. According to the cavities which have been opened—articulations, thorax, abdomen, cranium, orbit.—3°. According to the relation of the wounds towards the various liquids of the economy—arterial and venous blood, serosity, lymph, synovia, pus.

But, after having proved that sub-cutaneous wounds of the different tissues are analogous in respect to their harmlessness, it is necessary to pass in review the various anatomical phenomena peculiar to each. The wounds of the tendons do not present the same material peculiarities as those of the muscles; the arteries as those of the veins, the nerves, the bones, &c.; so that it is evident that if there are, in the immediate organization of all the tissues, phases and circumstances common to all, there are likewise others which are peculiar to each. This unity in diversity, and this diversity in unity, is a character which increases the interest attached to this curious problem. Again, what occurs in wounds which affect the different eavities without complication of effused liquid? By what means, and in what way, does cicatrization take place? And when there is effusion of a liquid, what becomes of it? What are the changes in colour, consistency, and organization, which it undergoes? I would have added—what are the chemical changes? had the science been further advanced, or had my researches enabled me to have a decided opinion on the subject!

The physiological question is not less important than the anatomical one. For, if, after having proved materially the existence of these facts, I pass to the existence of their mechanism, their causes, their signification, what a field of investigation is before us! As to sub-cutaneous cicatrization, is it effected by immediate organization of the tissues, rather than by inflammation or one of its products? Of what does this organization consist? What are its symptoms, its laws, its causes? Do these symptoms, these laws, these causes, differ, or are they similar in each tissue? In what proportions, according to what periods, and in what conditions, are they like or unlike each other?—and in what does the similarity, or dissimilarity, consist? Is the mechanism of reunion or reproduction the same in tendons, muscles, bones, &c.? What is the influence exercised by the liquids effused in the wounds of the different cavities? Which of these may be considered as injurious to our organs, and preventing their performing their functions? What difference is there between arterial and venous blood, serosity, lymph, synovia, pus, bile, urine, chyle, fæces, in short, between all the normal and abnormal liquids of our economy? Which of these liquids is a permanent and constant obstacle to immediate organization, and in which is it necessary that certain changes must take place ere they produce any injurious effects? And, in respect to these changes, are we right in attributing the principal, the most important, the most frequent, to the contact of the air? Is it its permanent presence which is the cause of suppurative inflammation? To what extent is that presence necessary and indispensable? Is it by its action on the tissues or liquids that these changes are produced? Is its action physical, chemical, or vital? The simple enunciation of these numerous questions is sufficient to show how important this subject is. In raising them, I am far from pretending to be able to solve them all, the more as this is impossible in the present state of medical science, and will, perhaps, be always so; but I have studied several; and I trust I have thus prepared, if not accomplished, their solution. I examined, successively and analytically, the mode of action of the component elements (oxygen, hydrogen, nitrogen, carbonic acid, ammonia) of the atmosphere on the various liquids of the animal economy; and the nature and limits of this study were indicated by

the fact which constitutes the basis of the method, i.e., immediate organization without suppurative inflammation. Thus, in studying the action of oxygen on the blood and on pus, I did not examine the chemical changes which took place from the presence of this gas, but those capable of hindering immediate organization, or of producing suppurative inflammation. But, though I neglected chemical action—properly so called—I did not overlook the principal physical conditions which accompany it, such as the temperature, the degree of pressure, &c. These conditions are so important in the exercise of the different functions, that I could not avoid studying them, and they led me to examine to what extent the temporary presence of air, or the longer contact of a small quantity, is injurious, and to distinguish its mechanical from its chemical action. This is the scientific problem which I intend examining. Is it necessary to point out its importance in a scientific or practical point of view? As to the former, we perceive a renovating process, in which the various transformations of organic matter may be observed, and we may, to a certain extent, watch and discover the conditions by which these transformations are effected. Is it true, as I think, that the reproduction of a tissue offers, to a certain degree, during the process of subcutaneous organization, the repetition of what takes place primitively in the fœtus? Is it true that, in the series of these successive transformations, the new tissue assumes gradually the characters of that to which it belongs, under the joint influence of nutrition, which becomes special by continuity, and of a peculiar functional action in which it participates? It is sufficient to mention the wounds of tendons, muscles, vessels, nerves, to shew how interesting and useful this study is. And, as to the latter, we have a new mode by which the cicatrization of wounds may be explained. If I am not mistaken, subcutaneous ones attain immediately the last stage of external wounds—i.e., cicatrization—without its preliminary symptoms, inflammation and suppuration; and the conclusion to be drawn from this fact is, that, in securing wounds from the action of the causes which prevent their cicatrization, or bringing them into the same condition as subcutaneous wounds, they partake of the advantages presented by these last. This, when attained, (and I trust to be able so to do) will be sufficient to authorise all the stress I lay on the scientific part of this subject.

Academy of Sciences. Sitting of the 27th May.—Baron Ch. Dupin in the chair.—M. Pouchet addressed a letter, in which he stated that he never had the pretension of having discovered the epithelium in the zoospermæ, but only of having indicated with exactitude its existence and its *rapports;* that he never wished to usurp the discoveries made by his predecessors, since he quoted more than twenty in support of his opinions;—but what he considered as having mentioned the first with precision, is the extraordinary and gradual twisting *(enroulement)* of the zoospermæ of the frog, and the curious and peculiar globule which, for a certain time, is attached to their tail.

On a new Cow-pox.—M. Magendie informed the Academy that he had discovered on a cow, in his possession, pustulæ of vaccine matter. Two women, one aged 52, the other 50, having both had variola, to whom the care of the animal was confided, remarked that their hands were affected with several pustulæ. M. M., informed of the fact, examined the dugs of the cow, and discovered the existence of an eruption which presented all the characters of cow-pox. Consequently, he requested Dr. Fiard to vaccinate some children, in order to test its qualities. This practitioner performed several experiments; in the first, on thirty-five punctures made with the matter collected on the cow, and on the hands of the women, only one succeeded; but from this, twenty other punctures were made, and all succeeded.

New Vegetable Alcali.—M. Laurent, of Bordeaux, announces having discovered a new vegetable alcali, obtained by heating benzoic acid. It does not contain oxygen, and forms, with the different acids, crystallizable salts, soluble in alcohol, insoluble in water. Sublimates at a high temperature, without being decomposed.

On the Influence of the Par Vagum on Digestion—Memoir read by M. Bernard (de Villefranche). A great many physiologists have remarked that various functional disturbances take place in the stomach, when the eighth pair of nerves is divided; but they were far from being unanimous as to the precise action that these nerves exercise on chymification; it was in order to endeavour to solve this interesting question, that I performed the following experiments: 1° An opening was made in the stomach of an adult dog, so as to permit its being examined at the different periods of digestion. Having fed the animal on bread and milk sweetened with cane sugar, I remarked (A), on introducing the aliments into the stomach, the mucous membrane became red, turgid, erectile, and at the same time an abundant, transparent and acid liquid (gastric juice) was secreted, and mixed with the aliments. (B.) When raw meat was given, after three or four hours, it was changed into a chymous paste, very acid. (C.) When sweetened bread and milk was given, the latter was immediately coagulated, and a half or three quarters of an hour after, the whole mass formed a homogeneous, whitish, and very acid pap. In no instance was fermentation observed; and in all stages of the digestion, the sweetened bread and milk contained sugar unaltered. After studying thus the phenomena of digestion during eight days, I removed a small portion of the par vagum, in order to observe the changes which would take place. The animal was deprived of food for twenty-four hours previous to the operation, and was, consequently, very hungry. The fistula opened, the mucous membrane was wiped with a sponge, which produced a considerable degree of turgidity, and an abundant secretion of gastric juice. At this instant the two nerves were divided; the mucous membrane shrunk immediately, became pale, insensible, motionless; the secretion of gastric juice ceased, but instead of this last, there was an abundant, ropy, mucous, neutral secretion. The re-section of a portion of the nerve did not produce anorexia, for the animal, naturally voracious, eat as much as before. A bit of meat, mixed with bread and milk, was introduced into the stomach by the fistula. An hour after, the milk was not coagulated; the bread imbibed and softened by the ropy mucus just mentioned; the meat unaltered; liquids in a neutral state. Two hours after, same state—bread alone softer; liquids still neutral. Eight hours after, there was a sort of whitish pap, evidently acid, owing to the presence of lactic acid, produced by a decomposition in the milk: meat still unchanged. Twenty-four hours after, the animal was killed. From this experiment, it may be concluded:—that the division of the par vagum destroys not only the sensibility and the motility of the stomach, but likewise stops instantaneously the secretion of gastric juice; that after this operation, digestion no longer takes place, since twenty-four hours after the introduction of meat into the stomach, it was found unchanged;—that in the absence of gastric juice, certain spontaneous decompositions may take place in the substances contained in the stomach, as the formation of lactic acid in the milk. On several other dogs, I remarked that, after three or four hours, cane sugar was converted into grape sugar, and after ten or twelve hours, into lactic acid; but when the food was incapable of producing acid decomposition, such as meat, it remained neutral until death closed the scene. When the stomach receives its nervous energy from the eighth pair, gastric juice is secreted, by which chymification is produced, and the substances contained in the stomach undergo a change, which enables them to act on each other. On the contrary, when the nerve is divided, digestion does not take place, and the substances, no longer acted upon by the gastric juice, decompose one another, according to the ordinary laws of chemistry: in a word, the stomach is similar to an inert vase, and the matter contained in it is not submitted to organic changes, but undergoes the same transformation and spontaneous decompositions as it would do in a vase kept at the same temperature. But does absorption take place after the division of the nerve? evidently so, as the following fact proves. Two inert substances, *emulsine* and *amygdaline*, when mixed, produce hydrocyanic acid and essence of bitter almonds, and become thus a violent poison. To two dogs, in one of which the par vagum had been divided, a mixture of emulsine and amygdaline was given; in that in which the nervous influence was destroyed, symptoms of poisoning by hydrocyanic acid appeared a quarter of an hour after; whilst in the other nothing occurred. This is easily explained: the gastric juice, secreted as usual, modified the emulsine, and prevented its acting on the amygdaline. It may, therefore, be concluded:—1° That chemical changes cannot take place in the food introduced into the stomach, so long as the secretion of gastric juice continues. 2° That this secretion ceasing when the par vagum is divided, chemical action is no longer prevented developing itself.

On the Duration of Gestation.—Memoir addressed by A. A. Berthold, M.D., Professor at the University of Gottingen, &c.—According to the author, 280 days cannot be considered as the normal duration of gestation; for, on 114 cases observed by Merriman, 9 only took place on the 280th day; and in 7 quoted in this memoir, the following variations were observed:—1st, observation—the cycle of the 10 previous menstrual periods, was 303 days; gestation lasted 291 days, or 12 days less: 2nd observation, (same woman, 3 years after)—cycle of 10 previous menstrual periods, 291 days; gestation lasted 279, or 12 days less: 3rd observation, (same woman, 2½ years after)—11 previous menstrual periods, 298 days; gestation, 286 days, or 12 days less: 4th observation, (same woman, 3 years after)—10 menstrual periods, 301 days; gestation, 287 days, or 14 days less: 5th observation—10 menstrual periods, 285 days; gestation, 273 days, or 12 days less: 6th, (same woman)—10 menstrual periods, 295 days; gestation, 284 days, or 12 days less: 7th observation—10 menstrual periods, 303 days; gestation, 290 days, or 13 days less. As to the difference in animals: in the she ass, it may be a month; in the mare, 7 weeks; in ewes, only 8 days.

Academy of Medicine; Sitting of the 28th May—M. Ferrus in the Chair.—*On the Case of Plague mentioned in the Report of M. Joly, (vide Medical Times,* vol. x. p. 150.)—Dr. Aubert Roche addressed a letter in which, after discussing and refuting the different opinions expressed in the report, he concludes:—1° that it is not uncommon to meet with lymphatic engorgements complicating diseases more or less dangerous, without their constituting cases of plague. 2° That the word *suspicious*, means *ignorance*; now the characteristic signs of pestis are too apparent to permit the Academy admitting such an expression. 3° That pestis remittens does not exist, or at least no authenticated fact has ever been recorded. 4° Lastly, that the case observed at Malta, cannot be considered as suspicious, but simply as a pernicious remittent fever with *engorgement* of the lymphatic glands, or rather tumours,—a complication frequently met with in many diseases in the East.

On Hydrophobia.—M. Rochoux stated, that the papers related the death of Dr. Fleming, an eminent German veterinary practitioner, from hydrophobia, although he had never been bitten by a dog, but had attended one three years before, affected with this disorder. Would it not be interesting to write, in order to ascertain how far this fact was correct. In reply, the president said that, in all probability, the commission named to examine the different observations of hydrophobia presented to the Academy, will not fail to do so.

Bust of Dupuytren.—After an *excessively* confused and tumultuous discussion, which lasted upwards of an hour, and in which MM. Gerdy, Roux, Dubois D'Amiens, Adelon, Husson, Naequart, Merat, Dupuy, Blandin, and Caventou, took part, the following members were named commissaries to examine the proposition made by M. Cornac, as to placing the bust of Dupuytren in the Assembly Room:—MM. Husson, Cruveilhier, and Begin.

On Scorbutus.—M. Pariset read a report on a memoir of Dr. Lachése, formerly chief physician to the Egyptian army, on the *Scorbutus of Arabia,* erroneously called *plaie du Hedjaz.*—Scorbutus, said the distinguished reporter, is as old as the world, and though probably met with at all times

and places, yet was seldom described. Towards the close of the 15th century, a period at which hydronosos and lues venerea were observed, navigation having considerably increased, scorbutus seemed to develop itself in an equal ratio. In the North, its progress was so rapid and so fatal that it was considered as a new and contagious disease, an opinion professed by Wierus, Citois, Friend, and some others; but which was victoriously refuted by Sennert, Foristus, Van Swieten, Richter, Lind, Coray, &c. Richter proved that Hippocrates had described scorbutus under the denomination of *ileus hematites*, an affection which he had observed in the cold and humid parts of Thracia, or in Boetia, near the marshes of Asera. But scorbutus existed likewise in other parts of the globe, and precisely in the spot in which Dr. Lachése studied it. In the time of Augustus, the inhabitants of Saba and Gerrha were immensely rich; consequently that Emperor decided upon making them his tributaries or subjects, and ordered Œlius Gallus to march from Egypt in Arabia. Gallus besieged towns, gained battles, and had only seven soldiers killed; the rest he lost from forced marches, the climate, hunger, thirst, and especially from sickness. Now among the diseases, was that which Dr. Lachése has described, and which we have denominated in Europe, scorbutus; the causes, the symptoms, the mode of development, the treatment, are exactly the same. In the success attendant on the treatment, the author quotes several cases highly interesting, and of which the patients, though apparently in a hopeless state, were, notwithstanding, cured. The ancients designated the same disease under the names of enlarged spleen, sanguinolent ileus, *stomacacœa* and *scelotyrbœa*, names derived from such or such essential or accessory symptoms. The denomination — scorbutus — comes from the North, and is preferable, because as it designates no peculiar symptom, it recalls them all to the mind. In the East, the disease is called *plaie du Hedjat*, from the spot in which it originated and reigns; and from not having been properly studied, it was considered as produced by the locality and incurable. This opinion Dr. Lachése has proved to be erroneous, and has rendered a real service to mankind in giving its true name to the disease, and in shewing that it is a cachexia which may be cured by nutritious food, and an appropriate treatment. He shews, likewise, what a pernicious effect this cachexia has on the economy: so much so, that a simple scratch is by it converted into a deep and inveterate ulcer; that old cicatrices often open afresh; and even the callus of a fracture dissolves and the fracture re-appears. In conclusion, the reporter proposes; 1° Sending the memoir to the *comité de publication*.—2° Returning thanks to the author.—3° Placing his name on the list of future correspondents.—M. Roehoux thinks that the fact of Hippocrates having described the scorbutus is not proved. Lind, after reading that Greek author, asserted the contrary, and he is of the same opinion. Hippocrates practised in a country very salubrious, and the causes of scorbutus, such as long voyages, did not then exist. — M. Desportes stated that in the overland expedition from India to Egypt, the English army was affected with several diseases, among which was scorbutus; but he thinks that the disease described by Dr. Lachése differs from the scurvy observed in Europe.—M. Pariset, in reply, said he did not consider it the duty of a reporter to analyze a memoir, but merely to give a satisfactory general idea. The conclusions of the memoir were then adopted.

On circular iridectomia.—Dr. Callias of Adrianople, read a memoir on *iridectomia*, in which he describes a new instrument for performing this operation. The instrument is composed of a very small double *uncus* or hook (*erigne*), and a blade, which, by going round the *uncus*, removes a portion of the iris about the size of the natural pupil. The uncus is fixed on a handle, before which is a tube, about three-quarters of an inch in length, hollow so as to permit the uncus to pass through it, and so as to allow the operator to change the point which limits the action of a small handle ending in a needle-like blade, with sharp edges, and of which the base is about 0·079 inches broad. The extremity of the canula terminates in a beak, in which the uncus is hidden when withdrawn; on the contrary, when pushed forwards, it passes the blade about one-tenth of an inch. To operate, the instrument must be held like a pen, the thumb and fore-finger on the extremity of the handle of the uncus, and the medius in a metallic ring fixed to the handle of the knife. The hooks of the uncus must then be turned inwards, and drawn into the canula, and the first part of the operation terminated by penetrating obliquely into the camera anterior. 2ndly. The knife being held motionless, the uncus must be pushed forwards, and the iris seized in a spot not corresponding to the incision in the cornea. 3rdly. The knife must be pushed inwards, and a circular portion of the iris removed. This done, the hook of the uncus must be placed as when introduced, and the instrument withdrawn. In conclusion, the advantages presented by this instrument are:—1st. that the three stages of the operation may be performed by the same instrument; 2ndly. that the operation may constantly be performed with the right hand, the left being useful in fixing the eye, by which we are enabled to do without an assistant; 3rdly. that a portion of the iris may be removed in a spot not corresponding to the incision of the cornea; 4thly. that a very small quantity of the aqueous humour escapes during the operation, a circumstance highly important for the free action of the instrument in the camera anterior; 5thly. that the instrument being introduced obliquely, there is less probability of wounding the capsule of the crystalline lens; 6thly. that the traction exercised on the iris is partly supported by the uncus; 7thly. that, when necessary, selerotic onyxis may be performed. 8thly. that *iridectomodialysis*, or the detaching of the iris with removal of a portion, may be performed: an operation very difficult with the other modes; to accomplish this, the uncus must be carried to the circumference of the iris, after which the knife is pushed inwards, and a semicircular portion of the membrane removed; 9thly. that the conditions necessary to insure success are:—a very sharp knife, an iris not too flaccid, and a certain degree of dexterity.

GARLAND DE BEAUMONT, D.M.P, B.L., & S., &c
Honorary Physician to the Spanish Embassy.

BIBLIOGRAPHICAL RECORD.

MARCH 12TH TO JUNE 8TH.

SMITH (TYLER, M.B.) Scrofula; its Nature, Causes, and Treatment, and on the Prevention and Eradication of the Strumous Diathesis, 8vo. cl. 7s.—YEARSLEY'S (JAMES) Fifth Contribution to Aural Surgery, On the Pathological Connexions of the Throat and Ear, 8vo. 1s.—BURNS (J., M.D.) the Principles of Midwifery, including the Diseases of Women and Children, tenth ed. 8vo. cl. 16s.—WILLIAMS (E., M.B.) an Essay on the Tongue in Functional Derangement of the Stomach and Bowels, with some Observations on the Tongue's Aspect in Organic Diseases of the Lungs, 8vo. 5s.—REID'S (B., M.D.) Illustrations of the Theory and Practice of Ventilation, 8vo. cl. 16s.—BROWNE'S (Sir T, M.D.) Religio Medici; its Sequel, Christian Morals, 8vo. bds. 8s.—SCOUTETTEN'S (Dr.) De la Trachéotomie dans la periode extrême du Croup, avec une observation d'opération faite avec succés sur sa fille âgée de six semaines, 8vo.—TURCK, (L.) Memoire par la Nature de la Fièvre Typhoïde et sur le Traitement à lui opposer. 8vo.—WATOU, (F. M. L.) De la Fièvre Typhoïde, 8vo.—CHRISTOPHE (C. A., M. D.) L'Evangile Médicale, ou Traité des Causes premieres de l'homme. Tome 1. Anatomie et Physiologie, 8vo. Prix. 7fr.—VALLEIX, (F. L. J.) Guide du Médecin Practicien, résumé général de Pathologie interne et de thérapeutique appliquées. Tome 3, Maladies de l'appareil circulatoire, 8vo.—BELL (Sir C.) The Nervous System of the Human Body, as explained in a Series of Papers read before the Royal Society of London, third ed. 8vo., with three additional Papers on the Nerves of the Encephalon, cl. 10s. 6d.—JOHNSTON'S (J. F. W.) Catechism of Agricultural Chemistry and Geology, 1s.—OWEN (Professor) a History of British Fossil Mammalia, parts I. and II. 5s.—CALDWELL'S (C.) Thoughts on Physical Education, and the True Mode of Improving the Condition of Man, with a Recommendatory Preface, by George Combe, second ed. 8vo. 1s. sewed.—COMBE'S (A.) Principles of Physiology applied to the Improvement of Physical and Mental Education, twelfth ed. 8vo. 2s. 6d.—DUMAS (M. J.) and BOUSSINGAULT (M., J.B.) The Chemical and Physiological Balance of Organic Nature, third ed. 8vo. 4s.—DUNGLISON'S (R.) Human Physiology, 2 vols. 8vo. fifth ed. £1. 12s.—GORHAM (J.) the Equivalent, Proportional, or Combining Weight of the Elementary Bodies, arranged on Cards, in separate compartments, and designed to facilitate the study of Chemical Composition and Decomposition, 8vo. 7s.—REES (G. A.) the Diseases of Children, their Symptoms and Treatment; a Treatise intended for the use of the Student and Junior Practitioners, second ed. 12mo. cl. 5s.—SWAN (J.) the Principal offices of the Brain and other Centres, 8vo. 1s.—SCHNEIDER, (J.) Das Wissenswurdigste über den. Abdominaltyphus oder eine ausführ-liche Monographie über diese wichtige krankheit.—MALGAIGNE (J. F.) Lehrbuch der Operativen Medecin begrundet auf normale und pathologische Anatomie, 8vo. 3 thlr.—EBERS (J. J. H.) Die Ehe und die Ehegesetze vom naturwissenschaftlichen und ärztlichen Standpuncte betraehtet und beurtheilt.—BOUCHARDT (A.) Annuaire de Thérapeutique, de Matière Médicale, de Pharmacie et de Toxicologie pour 1844.—BAYARD (H.) Manuel de Medecine légale.—COMBE (A., M.D.) a Treatise on the Management of Infancy, for the use of Parents, fourth ed. 8vo. bds. 6s.—REECE (R., M.D.) the Ladies Medical Guide, second ed. 8vo. cl. 4s.—REES (Dr.) Diseases of Children, second ed. 12mo. cl. 5s.—REES (Dr.) Physiology for Young Ladies, 12mo. cl. 4s.—CURTIS (J. H.) on the Care of the Eyes, second ed. 8vo. 1s.—WOOD (A.) Homœopathy Unmasked, 12mo. cl. 4s. 6d.—SANDBY (G.) Mesmerism, and its Opponents, fol. 8vo. cl. 6s.—PROCTER (T. B.) a Treatise on the use of the Sympathetic Nerve and its Ganglions, with their Influence on various Diseases of the Abdominal and Pelvic Viscera, 4to. cl. 7s. 6d.—ARNOLD (Fr.) Handbuch der Anatomie des Menschen, Band. I. Abth. 1 u. 2, 8vo. 1 Rthlr. 10 sgr.—BAUMGARTEN (F. E.) Lehrbuch der Chirurgie, 8vo. Rthlr.—CHOULANT (L.) Die Anatomischen Abbildungen des 15 und 16 Jahrhunderts, 4to. 12 sgr.—FRANK (J.) Grundsätz der ges, prakt, Heilkunde, 8vo. 7 Rthlr. 15 sgr.—ARNOLD (F.) Tabulæ Anatom. Fase IV. fol. 4, Rthlr.—SCHERER (J.J.) Chem. und Mikroskop Untersuchungen zur Pathologie, angest. am Julius-Hospital in Wurzburg, 8vo. 1 Rthlr. 7½ sgr.—SIMON (F. A.) Pezzoni und Oppenheim, oder die Pest ist. also doch contagios, 8vo. 1 Rthlr. 15 sgr.—PRICHARD (J. C.) Histoire Naturelle De L'Homme Traduit de l'Anglais, par Dr. F. Roulin, 2 tom. 8vo. prix 20fr.—TESTE (A., M.D.) Manuel Pratique du Magnetisme Animal, &c. 2me. ed. 12mo. 4fr.—FRANK (J. P.) Traité de Médecine Pratique, 2 tom. 8vo. prix 24fr.—CHAILLY (Dr.) Traité Pratique de l'art des Accouchemens, 8vo. prix 9fr.—LEVY (M.) Traité d'Hygiene publique et privée, 8vo. 7fr.—CHOSSAT (C.) Recherches Expérimentales sur l'Inanition, 4to. 7fr.—HUFELAND'S (W.) Manual of the Practice of Medicine, the Results of Fifty Years Experience. Translated by C. Bruchhausen and R. Nelson, M.D. 8vo. 15s.—MADDOCK'S (A. B.) Practical Observations on the Efficacy of Medicated Inhalations in the Treatment of Pulmonary Consumption, and other Diseases of the Respiratory Organs, 8vo. cl. 5s. 6d.—MORTON (W. J. T.) On Calculous Concretions in the Horse, Ox, Sheep, and Dog, 8vo. cl. 6s.—Northern Journal of Medicine, edited by W. SELLER, M.D. and T. KEMP, M.D., 8vo. 1s. 6d.—RHIND'S (W.) Elements of Geology and Physical Geography, 8vo. cl. 2s. 6d.—WITH (G. C.) Handbuch der Veterinair-Chirurgie, 8vo. 20 sgr.—ERDMANN (F. v.) der Veitstanz Keine Krankheit, 8vo. 10 sgr.—JACOBI (M.) Die Hauptformen der Seelenstörungen in ihren Beziehungen zur Heilkunde nach der Beobachtung geschildert, bd. 1. 8vo. 4 Rthlr.

THE

Pharmaceutical Number of the Medical Times,

NOW READY,

CONTAINS:—

I. Annuaire de Therapeutique for 1844; Translated from the French of Dr A. Bouchardat, Assistant Professor of the Faculty of Medicine at Paris, Principal Pharmacien at the Hotel-Dieu, &c.—This Translation contains an Account of every New Remedy introduced into Practice during the last Twelve Months. Among the subjects touched, are:—The Opium of Algiers; Large Doses of Opium in the Treatment of Acute Articular Rheumatism; Opiated Powder of Guaiacum; Battley's Anti-Neuralgic Liquor; Inoculation of the Salts of Morphia in Neuralgia; Pills of Morphia and Cyanuret of Potassium: Narcotic Pills; Powder against Chorea; Potion, Anti-dysenteric; Liniment, Baumes'; Opium Sparadrap; Use of Belladonna as a Preservative of Scarlatina; Belladonna in Ophthalmia; Suppository of Ungentum Populeum; Anodyne Ointment; A New Method of obtaining Conicine; Pills of Conium, Quinine, and Iron; Sedative Ointment; Plaster of Conium; Anti-Neuralgic Pills; Ointment against Sciatica; Strychneæ; Nux Vomica in the Treatment of Chorea; Pills against Gastralgia; Anti-Gastralgic Draught; Strychnine Ointment; Secale Cornutum; Preparation of Ergotine; Ergotine Mixture; Syrup of Ergotine; Pills of Ergotine; Use of the Aqueous Extract of Secale Cornutum in some cases of Chronic Disease of the Uterus; Pills against Dartrous Ulcerations: Pills of Conium and Secale; Pills of Ergot and Ioduret of Iron; Cyanic Compounds; The Cyanuret of Potassium; Anti-Epileptic Potion; Anti-Epileptic Pills of M. Bourge de Rollot; Poisoning by Bitter Almonds; The employment of some Cyanic Compounds in the Treatment of Diseases of the Eye; Hydrocyanic Collyrium; Collyrium of Cyanuret of Potassium; Ointment of Cyanuret of Zinc; Ointment of the Essence of Bitter Almonds; The Essential Oil of Bitter Almonds and Cherry-Laurel; Hydrocyanic Acid, its Use in Vapour in Diseases of the Cornea; Remarks on the Employment of Chloroforme as an Antispasmodic in Asthmatic Persons; Etherized Water regarded as a Solvent, and as a Preservative Agent; Tisane of Chenopodium Ambrosoides; Antispasmodic Potion; Cochineal Potion; Antispasmodic Lavement; Anti-Epileptic Pills; Use of Camphor; Scraped Camphor; Camphor Cigarettes; Camphorated Alcohol; Camphorated Ointment; Camphorated Oil; Use of Camphor in Diseases of the Skin; Essence of Turpentine in Epilepsy; Medicinal Employment of Napthaline; Napthaline Looch; Syrup of Napthaline; Napthaline Lozenges; Copaiba Sugar-plums; Anti-Gonorrhœal Drops; Purified and Solidified Storax; Treatment of Gonorrhœa by Pitch and Alum; Syrup of Orange Peel; Sal Ammoniac Potion; Powder against Amenorrhœa; Anti-Rachitic Syrup; Walnut Pills; Tonic and Detersive Decoction; Action of Digitalis on Chickens; Analysis of Digitalis; Digitaline; Pills of Squill, Digitalis, and Iron; Vendt's Potion; Nitrate of Potash in large Doses in Rheumatism; Use of Nitrate of Potash against Incontinence of Urine; Decoction of Marchantia; Treatment of Croup; Expectorant and Sedative Julep; Large Doses of Tartarized Antimony in Pneumonia.

2. An Original Paper on the Sulphites, containing a Series of Original Investigations conducted under the eye of Liebig. By Dr. Sheridan Muspratt, of Giessen.

3. Professor Playfair on the Functions of Oxygen in Producing Sleep and its Concomitant Phenomena—an elaborate Paper announcing Original Views on the Theory of Sleep, while lucidly explaining the principal Doctrines of Liebig.

4. Review of a Work on New Methods of Alkalimetry, and of Determining the Commercial Value of Acids and Manganese. By Drs. C. R. Fresenius and H. Will.

5. A Valuable Article on the Preparations of Iron Recently Introduced into Practice.

6. On the Laws which Govern the Electro-Chemical Decomposition of Bodies. By M. Edmund Becquerel.

7. The State of Pharmacy in England. By Richard Phillips, F.R.S.

8. To Make India-Rubber Corn Plaster.

9. Analysis of the Harrowgate Spring.

10. On the Citrates of the Protoxide and Peroxide of Iron. By W. Heldh.

11. Citrate of Peroxide of Iron.

12. To Prepare Mezereon Cerate. By M. Pleischl.

13. New Experiments on the Fattening of Geese. By M. J. Persoz.

14. Ointment of Iodine.

15. A new and very efficacious Topical Remedy. By Dr. Putegant.

16. On the Oxidation of Protein in the Animal Organism. By Professor Mulder.

17. New Investigations concerning the Carbonate of Copper. By M. P. A. Favre.

18. A few words on Pectic Acid.

19. On the appropriation or distribution of Lands. By Professor Liebig.

20. Liquor Opii Sedativus, with Remarks on the General Preparations and Various Formulæ for preparing the Liquor.

21. Milan Plasters—Formulæ for

22. Poisoning by the Lolium Temulentum, with the means of detecting this Seed when mixed with Wheat Flour.

23. Important experiments on the Digestion of the Herbivora.

24. Researches on Cerium.

25. Improved mode of preparing Chlorate of Potash.

26. Action of Prussic Acid on Calomel and Corrosive Sublimate.

27 Products of the Dry Distillation of Tobacco.

28. Experiments on Leguminc. By MM. Dumas and Calours.

29 Action of Sulphurous Acid on Metallic Oxides.

30. On the Hadshy of the Turks.

31. Professor Wohler on the preparations of Benzoic Acid.

32. Carbonate of Soda in the Preparation of Coffee.

33. On the Discolouration of Ointments containing Peroxide of Mercury.

34. Gelatinous Capsules of Assafœtida.

35. On the Transformation of Fibrine into Butyric Acid.

26. On the Amides which originate from the action of Ammonia on the Fats and Oils.

37. How to distinguish the different kinds of Starch.

38. Preparation of the Perchloride of Iron.

39. On the quantity of Carbonic Acid expired by Man.

40. Cinchona Petoya.

41. Infusion Sennæ Frigidum.

42. On the Formation of Hydrocyanic Acid in the Preparation of Sweet Spirits of Nitre.

43. On the Preparation of Tannin.

44. On the Preparation of Alum.

45. On Rad. Gulangæ.

46. Observations on Quinovine.

47. Preparations of Tartarus Ammoniatus.

48. The Homœopathic Materia Medica examined, by Dr. Wood, &c.

Drug Price List for the last Week.

Gentlemen can order this Number of all Booksellers or Newsmen, or may have it sent by remitting 6d, or Six Post-Office Stamps to Mr. Carfrae. Subscriptions (per annum, 6s.) to be received by Mr. Carfrae for the Stamped Edition. All Orders must be paid for in advance.

NOTICE TO CORRESPONDENTS.

A Correspondent writes us:—"The remark of Dr. Cummins, in his detail of the case of anomalous hysteria, viz.:—as to the peculiar odour of the perspiratory discharge—'somewhat resembling that arising from a dead body,' has reminded me of several cases of severe nervous diseases, in which I have made a similar observation. I shall be glad to learn if any of your readers have met with cases of this kind, and if any opinions have been formed as to its nature and cause."

H. J. C.'s *offer is declined with thanks.*

A Constant Reader, Maidenhead, *will do well to write a confidential note to the Secretary, who will give him a better opinion than we can. We believe that a spirit of accommodation is shown, and in special cases, like our Correspondent's, the authorities do not insist punctiliously on their regulations.*

Dr. Hardwick (a retired general practitioner), has sent us a note on the "Company question." He enlarges much on the benefits done by the Company, in raising the standard of qualifications: and suggests that a movement in their defence should be commenced. Will Dr. Hardwick permit us to ask him a question? Why, in retiring, did he take the physician's degree? We hear the answer—causâ honoris. *Now, are the qualifications* generally *asked from the M.D. higher than those which he assures us the Company have raised so high? If not, why was not his "L.A.C." as honourable as his M.D. It was not—and the reason is plain:—a* gentleman *does not get that eclat from his connexion with the Hall to which his labours and merits entitle him. His honours are for the world, and the world thinks nothing of this.*

Professor Schultz on the value of Liebig's Theories in our next.

J. W.—*We must decline to interfere between our Correspondent and his former medical attendant. It is beyond the strict path of our duty, and we do not do more than our duty in such unpleasing cases.*

Dr. Mackinder.—*We have no thought of altering the size of the* Medical Times. *It will pay the homage to its past success, of being ever the same size. We consider it not too large for a medical man's library—books in which should appear of a learned calibre.*

An Artizan *should place himself under a practitioner of experience. His case is not hopeless. He should avoid the books spoken of, which are worse than useless.*

M. S.—*The seal of the Company does not prove the license.*

M. D.—*The medical schools of Italy are improving. Lee's work on Foreign Medical Institutions is the work our correspondent needs.*

A Constant Reader, York, *will find all the information he needs in our Almanack for* 1844. *Our correspondent, as a medical man, is much to be pitied to be without it.*

C.—*The work named has been received, but we cannot* yet *do it justice. The subject is for the present peculiarly situated.*

We do not know the price of Neligan's Materia Medica, but believe it has been advertised in our pages.

H. W. *asks why Mr. Carpue is not on the Council, Our answer is, that the Council passed him by in his turn, and having made a bye-law to the effect, that they would never repair a blunder, they have kept him passed by since. Mr. Carpue, if asked on the matter, would probably say, after Cato, "I would prefer to have it asked why I am* not *on the Council, than with fourteen or fifteen of the twenty-one, why I am." There is more honor in the interrogation, than in the election.*

X. Y. affirms, *that a person of whom we recently spoke as dangerously situated in reference to his "license," is not an apothecary, for "he is known not to deal in scruples."*

A Subscriber and others.—*The two subjects of the Jacksonian Prizes for* 1844, *of twenty guineas each, are "Injuries and Diseases of the Scalp, and the Anatomical Structure and Diseases of the larger Blood-vessels." The subject of the Collegial Triennial Prize, of fifty guineas, for* 1844, *is the "Anatomy of the Cerebrum, Cerebellum, and Spinal Cord in the Human Subject; together with the origins of the Cerebral, Spinal, and Sympathetic Nerves; specially illustrated by the Anatomy of the same parts in the lower Vertebrate Animals."*

Several letters from valued correspondents have been received.

THE MEDICAL TIMES.

Saturday, June 8, 1844.

Leget, invenietque
Nil sibi legatum, prater plorare, suisque.

Whoever wished his *enemy* to write a book, was, as a Scotch friend of ours says, "a vaary sensible person I do assure you." He must have had in his eye some such impotently-active, some such diligently-foolish scribes, as we have recently been made acquainted with; and (to be quite confidential with our readers) we shall not wonder if the next foolish thing—i.e., the next public act, of the Royal Surgical Councillors, will not be a challenge to the said wisher (if their present efforts to find him out shall prove successful) for the direct personal insult conveyed to them in that impertinent phrase of his. Poor, self-

abused people! how much do we pity them! Never, surely, before, was *autographic suicide* more efficiently done to the heart's content of any reasonably vindictive enemy than that achieved in the remarkable document to which these obliging gentry, last week, begged us to put the *coup de grace* by full publication. Their self-immolation to gratify the *Profession*—we had almost said, the MEDICAL TIMES—shall be recorded as the best—if not the wisest—of their feats. Deny the parity who will, the *real* folly of the Council for their brethren's good, and the *simulated* folly of the elder Brutus for his countrymen's good, shall last as long as Livy and the MEDICAL TIMES, i.e., as long as good taste and literature—i.e., for ever!

What possible motive (reasonable men are every where enquiring) had this odd Council for their odder manifesto? They had nothing to say: it was their interest to say nothing; why, then, not essay the hard virtue of saying nothing? If the rule of being silent when they have nothing to utter, would inevitably shut their mouths for ever, why, at least, not imitate the greatest talker of our Eastern hemisphere—Sir Robert Peel—and if they must speak having nothing to say, wisely say *nothings?* But here we have them openly writing unexpected platitudes—publicly announcing uninvited nonsense—ostentatiously volunteering gratuitous absurdities—speaking, in short, absolute *somethings* meaning an abundance of rich ineptitudes, and admirably successful in the unsought aim of fatally compromising themselves and friends, and making both ridiculous! We should think little of Mr. Guthrie's well-known tact or cleverness, if he did not disclaim all share in the authorship of such a document. In neither purpose nor execution can we get to an understanding of it. The writers living, moving, existing in the New Charter, they are yet neither panegyrical nor condemnatory, critical nor suggestive, reforming nor conservative—they are neither "fish, flesh, nor good red herring."—The past has been changed, yet they neither mourn over that, nor rejoice over the present: they have been pronounced as obtaining governmental trusts on a condemned and infamous system—they tacitly acknowledge the justice of the sentence, yet tenaciously cling to the ill-gotten goods: and thus they go on to the end of the chapter, neither opposing nor supporting right nor wrong—and careless even about the access of good, provided it do not touch *them*. Labouring and toiling on in their daring task, with a weak, insipid, and unmanly timidity, they are vague to their advantage, and explicit to their injury. Equally ungainly and unfortunate in both their admissions and omissions, they do and undo till they leave nothing done but their own undoing: and if, after all this, they escape universal odium and perilous opposition in the antagonistic excitement and commotion they have so industriously laboured to arouse, they must be under far better protection than their own. In short, their manifesto is a *perfect* corporate *betise*, and will hang like a millstone round the neck of the very patron they would serve—Sir J. Graham.

"The *Explanation* of the changes" produced by the New Charter has been already adverted to as something ridiculously meagre and useless. Its four or five miserable clauses are pervaded by a continuous suppressio veri, or *suggestio falsi*. Thus, we are told that subsequent bye-laws will require the assent of the Crown. It is omitted to state that, practically, the College will be governed by old bye-laws which have never received such a sanction. And this opens a fresh inconsistency in the Charter. If the Council's bye-laws can be confided in, why ask the Crown's future interference? If they cannot—why does the Crown not revise the past? As it is, the College will be governed on a double system of conflicting bye-laws.

Again. The Council talk of Election of the Council. Why did they omit to "explain" that, while sanctioning the election of Councillors, *not* themselves, for *short periods*, they opposed the extension of the principle to their own cases. They have, so far distrusted their popularity with the surgeons who know them so well, that rather than trust to their discernment and gratitude for re-election, they have preferred to publicly outrage their own approved principles of government, and consent to sit members of an anomalous Board, composed of men chosen on principles which, though equally sanctioned by them, mutually condemn each other. If what is sauce for the new goose Councillors, is not sauce for the old gander Councillors, they should not both be allowed at the same table.

We have much nonsense on the effect which Fellowships will have on the advance of surgical science. We think we foresee that the effect will be most unfavourable. As the Fellowships of *appointment*, as we shall show, have been homages to station, the Fellowships of examination will be homages to mammon. There are no examiners to conduct examinations of so *recherche* a kind, that high science shall alone be the test of admission. A diligent pupil of Sharpey, Todd, or Golding Bird, or Sharpey, Todd, and Golding Bird themselves under examination for a Fellowship in the hands of the President, Mr. Thomas—or the gentleman who preceded him, Mr. Andrews; or his worthy predecessor, our sleek practical friend, Mr. Anthony White, would furnish matter for a picture by a second Hogarth. One thing is certain, that if there are to be such examinations, the rule of having them in secret, must be carefully persisted in: we should, otherwise, have our venerable surgeonhood publishing more blushes in one examination day, than would keep a metropolis of widows in high character for modesty through a twelvemonth. In truth, the Council cannot give worthy examinations: if they can, they cannot get the men to submit to them: and if the examinations are merely nominal, we have again another institution of honour founded on the universal basis of corporate medical distinctions—*mammon*.

Perhaps the most absurd and amusing part of this enigmatic manifesto is the scrap of stoic philosophy which this very sage Council purvey for our consolation. "In our profession each individual makes his own place in society," coolly, impudently say, these living monuments to the truth of the contrary axiom. They remind one of Berkeley, with *material* hand, asserting on *material* paper, the sole empire of *spiritualism*. Nepotism and wealth the sole avenues to hospital or collegiate dignities, these specimens of a most becoming humility would have us believe that they "have made their own place in society." The doctrine is delightfully self-consoling, but if they can believe it, they must be stocked with such a total ignorance of themselves as itself removes all doubts as to the "place in society" their unassisted genius would have secured them. Graced, as they are, with so many of the *Mantilini* endowments, there is a moral certainty that their competition—lead on we will suppose by that "first surgeon in Europe," Liston—would have increased, more than it does, the surplus of labour in the "*mangling* line!"

The Council, proceeding, kindly bid as follow their example and to look with them on the new Charter, as an affair that (high eulogium!) has nothing to do with the present generation; and, like them, to take refuge in the certainty that our "intellect, knowledge, and integrity will ever (so says *their experience*) be duly appreciated!" To the good surgeon how cheering are these fresh evidences that "worth makes the man" *successful*, if it make not the man "a Fellow!" "Clap your hands ye virtuous!" we are tempted to exclaim. "Shout with joy, ye that travail with goodness!" As the eminent Mr. Belfour, the Secretary, and the great Mr. Thomas, the President, hold their honourable posts by virtue of their *superior* "intellect, knowledge, and integrity," so those amongst us who shew *most* "intellect, knowledge, and integrity," will infallibly be their successors!

Would that we could think that the medical man's election is governed by no extrinsic circumstances! Would that we could consider that the new Charter was innocuous to no living surgeon! "Slow rises worth by poverty depressed" in all professions: in ours it *never* rises till it ceases to be poor. Now, the grand sin of the new Charter is, that it adds fresh force to the already too potent force of wealth. Its honours exist but for the *rich* member. His affluence can buy him that higher rank in his college which the wisest of his fellow members cannot get, if poor. During the first year, when the selections are made by the Council, the men whose influence and wealth had secured hospital preferments are avowedly those, in great part, selected for the first 300 Fellows; and

thus, the hospital system of honours, so much declaimed at as the establishment of Mammon priority, has been made infinitely more efficient in its services to Mammon's children by the new Charter. During all subsequent years, the honour will be procured by supposed examinations; but as there will be no "open sesame" without a fee, (which may be any sum under *thirty-one* pounds ten shillings, beside the stamp duty,) it is clear that the poor struggling scientific man will again be virtually shut out.

While thus, on our shewing, pure science will be injured at all times under the *regime* of the New Charter—and while, on the shewing of the Council itself, the Charter can do no good till the next generation; how sad is it to think of the extent of unhappiness a measure, so indifferent or worthless, has causelessly inflicted on so many thousand medical men! Whatever we may say about popular perspicacity, the world is deluded by every phantom of title whose unreality is not made too palpable by too great proximity or commonness; and whatever we may preach about the medical man's reliance on himself, we shall never persuade him so far to overlook his nature as to survey lost titles with equanimity, or so forget his reasoning power, as to think them of no service. Titles are another kind of *money* in the hands of the donors; and another kind of good fortune in the hands of the recipients: and so much is life made up of such important trifles, so much of reality as to effects have these phantoms as to causes, that we can affirm that many a surgeon's days have passed without so severe a stab to his repose as that inflicted by the Council's recent distribution of Fellowships. The loss of the expected honour was something: the preference of a rival was something: the shame of being compelled, whenever he would publicly speak of his connection with the College, to pay for that small honour by the pain of confessing himself a subordinate member, was something: but the great thing was, that, in all these facts, a public declaration by a learned body—supposed to be very competent of judgment—was for ever registered against him in the archives of his country, that he was a man of mediocre attainments, unworthy to rank among the better sort of his fellow surgeons!—by which declaration the public were guarded against him by a state admonition,

—— Fœnum habet in cornu!

To the more cautious reader, who would suppose exaggeration in this estimate of the Charter's effect, we would submit a sentence occurring in the Council Manifesto we are considering, and which—be it remarked—was carefully published to the world through the *public* general journals of largest circulation. The Council tell us, "they will *omit* no one from a Fellowship who is held in esteem by other members of the College for his surgical experience and scientific attainments." Now, as in the same paper they distinctly declare that the *included* will not "greatly exceed three hundred," what do they but distinctly advertise to the world that the nine or ten thousand omitted are not men "of surgical experience and scientific attainments!"

The brand thus fixed on the Surgeon's brow—a repressing, preventive power interposed on his practice—his College Council advancing out of its secret halls to proclaim to him the full extent of a now-settled degradation—his vested rights gone—the protection he bargained life and fortune for turned to injury,—what is he to do? We trust, anything, but submit to wrongs made burning insults by the stupidities with which, as by a fate, they are accompanied.

IMPORTANT NOTE FROM Mr. GUTHRIE.

To the Editor of the "Medical Times."

Sir,—I shall be obliged by your doing me the favour not to associate my name, either with the Charter granted to the College of Surgeons, or with the statement lately published by order. I have had nothing to do with the merits or demerits of either. I am, Sir,

Your very obedient humble Servant,

G. J. GUTHRIE.

4, Berkeley Street, May 31, 1844.

THOUGHTS ON THE CHARACTER OF MEAD.*

(For the "Medical Times.")

Mead's first great success in life is attributed to the following circumstance, reported by Dr. Lettsom. Dr. Radcliffe and the great dons of his day held an hebdomadal meeting, sacred, not to Æsculapius, but to Bacchus. To admit a young physician to one of these meetings, was deemed a distinguished honour; for no one was asked unless he seemed likely to prove conspicuous. When Dr. Mead was young, and just beginning to be talked of, he was asked to Carshalton (the place where these weekly meetings were held); the object was to make him drunk and to see the man; this design he suspected, and carefully avoided to fill a bumper when the sign was given.

"Me cum sæpe viri, nunc vino pellite curas."

And he so managed as to see all the company retire under the table, except Radcliffe and himself; and the former was so far gone as to talk fast, and to shew himself affected by the potations. "Mead," said he, "will you succeed me?" "It is impossible," replied the polite Mead; "you are Alexander the Great, and no man can succeed Radcliffe: to succeed to one of his kingdoms is the utmost of my ambition." Radcliffe, with all his bluntness, was susceptible of flattery, when delicately dressed up, and this reply won his heart. "I will recommend you, Mead, to my patients," said he; and the next day he did Mead the honour to visit him in town, when he found him reading Hippocrates. Radcliffe with surprize asked, "Do you read Hippocrates in the Greek?" "Yes," answered Mead respectfully. "I never read it in my life," said the great Radcliffe. "No!" replied Mead, "you have no occasion; *you are Hippocrates himself!*"

It is possible that much of all this was sincere. It is more than probable that much of it was mere flattery, used for the very purpose it in fact promoted. There is an odium attached to that word. A flatterer and a slave are nearly convertible terms; and, indeed, those men who speak to please the influential without respect to truth, or who, in giving truth words, pick them with that delicate fingering that turns what it touches into gold, are worthy of every deviseable contempt. But is there no such posture of circumstances wherein the use of flattery may be forgiven, nay, even commended? "He that is only *real*," says Lord Bacon, "had need have exceeding great parts of virtue; as the stone had need be rich that is set without foil." For what reason is this "need," if not because the paths to preferment are so jammed up with forms and prejudices, and chiefly with the caprice of men already on the road, that nothing but extraordinary strength, or gentle entreaty, can make way through the crowd. Will it detract from the merit of a man if he use the latter mode in preference? Or after he has gained his point and shewn himself worthy of his place, will it not even add to the admiration the superior mind commands, when we consider it stooping as it were to play with the foibles of the world, as a man amongst children would take part in their pastimes, in order eventually to allure them to the instruction their welfare demands they should be taught.

There appears something admirable in this descending of the mind to what is beneath it, in order to secure the result to which it aspires. Rather a test and proof of greatness than its disparagement. An evidence of wisdom! For if we consider the world in all its respects, that is, in its real worthiness and also in those forms which owe their substance to prejudice, and are nothing in themselves; and regard them as of equal importance, and how the stability of the one is the only maintenance of the other, we discover a noble provision in that equality: a protection of the small amongst men against the great; an equivalent for their deficiency; a preservation of mutual dependence, without which society were a condition of anarchism. What man of cultivated mind believes there is any positive virtue, for instance, in a title; in the mere name of Lord, Marquis, or Duke. Viewed abstractedly, such a thing is nothing. But in life it has its good. Though only the shadow of merit, it engenders respect, which engenders obedience, which preserves the peace of society. Again be it observed that the laws of manners are no more intended than the laws of actions are, for individuals, but for all. In the latter 'tis necessity compels universal obedience, while the former, instituted by the aggregate humours of mankind, are enforced by the consequence of their hatred or esteem. It comes, then, to be a question whether such a sacrifice of one's own notions as is made to gratify the predilections of others, be not a duty and no falsehood, as flattery is generally deemed. Or go further, and suppose by such a sacrifice an emolument is proposed; what is that but the bartering of one thing for another—the recognition of right under compulsion of interest—an act in which the head only is concerned and the heart untouched. So that it would seem, after all, that there is not the iniquity that is believed in placing one's neighbour on good terms with himself, though he may not deserve those terms, or even though in doing it, we act with a view to our personal convenience. There is left, however, a doubt, and the solution thereof lies in futurity. The whole life put together colors particular acts. They are bright or dark, as seen in the history of a good man or a bad one.

Of all English medical men who have left a name behind them there is no one, from Linacre to Halford, so worthy of emulation as Mead. He combined the man of learning, the man of fashion, the practitioner, the politician, and, giving a virtuous direction to all these, the man of heart. In his person, in England, the science of medicine found at once its oracle and patron. Neither in England alone was the superiority of his attainments admitted. Whatever foreigner that pretended to learning and taste, or had either, came to this country and returned without conversing with or seeing him, had gone home almost without his errand. The Kings of France and Naples both requested copies of his works. It is considered in general honour enough if such people accept them. He was surrounded by the wit, learning, and fashion of his time; constituted dispenser of medical appointments to the counties and colonies of England, by virtue of no ministerial favour, but their own unsolicited desire. Wealth poured in upon him, as if Fortune by dazzling him with her smiles was seeking to warp him from his wisdom, that she might shew the world one of those prodigies

* We are indebted for this clever article to the pen of R. B. Knowles, Esq., Barrister-at-law, of the Northern Circuit.

of her caprice which unite in one the favourite and the fool.

If it be true that adversity is a test of a strong man, it is no less true that prosperity doth test him as well. The one finds him rise, and then he is declared sound; the other sees him sink—become humble, not abject—and then he is proved. It does not appear that ever Mead had much acquaintance with adversity; it needs not however that he should have come out from that fire whole in order to establish his virtue. He *withstood* prosperity; and the expression is correct as it is forcible. He conquered his good fortune; made it a tributary,—the only character it ever fills with grace; and, feeling that the sun of wealth unless glanced off burns him it shines on, he scattered his riches around him as if it were the only use of them he could devise. He discovered not that vice, common to men who have been the builders of their own fortunes of looking on those fortunes, as the best fruit of their endeavours, and hoarding them. To him, wealth was the humble though necessary agent of great good; and he so fully carried out this conception, that, in spite of yearly returns to the amount of six and seven thousands of pounds, he died far from a rich man. Far from rich in the vulgar acceptation of the term, but how wealthy a man indeed! There was not left behind him one, but hundreds of heirs—heirs that enjoyed their inheritance in the lifetime of their ancestor; the children of merit and poverty, promoted by the bounty of his hand to the reward of the one and the antidote of the other. Of *all* sciences in *all* countries he was the patron. To the indigent and sick of humble life his house was the temple of charity; not once in a week, as is told of others and that to their high honour. At no time did want raise its voice, but it found an answer. Every day at his door were distributed food, money and medicine, freely to those who asked them, thus making the rich mans coffers what they ought to be,—the granaries of the poor.

As of all other eminent physicians there are many anecdotes told of Dr. Mead; none of them however of that amusing character which we find elsewhere. The jokes of medical men are peculiar to themselves, arising from the peculiar circumstances that all of them in succession are placed in, and partaking of one general character.—Nor is it in the turn of a jest, or the pointing a stroke of satire we should look for cause of admiration when Mead is under notice. Or say it were some man less than Mead, where is the credit of such performances? At the best they are but curious; and often that little virtue is swamped by the sin done against the happiness of others. Poor triumph, to give pain! But how often a triumph exulted in? The crime forgotten in stupid delight at the workmanship of the tool that completes it. Charity in its best sense, the love of kind; a gentle solicitude for their welfare; the tending and healing of affliction by force of sympathy; the inspiring of hope into hearts which have long been dead to its throb; this great virtue which of all others raises humanity nearest its divine original, forgotten,—for the sake of a neat period, or a happy antithesis. 'Tis a weapon, no doubt, is satire, useful at times. What is that that is wholly without utility? The adder itself yields the oil that is antidote to its venom. Yet, in comparison with the good, how great is the evil. Consider the violence done to those of quick feelings; the enmity created in those that are strong enough to resist; the sacrifice of truth at which wit never stumbled; the moral degeneracy contracted.—for he that wantonly strikes at the heart of his fellow, must first of all have thrown aside the integrity, the humanity of his own,—consider these results, and what others are omitted, and against them place the casual blush that satire brings on the cheek of vice, and where lies the balance? The end shall not sanctify the means; a great good shall not come by the patronage even of a small evil. May then a little one, by the patronage of a great? We have need of all the relations in life to uphold us in the track of right doing. They are rests and helps upon the road. For our own sakes we should stand well with all men, to do which we must dwell with them in harmony; but, grant it within the scope of our authority to injure ourselves, it is plainly in contravention of every law of reason and record, by word or deed, to scathe our fellow creatures.

These remarks are most fit for the full consideration of Mead's character. He was a man of large mind; for many years of his life a man of extended influence; and throughout kindly and benevolent. Greatness with most men is considered accomplished by the subjection of other men. Alexander mourns over his father's victories, as forestalling his own glory; and later in life weeps for more worlds to conquer; while Cæsar in turn peruses with tears the triumphs of Alexander.

What glory is all this? In raising mankind, not in depressing them, is true glory. To that end did Mead dedicate his life, and all its grand advantages. Neither the triumph of the soldier, or the satirist, and both are gained by sacrifices similar, won his heart. The relieving of misery, the promotion of merit, called him into vigorous existence, and wrote for him his name in that high catalogue of men, where no Cæsar nor Alexander can find place. The spirit of Christianity was strong within him. He had not after the pursuit of vain glories, to weep with the silliness of a child, because there were no more left to fight for. His warfare brought substantial possessions;—things to satisfy the mind, which must be satisfied, or on the rack: things real and lasting—food, not for hours or days, or years, but store for this life and hereafter. The steward of Providence, counting no wealth of equality with the privilege of distributing again what was vouchsafed him. Ranging from the beggar to the prince, and enlightening the mind of the latter, as he had cheered the heart of the one before. Three aristocracies there are;—of wealth, which is the least; of ability, which is something better, but like wealth, liable to the stain of tyranny; and of disposition, the best! In the first and the second, Mead was pre-eminent; but his fortune was thrice happier in excelling his own glory in the third. What a nature had he! How formed to benefit and delight. The eye to see good—the hand to do it, and the heart to nerve the hand. Superior to envy, awake to his own frailties, and, by considering them, taught to be compassionate towards other men in fault. What a noble instance of this is recorded in his life!

"Dr. Friend, cotemporary with Mead, who was usually drunk after dinner, was once sent for to a family of dignity; but they perceiving his condition, and fearing to trust his prescription, to make all sure, sent for Mead; who, after looking at Friend's prescription, very generously declared, 'If Dr. Friend wrote this when he was drunk, he, prescribes better than I can when sober.'"

This, when it is told how endeared Friend was to Dr. Mead, will not be so good an instance of our observation, but it will illustrate his friendship, and illustration is doing enough for any part of Mead's character, since nothing good of it is doubted. Another fact relative to these men is subjoined, than which there is nothing more noble or generous found in history, while it is also tinged with romance, which gives additional force to the trait it discovers.

Dr. Friend, it is known during the suspension of the Habeas Corpus Act, was confined in the Tower, where he wrote his "History of Medicine," under suspicion of being concerned in a plot for the restoration of the Stuarts. To obtain his liberation, Mead looked up and down with untiring activity; but every endeavour proved abortive till once, he was called in to attend Sir Robert Walpole, whereon he made it a condition that Friend should be released, or he would not prescribe. The condition was granted. Immediately afterwards Mead summoned a large party of his friends to congratulate the liberated Jacobite, and in the midst of their festivity, withdrawing Friend from the room, placed in his hands a bag containing five thousand guineas, which he had earned by attending Friend's patients during his confinement.

With this observation we conclude. Regard him as a man of science; as the patron of science; in acts of duty, charity, or friendship; no one stands higher in annals of any kind, than the princely and amiable Dr. Mead.

THE PHYSIOLOGY OF MATERIA MEDICA.

AS ESTABLISHED BY THE LATEST RESEARCHES IN ORGANIC CHEMISTRY, PHYSIOLOGY, PATHOLOGY, &c.

By the celebrated Professor T. F. SOBERNHEIM.

(Translated and prepared for the 'MEDICAL TIMES,' by SIGISMUND SUTRO, M.D.

THE blood's independent life is incontestibly proved by the active part, which the blood cells act both in their own nutrition and in their free communication of nutritive matter to the elementary cells of the tissues and organs; and is further shown by their spontaneously appropriating to themselves the globular nutritive matter delivered to them through the cells of the intestinal pituitous membrane; by the organic assimilation of air in the lungs, and by the elimination of those substances which have become unfit for the preservation of the body. All the above-mentioned processes are solely performed by the energy of the living molecules of blood. Formerly, the *liquor sanguinis* was supposed to nourish the body, by penetrating the tissues through endosmosis (whilst the useless matter was thought to be eliminated by exosmosis) and, with such a theory, of course the activity of the blood-cells, and their independent vitality, could not be demonstrated.

Self-Preservation.—Whatever feels and moves, also endeavours to preserve itself, and to maintain its individuality as long as possible. Thus self-preservation arises out of automatic feeling. Every cell is a monad, with an independent life, nourishing itself, and forming the substances which are useful to its organization. The important processes of growth and nutrition have only lately, by the ingenious researches of Schleiden and Schwann been proved to arise from the same principle of development in the animal and vegetable organism. Though it had been known for a long time, that several structures, particularly the crystalline lens, the epidermis, the tendons, nails, &c. grow without direct mediation of blood-vessels, analogously to the growth of plants, still the proper conclusion had not been drawn from this phenomenon. For it was not concluded, that nutrition and growth are performed by the force and energy of the individualized cell without secretion from the blood, and that in general, secretion, absorption, and excretion are all accomplished by the vital power of the living cell. It was formerly assumed, that increase of bulk (growth) takes place in inorganic bodies by *juxtaposition*, and in organic by *intussusception*; but Schleiden has shown, that both kinds of growth take place in plants. The self-preservation of the cell, its nutrition and growth, can be distinctly seen in the primitive cells of the yolk, long before the system of blood has been established. All parts of the egg grow in the earlier part of the embryo's development by the force of the individualized cell. Every one of these cells contains its globular nutritive matter; by means of which the young cellular generation is formed. In the developed organism blood, and especially the blood-cell, undertakes the function of mediatory nutrition, of conducting to the elementary cells of the tissues the universal nutritive material, which these cells, by means of their individual power, appropriate to themselves and transform into their proper substance. Self-preservation occasions the independent assimilation of the nutritive substance furnished by the cells, and the elimination of unfit matter out of the sphere of life. Both functions are performed in all parts of our organism, by the differently modified cells without any intervention—by the nervous cell, by the muscular cell, by the fibrous cell, by the blood cell, &c. The chief law of the whole vegetable and animal kingdom is, that the cell once formed, grows by individual power, to such a form, however, as is required by the general arrangement, Thus the three principal phenomena of life are; automatic feeling, automatic movement,

and self-preservation. Whatever lives, liberates itself from the bondage of objectivity; i. e., from external dependance. Thus the organism is a system of free beings; for, in every point, the law of liberty reigns, represented by the individuality of the cell. But with this individual liberty exists the *necessity* of conforming to the idea of the whole; for it is only by the preservation of the whole that the liberty of the individual part can be maintained. Thus every organ, though possessing an independent life, is still subservient to the organism; therefore, the organism represents the harmonious concord of several articulated free relations, guided and united by the idea of life. *Health* is thus the more or less complete harmony between the individual life of the organs and the idea of the whole, a free concurrence of the functions of all the individuals forming the organism. *Disease*, on the contrary, is a disagreement between the parts and the whole, a "selfishness" of an individual organ, which lives, as it were, for a *separate* purpose, and refuses to contribute to the welfare of the system. The process of healing consists in the conciliation of the individual and general life, brought about by the mediation of artificial aid, supporting the healing power of nature (*conamen naturæ medicatricis.*) A *remedy* is thus, every agent, which is the medium of conciliation between the diseased organic individuality and the general organism. Air, light, galvanism, magnetism, water, fire, will, self-control, confidence in God, &c., may consequently be considered as *general* remedies. But remedies *in particular* are peculiar chemical objects included in the study of materia medica.

On the Difference between Food, Remedies, and Poisons.—Food may become a remedy (water, eggs, meat); a remedy may become a poison (hydrocyanic acid, arsenious acid, opium); poison may become a remedy, and the remedy a nutritive substance (quinquina, extractive substances, iron.) The difference then only exists in *relation* to the vital process. Food means those solid, liquid, or elastic substances, which, after being digested and transformed by the assimilating power of the pituitous membrane, and of the blood-cell, furnish a general nutritive substance, containing the elements of all further organic formations (albumine, fibrine, fat, &c.) *Remedies*, on the contrary, do not contain materials, answering the general formation of structures; but such combinations, as form a more or less striking difference from the organic composition; by which means a lively reaction is caused in the organism, which continues to be active, till the individual cells have succeeded by means of their transforming power to conciliate the foreign elements, and then to excrete them from the sphere of the organism. We call *poison* all that can destroy the conditions of life, or prevent the development of organic reaction, and so exclude every organic mediation. Food, remedies, and poison, may be considered as *equality, opposition*, and *contradiction*. Equality supposes a peaceful mediation; opposition an ultimate conciliation; but contradiction admits no mediation, and leads to destruction. As opposition can rise to contradiction, remedies can be changed into poison, by not carefully observing a certain medium.

(To be continued.)

THE TRUTHS AND FALSEHOODS OF THE THEORIES OF LIEBIG,

WITH NEW VIEWS ON SOME IMPORTANT PARTS OF ORGANIC CHEMISTRY AND PHYSIOLOGY.

(Prepared expressly for the "Medical Times.")

It may be now assumed, as proved in the two former articles, that the act of breathing is a process for generating the electro-energy which is applied and transmitted by the nerves; and that the quantity available by each individual is proportional to the size and activity of the chest, in conjunction with the perfection of the digestive process. We shall now endeavour to point out some of the laws which regulate the economy, or distribution and application, of this energy.

The first grand principle of Liebig, that all vital activity arises from the mutual action of oxygen on the elements of food, was illustrated and applied in our last communication. The second grand principle, which his treatise is so valuable in establishing, he announces in the following words:—"the vital force which is expended for mechanical purposes is subtracted from the sum of the force available for the purpose of increase of mass;" and, "if a part of the force which is available for mechanical purposes, without disturbing the equilibrium, should not be consumed in moving the limbs, in raising weights, or in other labour, it will be available for involuntary motions." The law here announced may be thus stated: that the animal strength or bodily spirits, generated in breathing, constitutes, as it were, the person's capital; that whatever portion of this capital is applied to one purpose cannot be applied to another; and that if too much be expended on one function, in the same proportion, other functions must languish. It must be here remarked, that every portion of the body has a fixed and appropriate share, which, at all times, and under all circumstances, belongs to itself; and that every organ, according as it is dominant in function, derives an increased supply from every other part of the body, and from some related parts in particular. Some particular organs possess the power of abstracting energy from one another, or both together from the general system, as the uterus and mammæ.

In order to understand this clearly, let us ask ourselves why trees and vegetables are found to have no nerves, in the common sense of the word? The reason is, that, from the uniformity of their lives, or rather from their stationary or fixed condition, they do not require to make the same varied and sudden alterations in their motor forces as animals do. The safety of the animal may depend, this moment, on intense application of the eye; the next, on intense application of the ear; immediately afterwards, on keen perception of noxious effluvia by the olfactory nerves, or organs of smell; an instant afterwards, upon the keenness and perfection of taste; again, on the limbs, to evade a foe or a danger;—and so on, in an hundred other ways, which more or less require the active exercise of one or other portion of the animal machine. Whereas, in a tree, vitality is not, in such a rapidly revolving circle, transmitted from the formation of wood to the evolution of leaves and inflorescence, fructification, maturation of fruit, &c. In all these various manifestations of predominant action, there is time for a gradual subduction of force from one organ to another, so that machinery for instantaneous transmission is not required, and therefore does not exist. But with animals it is very different. In them, the rapid succession of the varied and opposing functions could never be accomplished, if the functionizing energy were not readily conveyed to the part in ascendant action. Now, the mechanism for the rapid transmission and application of the electro-energy, is the nerves. That nerves are, in their nature, suited to—nay, form the best possible means for the transmission of this, is known from the fact, that nerves are the conveyances adopted for the transmission of the electric force, or fluid, in the gymnotus, silurus, &c.; and we must allow that they are the best possible conductors of this force, from the simple fact that nature has adopted them.

The case of the electric eel further informs us, that the electric current is under the will, or that the will of an animal has the power of directing the nervous currents at pleasure. And further, the behaviour of this animal towards its prey shews that the power of volition over the nervous fluid is not restricted to its passage along the nerve in the animal's body; but that it has a power of using the electric current beyond its own confines. Thus, the prey of the animal is killed by the electric influence, while yet at a distance from the body of its victor. Whether any other animal, and man in particular, can, in like manner, WILL the electric currents along his nerves, is too evident to become a question. But whether he can bring his own internal electricity to bear upon that of another person, as the electric eel does upon its prey, is a question which must not be hastily decided.

It is well known that the eye of some persons possesses remarkable power over others. Whether that power be due to an agency hitherto but little known or explained, or whether it be due to purely psychological, or mental causes, is a question which must not be readily pronounced upon. But, if the piercing eye be in connection with a large deep chest, and good development of the upper portion of the spinal marrow, (since these are never supposed to be the seats of mind), it is possible that it may depend upon an animal influence, not mental, but physical: that is, on a concentration of electro-energy in the person's eye. Indeed, the nervous connections of the eye are remarkably ample; so that it stands in anatomical relation with the emotional portion of the brain (the upper and back part of the head), and on that account, is so placed as to be an index of the cerebration implied in the production of emotion. Further investigations will probably demonstrate that the power of the *commanding eye*, and that of the serpent fascinating its prey are, perhaps, operations of concentrated electro-force, similar to that the electric fishes use in destroying their prey. Now, if we consider minutely what vision is, we shall find that it is but a species of touch. To understand this, let us reflect that to touch an object, it is not always necessary to place the finger, or any other part of the skin, upon it. When it is distant we feel it, mediately, by stretching between the object and the body a stick, or something long enough to bring us in relation with the objective surface. In this manner, we can say whether the surface is rough or smooth, square or round, by means of this intermediate touch. But, as the object becomes more and more distant, the arm will become unable to support the intermediate feeler, such as a stick; and on that account, the stick must become lighter and lighter, until, at last, it becomes attenuated. At the same time, the hand must become more and more sensible to the impressions from the attenuated medium. The limit to this sensibility of the cutaneous surface is the retina of the eye; and the limit to the infinitesimal intermediate sticks, or feelers, is the ray of light; so that seeing an object is touching it intermediately; that is, there is stretched between the object and the eye a ray of light. From the mechanism of the eye, a portion of the retina is impressed, or impinged upon, which corresponds to the shape of the object; that is, it is square when the object is square, and round when the object is round. And thus, the eye *directly and primarily* takes cognizance of *visible figure*, notwithstanding all that has been said to the contrary by Browne and his followers. But while the eye, by means of the rays of light, does all that touch can do—that is, feels the object, it does what common touch cannot do, it possesses a higher degree of life, and can take cognizance of the molecular superficies. The molecules, or infinitesimal atoms, according to their variations, produce a corresponding variation on the proximate end of the ray of light in contact with them, and by modifying the contactual extremity, affect the optical extremities, in such a way as to give the sensation of red, orange, yellow, green, blue, indigo, violet, &c. This tactual philosophy of the eye it appeared necessary to introduce, in order that we may have a true conception of the mode in which distant bodies affect our nervous system, namely: by modifying the extremity of the ray of light in contact with them, and then propagating that modification to the extremity in contact with us. Whether this power of effecting changes in our nervous system, by changes taking place on their own surfaces, can be effected by bodies, by means of media, other than light, popularly so called; and whether it can be effected by the æther of light, or by the electricity diffused through space, are questions which it is perhaps wiser to ask, in the present state of public opinion, than to attempt to settle.

With regard to the action of one nervous system over another, if the view we have taken be correct, namely: that each is a surcharged, electrised body, there is a presumption in favor of such reciprocal influence. Because two electrised

clouds, while, at a distance, mutually influence the electrical condition of each other; and we know, as a fact, that the victim of the electrical eel is influenced and killed, while yet free from its bodily touch.*

The universal practice of stroking, or patting, a child's-head, when you wish to please it; and of the cat being gratified by your drawing your hand along its back: of the pleasurable touch of one person's hand in comparison to the touch of another in shaking hands; of the general practice of salutation by kissing with the lips, are facts which though likely to be overlooked, because of their common occurrence may, nevertheless, lead to the elucidation of great principles. It is known, from the experiments of Faber and Arens, that the skin is a conductor fifty times worse than other textures of the body Now, on the lip, the gelatinous tissue of the skin is abstracted, and the integument assumes a new form (epithelium.) Further, oscultation is more pleasant when the lips are moistened, while dry and parched lips are unproductive of pleasure; and in this manner they may be compared to the wires of a galvanic battery in which the wires are the best conductors while wet. Why should this portion be selected, where the non-conducting gelatinous structure of the skin is wanting, if the animal spirits of the two persons did not exercise a mutual influence, when brought into labial contact? And here we may bear in mind also, that the eye, the above-mentioned influencing and recipient point, is also wanting in common integument. But this power of two nervous systems influencing each other by contact, where the intercepting influence of integument is withdrawn, is pre-eminently manifested in the exercise of the reproductive function. The parts suited by nature for coitus, are denuded of common skin; and not only so, but the glans is provided with the prepuce, in order to preserve it in a delicate, perceptible, and unindurated condition. This is adapted to parts equally with itself deprived of common integument, and which, therefore, is susceptible of action and reaction, that is, of receiving and transmitting a remarkable influence. In order fully to understand this reciprocal influence of one animal body upon another, we must premise the following facts; and which, because of their great importance, would require much space for their proof and application, but which here for want of space can only be briefly stated: 1st. It is well known that masturbation is productive of the worst consequences to the constitution—2dly. It is generally, though not sufficiently known, that nocturnal emissions, if of equal repetition, are quite as injurious.—3dly. It is but little known that coitus conjuge frigidâ is, with the foregoing modes of excernation, equally insalubrious.—4thly. Inter maritos, the same train of disease, and from the same cause, manifests itself, as inter pueriles, who practise masturbation.—5thly. That this state of injury results in two ways: either when the pneumogastric function of the female is unable to generate sufficient nervous energy, or when the contactual organ is in such a bad condition that it can neither transmit it, nor apply it.—6thly. When the feminine energy is sufficiently great, and the reproductive organ in an appropriate state of excitement, there is always secreted *in coitu* a peculiar *liquor, sui generis*, the presence of which marks the perfection of the function, and the absence of which, under all conditions, entails upon the male all the consequences of masturbation. As this *liquor* is neither ordinary mucus, nor is yet subservient to impregnation, there can be little doubt that its true function is to transmit the action of the nervous system of the male and female reciprocally on each other. For example, after coitus without the condition here required, some persons manifest all the symptoms of masturbation—shrunk appearance of the muscles of the face, watery eyes, with slight eversion of the tarsal *embouchure*, lassitude, debility, insomnolency, or the sleep short and interrupted, deficiency of memory and confusion of thought, low spirits—in a word, all that manifests want of animal energy in general, as in indigestion, &c., with the particular symptoms of masturbation superadded. Persons manifesting these symptoms have them instantly removed by coitus properly conditioned. The re-establisbment of the nervous system in this case is like a charm, supervening instantaneously upon healthy contact. Now, when we reflect that in masturbation and in normal *coitus* all the substantive conditions are the same, whence then arises the salutary effect of a legitimate *prælium veneris* and the certain baneful effects of masturbation? It can only be accounted for by supposing that the nervous power of the one is opposed to that of the other, and in this way the nervous power of the male is preserved. It is to be further remarked, in confirmation of the functions of the body being carried on by electrical forces, that this singular function is performed through the instrumentality of friction, the common mode of disturbing the electrical equilibrium in all bodies. Further, if we consider the end to be accomplished, namely: the vivification of a germ, or *ovum*, on the electrical theory we can see the necessity for the nervous power of the parties being centralized on the reproductive organs. If this centralization take place in the male, solitary and unopposed by a corresponding accumulation in the female, there is then an escapement of galvanoid force in the region of the glans, where it is unprotected by common skin. Indeed, in the function of procreation "the twain are truly one flesh," because the function-izing organs form, as it were, parts of the same body, and are not separated, as in common touch, by ordinary integuments. When viewed in relation to the vitalized product, it is not one, but a pair, that form the reproductive apparatus. Though other works may be done individually and separately, yet, in this important function, each forms but a part of the reproductive machine, and the two parts are as closely connected one with the other, as the liver and stomach, or any two organs lying within the same body; and, like collatitious viscera, are subject to a common enervation; and, in this way, each of a married couple may consider the strength and spirits of the other as his or her own. This is the physiological reason why a man, even on selfish principles, ought to treat his wife with cherishing kindness, because he may rest assured that he can possess only half the sum of their united energies.

But the power of friction to centralize and accumulate animal energy is not restricted to the glans or the clitoris; but is, in a greater or less degree, efficient in all parts of the skin. Thus, when any part, as a rheumatic limb, is suffering through defective enervation, nervous power by friction of the parts can be accumulated and centralised in the part affected, and thus the pain becomes relieved. Space will not allow of an amplification on a subject so interesting; yet it must here be noted that strength or energy may be generated locally on the part, by the oxydizement of hydro-carburets, when applied to the skin, just as the hydro-carburets—or, to speak in general terms, oxydizable bases—would generate power if oxydized in the blood after ingestion; camphor and phosphorus liniments act on this principle.—With regard to the centralization of energy on the region of the glans, it is further to be observed that the will co-operates with friction, or acts against it. Thus, it is evident that a libidinous thought determines energy to the reproductive organs; and, in case of excitement, the excitation can be made to cease by turning the thought in an opposite direction. This phenomenon in the human body, is that where the power of the will, in directing the electric current, is most manifest; and is that which most nearly approximates the human species to the *gymnotus silurus*, in exhibiting the power of volition over the nervous forces. Now, this fact in the human body is generalised; for, when we WILL to look intensely, we find the nervous energy is so concentrated on the organs of vision that we hear less readily, nor would a slight impression of touch be so readily felt. In like manner, we can direct by the will the nervous supply to the organs of taste, to the deprivation of the eyes, ears, &c.; and, in the case of taste, no doubt sapid substances co-operate with volition in concentrating energy on the organs in question. It is also well known that in digestion, when the meal is too large in quantity, and of an intractable nature, such a supply is required by the stomach that it is withdrawn from other organs of the body, making the head dull and the limbs feeble. A most remarkable instance of the power of one organ of the body to monopolize or centralize the animal forces on itself, is exhibited by the uterus, in cases of parturition. This organ, in order to enable itself to overcome the opposing resistance, actually deprives, when it is in perfect and efficient action, every other part of the body of power; the stomach being often, in consequence, unable to retain food—the eye dull, and lazily opened—the motion of the limbs slow and laboured—the voice guttural, from want of energy in the muscles of the glottis to produce a sufficient degree of tension in the vocal chords, so as to articulate a sharp note. All these phenomena indicate a loss of energy consistent with its centralization on the uterus, and are facts which indicate the existence of a fundamental law, namely—that the human organism has a fixed amount of energy, generated in breathing;—that this amount is the common stock, from which must be drawn supplies to all the organs;—and that, while it may be through the agency of the will, and objects acting on those organs solicited dominantly to one in preference to another, yet it cannot be supplied dominantly to all, nor even to many, at the same time. Thus, by immoderate eating and drinking, the animal forces are expended in the digestion of food, in its conveyance to the blood, and its expulsion thence by the appropriate emunctories; while it is withdrawn from the brain, where it was necessary in the sustentation of feeling and of thought. Hence the reason why gluttons are generally both selfish, heartless, and stupid. Again, if habit and volition centralise the nervous energy upon the forehead, where it is necessary to sustain the cerebration implied in thought, it is then drawn from the stomach, from the limbs, and from the emotional organs, so that the person becomes at once sedentary, subdued, and cooler in his affections, and clear and effectual in his philosophy. The same is the reason why persons, with a small head, sustaining fewer faculties, are frequently energetic and successful in the exertion of those faculties, when compared to those with a greater multiplicity of brain, and a more complete range of mental and moral faculties. Thus, we often find the emotional organs, or the back and top part of the head, active, where we also observe the forehead and sides defective. And, again, we may often notice the sides of the head and the forehead well-developed, and the corresponding functions of construction, taste, rationality, &c., well performed, where there is very little development of the moral sentiments. There is one fact that falls under this law, which is too important to be omitted, namely: that the strength or energy, employed in the growth or nutrition of the animal machine, is the remainder which is left after all the various functions have been sustained. Thus, if there be too much expended in thought, or even in the sustentation of some of the affections—or too much in the digestion of crude and unsuitable food—or too much in muscular action, as in hard labour;—there is then such a draught made upon the stock generated in breathing, that there is too little left for the organizing formative function; the body is badly built up, and the textures are weakly held together. To make this more intelligible, it must be remarked that the molecules or globules of fibrine, which form the muscular fibre, are held together by the same chemical or electrical force as that which sustains the animal machine in motion. When this organising force is feeble, which must always be the case when too much is otherwise expended, the fibrinous globules are both badly-formed and loosely held together, and consequently there is produced a defective muscular fibre. Now, without expatiating on this topic, it is easy to understand how expenditure of

* In investigations of this kind, the most trivial incidents must be noticed and appreciated; for, if the pulsation of an artery had been noticed and pursued to its source, namely, the mechanism for the circulation of the blood, mankind would not have been left until the time of Harvey in ignorance of that great fact.

energy, in various functions, leaves a residue too small for perfect organisation. Hence, we often find scrofulous constitutions connected with, if not produced by, excessive cerebral activity. We often find the most promising intellectual youths overtaken in their studies by consumption; and, not unfrequently, does white swelling of the knee mark the diminished vitality of the limb, resulting from too much action in the head. Similar causes, operating on the parent, produce in the offspring scrofulous constitutions. Hence, it happens that distinguished and over-wrought parents seldom transmit, with their fame, a healthy constitution to their offspring. Indeed, the pallid cheek, the leaden eye, and softened muscle, in the severe student, clearly indicate the failure of the organic functions to be contingent on the exaltation of the cerebral. Indeed, if we note, minutely and accurately, changes that take place during progress in education, and so-called improvement, we shall far more frequently find that one power has been changed into another, rather than that new powers have been created. Thus, the son of a farmer goes as a student to one of our universities; he is strong, vigorous, and active; his colour is ruddy, and his eyes sparkling. The action of his senses is not so quick; he more slowly receives impressions from without, and less rapidly acts upon these impressions. Still more, is his ratiocination slow. His power of combining and disuniting facts, for purposes of mental analysis, is almost nothing. You see him again at the expiration of three years; the well-formed muscle is shrunk; the calf of the leg has lost much of its beautiful, plump contour; the skin from being fresh and animated, is pale, if not shrivelled; the step is less elastic and active than before; and the once hardy and robust youth moves forward with a slouching gait, implying in his very motion that all the interest which was once felt in the external world or surrounding objects has ceased, and that he no longer exists or takes delight in what he previously did; but in its stead revels in a world of his mind's formation. Well, he has gained the power of mental analysis, but he has lost much of his capabilities in regard to the objective world. We shall not here enter on the question:—has the ardour of the moral sentiments abated? as the mind revolts even from the conjecture that the perfection of its psychological nature implies a defect in the subliming beat of the emotional. Accurate observations of this kind, carefully noting that every gain is at the expense of a corresponding loss of power, will convince any one that the human body, under the same conditions of food and air, and moral approbation, is provided with a certain amount of available strength and spirits, which in the language of science may be called *a constant quantity;* and that when much is expended for one purpose, there remains proportionately less to be expended on others. The application of this doctrine to practical life is very important, as tending to impose checks upon parents, teachers, and also on young men, ambitious of *universal* excellence. Such persons are far from knowing that, in the act of perfecting one faculty, they are deteriorating another; when they are rendering the head more clear, they are at the same time making the heart more cold, the power of muscular motion less, and vitiating the process of growth and nutrition. Hence, they are often surprised after all their labours, to find that he, on whose every faculty and power the utmost care and attention had been bestowed, is after all no better than his less cultivated neighbour; and that, in the real business of life, because the latter is a more natural man, and therefore allied to other men by a greater number of affinities, the latter will often advance before him. This principle is not only true of different individuals in the same country, but is also true of different countries—each having an ascendant over the other in some particular point, for the very reason that it is below that other in some other point. Thus, the high, sentimental character of the Irish people (the function of the coronal portion of the head) arises in a great measure from their less mechanical power and taste (the function of the sides of the head and templar regions), in which, as a nation, they are less perfectly developed. Minute observation would also show that, even among the Irish, where there is great width of forehead, with square and well made up temples, there is more mechanical executive disposition, and taste for mechanical beauty, with less of what may be called the genuine national characteristics. With regard to the Scotch, on the other hand, the rational or logical faculty, is very highly developed, and accordingly we find the emotional (the propulsive faculties) so little developed, that they get time to exercise slow, steady caution. So that, "if reason be the card, and passion be the gale," we shall say that the human bark, in the sea of life, has to pay for the perfection of the one, by adopting an imperfection of the other: on the principle, that *defect implies perfection, and perfection, defect.* The reader may receive this with some repugnance, as not being very gracious in the constitution of our nature; yet it is the result of the most wise and beneficent arrangement, and is also most beneficial in its operation. The constitutional arrangement out of which it springs, is this:—to have maintained every organ or function of the human body in dominant activity, would have required a greater amount of respiration and digestion, and of the resulting galvanoid force, than man, as at present modelled, could afford; and for that reason, instead of all his organs being kept in dominant activity at once, they can only be plentifully supplied in turns, so that the activity of the one implies the repose of another; and, also, the human subject can exhibit in succession a greater range of mental and bodily activities, than could have appertained to man, if all his powers had been acting coetaneously. This is one of the reasons why man is supplied with the nervous system, in contradinstiction to vegetables; the will being thus enabled, by the nerves as conveyancers, to transmit rapidly, to one particular organ, much of the aggregate strength or spirits of the whole body; and thus every organ has the advantage of being able in an exigency to draw upon the power of the whole. In the female constitution, where in parturition the strength of the whole body has to be centralised in the uterus, this is finely exemplified; and the same constitutional provision, which secures this, also entails the power of easy and facile localization on other organs, (*e. g.*) the brain; and hence the quickness and shrewdness of the female mind on questions within its natural sphere. Hence, also, the liability, in females, to a greater interruption of nervous equilibrium, as exhibited in her tendency to hysteria, &c. But this difficulty of maintaining many faculties in action, at once, is highly beneficial in the constitution of our nature, in other points of view. It is the prineiple by which nature dispenses her gifts, by a determinate *limit*, more favourably to one person than to another; for, by exalting the first above the second in one particular, she secretly sinks the first below the second in another, and thus brings the two more nearly on an equality than either party may suppose; and, by way of comfort to each, she makes him take cognizance only of the faculty in which he excels, and thus renders him insensible to that in which he does not excel; so that each is left in the cheering, hopeful, and healthful conceit, that he is surely more excellent than his neighbour.

SLEEP WAKING, OR SECOND CONSCIOUSNESS.

By H. BROOKES, Esq.

(Continued from page 182.)

Much of the difficulty in attaining an intelligible view of sleep waking has arisen, from the circumstance of our having considered certain features essential to characterise it, which are not presented in many cases, which, nevertheless, present all the other usual features. and, therefore, it is that I have adopted the term *second consciousness.* The term *sleep-waking* is certainly preferable to the old term, *sleep-walking;* the former, as Dr. Elliotson justly observes, comprehending "all actions which may be performed," whilst the latter "strictly applies to those cases only in which the patient walks;" yet, as he further remarks, "when the coma is profound, the second term *waking* is hardly appropriate; and when there is no coma the first term *sleep* is hardly appropriate." Another term which the Dr. suggests, "extatic delirium," is still more objectionable as a generic denomination of a state of second consciousness, in which *no delirium* is manifested, though it may be appropriately applied to that class of cases of second consciousness, in which delirium is exhibited—as in the cases of the Okeys (not the less interesting on that account) and many cases of insanity.

Second consciousness appears to be a more appropriate designation as a generic term, indicating an entirely distinct and different state of mental existence, which may include, or be accompanied by, varieties of mental and corporeal phenomena, almost as numerous as those occurring in the state of normal, or *first consciousness.*

Second consciousness, though, doubtless, the result of an abnormal condition of the brain, may sometimes, though rarely be manifested in the absence of any other very marked evidences of its existence. Most usually, however, it is accompanied by unequivocal symptoms of nervous disease, manifesting themselves in one or other of the forms of hysteria, epilepsy, catalepsy or insanity, and almost invariably by a state of *partial or complete insensibility* to impressions on the external senses.

I need not quote the innumerable and cruel experiments, which, in former times, have been resorted to in proof of this, because in these days the fact that in such diseased states of the nervous system, perfect insensibility may, and generally does, exist, is no longer one of doubt or dispute. The epileptic paroxysm is usually followed by coma, more or less profound; but, sometimes second consciousness supervenes—the torpor of the senses still continuing—and the patient talks, &c., deliriously, until the accession of another fit, or until sleep comes on, from which he recovers unconscious of all. In the common delirium of fever, the same thing occurs—complete insensibility at the time, and perfect oblivion of every circumstance afterwards.

In catalepsy, the coma is generally profound, and there is also a particular condition of the nerves and muscles of voluntary motion; a perfect balance existing between the flexors and extensors, so that the limbs retain any position given them by any external force, and the patient having no controul over them; but, in some cases, second consciousness is manifested, and the patient (gaining power over some of the voluntary muscles) converses and sings freely and exquisitely, still remaining insensible to impressions on the senses. In common sleep-walking the senses are usually torpid; for though the eyes are often wide open, "there is no speculation in them," "their *sense* is shut," and the pupil is generally found in a state of perfect immobility; yet the intellectual faculties, or some of them, are in a state of activity.

Martinet relates the case of a watchmaker's apprentice who had an attack every fortnight. In this state, though insensible to all external impressions, he performed his work with his usual accuracy, and was always astonished, on waking, at the progress he had made. The paroxysm began with a sense of heat in the epigastrium, extending to the head, followed by confusion of ideas, and *complete insensibility*—the eyes remaining *open*, with a *fixed* and *vacant stare.* This case terminated in epilepsy. Macnish relates of Dr. Franklin, that once whilst floating on his back in the hot bath at Southampton, he "fell asleep, and slept nearly an hour by his watch without sinking or turning; a thing," he says, "I never did before, and should not have thought possible;" but this I think was merely a case of sound and quiet sleep, as the body, if perfectly at rest, would float without any effort. The following case also related by Macnish is more extraordinary:—"The watchmen on the revenue quay, in one of the towns on the coast of Ireland, were much surprised at descrying a man desporting himself in the water, about one hundred yards from the shore. They pushed off and succeeded in picking him up; but, strange to say, he had no idea of his perilous situation, and it

was with the utmost difficulty they could persuade him he was not still in bed. It was afterwards ascertained that the man had left his house about 12 o'clock that night, and walked through a difficult and dangerous road, a distance of nearly two miles, and had actually swam one mile and a half, when he was fortunately discovered and picked up." Not long ago, a boy was seen fishing off Brest up to the middle in water: on coming up to him he was found to be fast asleep.

A case is related of an English clergyman, who used to get up in the night, light his candle, write sermons, correct them with interlineations, and retire to bed again, being all the time asleep. The Archbishop of Bourdeaux relates a similar case of a student, who got up to compose a sermon whilst asleep—wrote it correctly, read it over from one end to the other—or, at least, appeared to read it—made corrections in it—scratched out lines, and substituted others—put in its place a word which had been omitted—composed music, wrote it accurately down, &c. Dr. Gall takes notice of a miller who was in the habit of getting up every night and attending to his usual avocation in the mill, and then returning to bed. On awaking in the morning, he recollected nothing of what passed during the night. Dr. Pritchard speaks of a farmer who got out of bed, dressed himself, saddled his horse, and rode to the market, being all the while asleep. Dr. Haycock, Professor of Medicine at Oxford, would deliver a good sermon in his sleep; nor could all the pinching and pulling of his friends prevent him.

In these and other cases, however, the state of insensibility is not absolute, so as completely to isolate them; they appear to hear or feel, or to have a perception of impressions which are in accordance with the prevailing state of their own minds or feelings—at least so far as to guide them in the performance of their acts. In some cases, also, the sense of touch only, or that of hearing only, may be most sensitively acute, and they may be startled by the slightest *contact*, or *change of temperature*, or by the merest whisper. They may hear and recognize, or may hear only without recognizing the voice of a speaker, and provided the voice, or the remark fall in with their, present ideas, may carry on a continued conversation, and the current of their dreamy thoughts may be entirely changed, and that repeatedly by judicious suggestion, and this is sometimes, though not very appropriately, termed *suggestive dreaming*.

Dr. Carpenter says he has observed two cases of this kind, and Dr. Francisco Soave relates the case of one Castelli, the pupil of an Italian apothecary. Castelli was found asleep one night translating Italian into French, and searching out the words in a dictionary. They put out his candle, when he finding himself in the dark, began to grope for it, and went to light it at the kitchen fire, though other candles were alight in the room. At other times he had come down into the shop, and weighed out medicines, and talked to supposed customers. When any one conversed with him on a subject on which his mind was bent, he gave rational answers. He had been reading Maquer's chemistry, and somebody altered his marks. This puzzled him, and he said "Bel piacere di togliermi i segni." He found his place and read aloud, but his voice growing fainter, his master told him to raise it, which he did; yet he perceived none of the persons standing round him, and though he heard any conversation which was *in conformity with the train of his ideas, he heard nothing of the discourse, which these persons held on other subjects.* His eyes seemed to be very sensible to *objects relating to his thoughts*, but appeared to have *no life in them*, and so *fixed* were they, that when he read, he was observed not to move his eyes, but his whole head from one side of the page to the other.

And not only is there this special cognizance of particular sounds, &c., but, in many cases, it has been observed, that there is also a special cognizance of or susceptibility to the presence or influence of *particular persons* during a state of complete insensibility to all other external influences. This fact was judicially proved in the trials for witchcraft in the 17th century, and in the unenlightened and superstitious minds of the observers of those days, it constituted the strongest proof of the guilt of the accused party. Most of those cases there is *now* no doubt, instead of being as then *supposed*, possessed or bewitched, were simply the victims of disease—epilepsy, and in a state of second consciousness. Various expedients were devised by the judges for the purpose of avoiding fallacy from collusion (however improbable) or from the patient's imagination, and it clearly appeared that the presence, or contact, of one particular party, produced the most unequivocal impression upon the patient in some cases, greatly aggravating in others, effectually calming or terminating the paroxysm. We may take their facts, though we reject their inferences. In some of the cataleptic cases, so ably reported by the distinguished physicians, Dr. Petitin and Dr. Joseph Franks, analogous facts were observed, as also in the recently reported cases of the Estatica and the Adolorata, by the Earl of Shrewsbury, cases which it is folly to hold forth as miracles, and which, if they are not pure mesmeric cases, are cases of second consciousness, induced by nervous disease, which the attendant priests have either ignorantly or wickedly perverted to the purposes of superstitions.

But two of the most beautiful and interesting cases of this description are related by Dr. Elliotson. He says, "Dr. Gregory, the second of Edinburgh, habitually mentioned in his Lectures the case of a cataleptic lady *whom he attended*, and who in her paroxysms of insensibility appeared perfectly blind, except when her baby was brought near her, and then she gave slight *signs of recognizing it.*" The other was a Spanish lady of consideration, about forty, a patient of Dr. Arnott's, who was subject to fits of sleep (which often lasted three weeks) and catalepsy. In these attacks she was quite insensible to mechanical injury—pricking, pinching, &c.—to light, *and to all noise, except the voice of her infant.*

Thus it appears that in all these states of Second cosciousness, (as in first consciousness) one or more of the cerebral organs may be active—manifesting its appropriate faculty, the others remaining torpid: in some cases this partial activity may be excessive, and then the mental manifestations will be those of delirium or insanity. But all the organs may be in a state of pretty equal excitability, and then the mental manifestations will pretty nearly resemble those of the normal state; or they may all be more obtuse, and the mental manifestations be accordingly inferior. And in some the consciousness, or perception of personal identity is lost, so that the patient in second consciousness may not be able to recognize the identity of themselves in that state with themselves in the normal state—as in the following case reported in the Medical Repository by Dr. Mitchell. The subject was a young lady of a good constitution, excellent capacity, and well-educated. Her memory was capacious and well-stored, with a copious stock of ideas. Unexpectedly, and without any forewarning, she fell into a profound sleep, which continued for several hours beyond the ordinary term. On waking, she was discovered to have lost every trait of acquired knowledge. Her memory was a *tabula rasa*—all vestiges, both of words and things, were obliterated and gone. It was found necessary for her to learn everything again. She even acquired, by new efforts, the art of spelling, reading, writing, and calculating and gradually became acquainted with the persons and objects around, like a being for the first time brought into the world. In these exercises she made considerable proficiency. But after a few months another fit of somnolency invaded her. On rousing from it, she found herself restored to the state she was in before the first paroxysm; but was wholly ignorant of every event and occurrence that had befallen her in the interval. The former condition of her existence she now calls the *old state*, and the latter the *new state*, and she is as unconscious of her double character as two distinct persons are of their respective natures. For example, in her old state, she possesses all the original knowledge; in her new state, only what she has acquired since. If a lady or gentleman be introduced to her in the old state, and *vice versa*, (and so of all other matters) to know them satisfactorily, she must learn them in both states. In the old state she possesses fine powers of penmanship; while, in the new, she writes a poor awkward hand, having not had time, or means to become expert. During four years and upwards, she has had periodical transitions from one of these states to the other. The alterations are always consequent upon a long and sound sleep. Both the lady and her family are now capable of conducting the affair without embarrassment By simply knowing whether she is in the old or new state, they regulate the intercourse, and govern themselves accordingly.

Dr. Abercrombie, in his Treatise on the Intellectual powers, relates the case of a servant girl who was seized with fits of somnolency, from which she could at first be roused by shaking, &c. She soon began to talk a great deal of things which seemed to be passing before her as a dream; *but she was not at this time sensible of anything that was said to her.* In the subsequent paroxysms, however, she began to understand and to answer—became capable of following her usual employments during the state—laid the table for breakfast, dressed herself and the children—her eyes remaining shut the whole time. She remembered what passed during former paroxysms, though she had no remembrance of it during the intervals. She was taken to church—evidently attended to the preacher—was much affected and shed tears, and, in a subsequent paroxysm, gave a most distinct account of the sermon, and mentioned particularly the parts of it by which she had been so much affected. During the attack her eyelids were generally half shut, and the pupils dilated and insensible; but sometimes they were *quite natural.* She often sung both sacred and common pieces, *incomparably better* than she could do in the waking state.

(To be continued.)

DR. STORER ON SOME MESMERIC EXPERIMENTS.

To the Editor of the 'Medical Times.'

Sir,—I rejoice to find that there is one Medical Journal whose pages are open to the subject of mesmerism; as I feel assured, that the more it is investigated, the more will its curative powers become known, and be made available in the treatment of diseases. There is one circumstance connected with mesmerism which greatly surprises me, and that is the violent opposition evinced by medical men, and this opposition, I regret to say, has generally been in proportion to their ignorance on the subject. I do not ground this opinion on mere conjecture. From being desirous myself of knowing something of mesmerism, I have attended several lectures on the subject, and particularly those of Mr. Vernon, at the Adelaide Gallery; a great number of medical gentlemen have, at various times, been present, and from knowing several, and other sources, I am obliged from their own confessions to admit, that the majority have expressed opinions against mesmerism, without being in the least degree qualified to do so. Now, Sir, I do think it is the absolute duty of every man to enquire before he condemns, and if that enquiry be fairly and honestly conducted, conviction I am sure will follow; and surely on this subject, what the superior minds of a Cuvier, La Place, Cloquet, Hufeland, Georget, Andral, Brouissais, Dupotet, Elliotson, Conolly (?), Abercrombie (?), and a host of others, have admitted to be founded in nature, the lesser minds of our own day ought to consider worthy at least of being enquired into. My personal experience has been very limited, but I have applied mesmerism as a curative agent in a case of St. Vitus's dance, a case of hysteria, and in a case of violent neuralgic affection, most successfully after the other remedies had failed, and its decided effects in nervous disorders have been fully proved in the works of several of the above authorities. The difficulty of conducting experiments in public must be admitted by all who are acquainted with this peculiar agent, and we

ought, therefore, to be the more circumspect, in not allowing our minds to be prejudiced by every apparent failure. I have witnessed with many others several experiments in private, and have been quite astonished at the successful results; yet before the public, many of the same experiments have failed, and this is to be ascribed more generally to the noisy wrangling and interruptions which have generally been displayed during the exhibitions. Many friends of mine have said, that they would not believe any thing of mesmerism, unless they themselves or others well known to them were mesmerised, and knowing the difficulty of succeeding in a crowded audience, I requested Mr. Vernon to favor me by coming to my residence some evening, when I would ask a few friends to meet him, and thus to test its powers on two or three individuals. A meeting took place on Thursday last, and I now forward to you the result :—There were twelve in number, eight gentlemen and four ladies; we were first desired to form a chain by holding each other's hands. Mr. Vernon then commenced his manipulations on the first individual of this chain, and after trying his mesmeric powers for a few minutes, about ten, desisted, and enquired whether any sensible effects were felt by any present. Only two of the number were affected, the last gentleman of the chain, and a lady who was about the centre; in both these cases, a heaviness and sleepiness about the eyes was induced, and it was then proposed that this lady and gentleman should be the subject of further trials. The gentleman was the first who was operated upon, he was about 22 years of age, and in good health; he was placed in the usual way before Mr. Vernon, and in less than a quarter of an hour he was sent into a state of semi-coma, so that he was quite insensible to every thing that was passing; after remaining in this state for a short time he was demesmerised, and awoke up apparently surprised at his situation; he described the sensations as far as he could recollect them as rather pleasurable than otherwise. The next case was that of the young lady—she was affected in about ten minutes, and appeared to suffer sensibly under the process, even rather distressed, which Mr. Vernon attributed to the fact of her resisting the influence (which she fully admitted), and also to the circumstance of the operator wishing to produce a full and speedy effect. The lady was aroused after some difficulty, from her state of unconsciousness, and expressed herself quite ignorant of what had passed, except in feeling a state of chilliness all over, and in which she continued for a few minutes after her being demesmerised. The next case was that of a little boy, about ten years of age, who was brought by Mr. Vernon, and whom he had only mesmerised a few times. This boy, Mr. Vernon said, had at times the power of clairvoyance, and proposed testing it on the present occasion. It was then agreed that a card, selected from a pack, should be enclosed in a paper box, and given to him when in the mesmeric state; this state was soon produced, and the boy receiving the box, and waiting two or three minutes announced it was a red card, on being asked which, he replied the eight of diamonds, the box was then opened, and it proved to be the nine, so that either he had not seen the middle point, or out of 52 guessed well; the next card enclosed, he said was the four of some suit, but this proved to be the knave of clubs—in this he failed; the next experiment was to cut a word from a printed circular, which some gentleman produced from his pocket, and this word, on being placed on his forehead towards the crown of his head, was in less than ten seconds correctly told to the astonishment and satisfaction of all who witnessed the experiment. The boy's eyes were perfectly closed, and Mr. Vernon was utterly ignorant of what word was being given to the youth. These points can be most readily and willingly corroborated by all present. After these experiments a conversation followed, which ended in bringing home conviction to the minds of several present, who acknowledged they were obliged to believe in spite of their unbelief. With regard to Mr. Vernon himself, having met him in his public capacity on many occasions, I am only echoing the opinion of all who know him, when I say, that for honesty and integrity of purpose, and with the ability to carry out his views, there are few men who can at all compete with him.

I beg to remain, Sir,
Yours very obediently,
HENRY STORER, M. D.

Grenville Street, Brunswick Square.
June 3d, 1844.

DR. J. H. DAVIS' FUGITIVE ACCOUCHEUR.

To the Editor of the 'Medical Times.'

[Mr. Waddington presents his compliments to the Editor of the "Medical Times," and encloses an Article which the *disinterested* "Lancet" has refused to insert, although the Sub-Editor (Dr. Henry Bennet) "concurs with Mr. Waddington in all he has said."]

Sir,—About twenty years since, Mr. Hull, Surgeon, of Norwich, published an excellent paper, "On Legislative Interference with the Practice of Surgery," wherein he says:—"The most splendid profession is that of arms; the most lucrative, is the law; the most useful, medicine. The benefits, great and indispensable, of this latter science, have procured for its professors a respectable station in society, universal deference, and influence of no common character. These advantages it behoves them to maintain and defend with jealous vigilance, everywhere and at all times. For the profession of medicine is not, abstractedly and essentially, honourable; it is made such by the conduct of its members: it is elevated or lowered in public opinion, as they are themselves in moral worth;—a statement illustrated by numberless instances, which the most cursory look around us will detect."

I have been led to reflect upon these "home truths," by the perusal of Dr. John Hall Davis' case of "Hæmorrhage both before and after the removal of the placenta" (at Camden Town), as recorded in the *Lancet* of Saturday, March 30th, 1844, and the *Medical Times* of April 13th, 1844. The case, in itself, was by no means uncommon; the treatment, that which is usually had recourse to; but what shall we say, or think, of the *prudent* Doctor's concluding paragraph?

"In the management of this case, which required much personal exertion, I was entirely deprived of the services of the party in previous attendance, who, frightened at the serious aspect which the case put on, had taken to his heels before my arrival, and never returned."

A few winters ago, it was stated in a provincial paper, "that during a fearful hurricane, an old inhabitant of Margate was blown away on crossing Cecil-street, and had not been heard of since!" Feeling deeply, as I do, for the character and usefulness of the profession at large, I sincerely hope the heartless individual alluded to by Dr. J. H. Davis, *has not been heard of since;* and, thus, that the highly respectable medical practitioners in the vicinity of Camden Town, will no longer suffer under the *indirect* stigma which has been cast upon them by Dr. J. H. Davis's very remarkable communication.

I am, Sir,
Your obedient Servant,
Joshua Waddington, M.R.C.S.,
Consulting Surgeon to the Royal
Sea-Bathing Infirmary.

Marine Terrace, Margate, May 29th, 1844,

ITALIAN MEDICAL SCIENCE.

(The Gazette Medicale de Paris gives some cases from the Italian Journals, which place us under obligations we readily acknowledge.)

Putrilaginous Softening of the Fundus of the Uterus at the last Stage of Pregnancy.—A barber's wife, aged thirty-seven, irritable temperament, at the latter period of her first pregnancy, had experienced nothing but a burning sensation. The labour commenced in the morning, ceased at six in the evening: she then suddenly appeared anxious; the face pale; the body covered with perspiration; the form of abdomen changed: the pulse small; features contracted; sight dim; orifice of uterus closed; and, on exploring the abdomen, the trunk, nates, and spinal column were felt very near the hand. *Treatment.*—Warm fomentations, and a cordial mixture. At eleven o'clock the patient expired. Gastro-hysterotomy showed that the child had escaped from the uterus into the abdomen, through the fundus of that organ. The fundus presented a putrilaginous softening, from five to seven inches in circumference, irregularly circular, and had given way under the influence of the uterine contraction. The amniotic sac was ruptured; the child, full grown, appeared to have lived to the time of the rupture. The entire trunk had passed into the abdominal cavity, the head only having remained in the inferior segment of the uterus. The placenta, of a green colour, was still adherent to its place of insertion.

Cerebral Apoplexy, &c.—M. Freschi narrates an example of hemiplegia on the same side as the effusion. A woman, aged fifty, had experienced, years previously, an attack of the *right* arm, from which she had recovered. On the 2d of Sept. 1842, she suddenly cried out for help, stating that she felt her *right* arm and leg dying, then lost all consciousness, and expired in the evening. At the autopsy the left cerebral hemisphere was found completely healthy. That of the *right* side was transformed into an immense cavity, containing a solid coagulum and fluid blood. The other regions of the brain were quite healthy.

Aneurism of the Innominata treated by Ligature of the Subclavian and Primitive Carotid.—The two arteries were tied in the same sitting. The patient died in six days; but the autopsy shewed that the left carotid and the right vertebral arteries were obliterated; so that during the six days the patient lived after the ligature, the cerebral circulation has been kept up by the left vertebral artery only.

The Valerinate of Zinc, by MM. Muratori and Cerulli.—M. Cerulli gives this in nervous diseases in doses of one grain and a half daily, in the form of pills, which he administers at the time of the paroxysm, and has thus cured several cases of orbital neuralgia; one in thirty, one in forty, and a third in fifty days. The mode of preparation is as follows:—The valerianic acid is introduced into a retort, and the hydrated protoxide of zinc is slowly added till saturation. Heat favours the combination. The saline solution is poured into a porcelain capsule, and a small quantity of protoxide of zinc is added, in order to salify all the valerianic acid. The dissolution is then concentrated by evaporation; a white crust of valeriana te of zinc forms on the surface. It is taken off as it forms, is dried, and preserved in a bottle. M. Muratori has also obtained this salt by the double decomposition of sulphate of zinc and of valerianate of lime. By filtering, the valerianate of zinc, which is soluble, is separated from the sulphate of lime, which is insoluble. The dissolution is then concentrated.

Hydrophobia treated by the Poison of the Viper.—Prince Louis Bonaparte has separated the active principle of the poison of the viper, and has named it *echnidnine*, and he proposes it as a remedy for hydrophobia. At the hospital of Santa Maria Nuova, at Florence, six vipers were made to bite a patient labouring under hydrophobia. Death took place, however, with all the symptoms of hydrophobia, without any of those which follow the bite of a viper having occurred. Prince Louis, however, thinks that the principle of the poison, freed from all other substances, might prove more efficacious if injected into the veins of a person labouring under hydrophobia.

TRANSACTIONS OF LEARNED SOCIETIES.

ETHNOLOGICAL SOCIETY.

At the meeting on Wednesday a paper was read "On the Inhabitants of the Maldivian Islands, by Captain Young and Lieut. Christopher." They are described as having, in general, a pleasing cast of countenance, and in colour and make much resemble the Moors of India. Their general height is about 5ft. 2in. Many exhibit, in their physical, and especially facial conformation, an admixture with the African race, doubtlessly the Zanzebar slaves of the Caffre east of features, occasionally imported by the Muscat vessels; but the proportion of persons of this description to the whole population is inconsiderable. Some individuals of the

higher orders have a much fairer complexion than the common people, which is probably attributable to descent from Persian stock. The ordinary dress of the men consists of short drawers, with a cloth wrapped round the waist, and another about the head, the waist cloth being twisted into a knot in front, which is supported by a string encircling the loins. The head people wear, in addition, a sash of embroidered silk or cotton, and on Friday, when attending the Grand Mosque, a white turban and shirt reaching to the ancles. The men shave their heads, but are free to allow the hair to grow on the face. The women's dress consists merely of a cloth wrapped round the waist, which, descending to the knees, is secured by a string, and a long shirt which has no opening but for the head and neck, as also a cloth tied round the head. In contradistinction to the men, they allow their hair to grow long, and fasten it up behind. They are fond of ornaments, wear bangles, and their ears are pierced when very young all round the edges, to which they hang light trinkets. They are not kept from the view of strangers or in a state of seclusion, as in most Mahommedan societies. Marriage is not very early contracted, but a plurality of wives is allowed; few, however, are able to support more than one. Intrigues are not uncommon, and the men show no small ingenuity in carrying them on, when the correspondence is with a married woman. For a widow to live with a favourite is not accounted criminal, and scarcely disgraceful. The principal articles of food are rice, fish, bread-fruits, cocoa-nuts, jaggery, and occasionally a few fruits and vegetables. These are produced on the islands, with the exception of the rice, which forms the largest constituent of every meal, being considered necessary for the preservation of health, and is generally mixed with grated cocoa-nut. On festival days, and occasions of public rejoicing, feats of strength and skill are exhibited under rules and restrictions to prevent injury or danger to the performers. Wrestling formed part of these games, but has of late been prohibited, owing to some severe falls having taken place. The weapons employed in these exercises are swords, spears, and quarter staffs, to teach the use of which, and prepare the several actors, there are masters appointed by the Sultan. It is not deemed beneath the dignity of the principal men to take part in these games. They are a quiet peaceable race, hospitable and kind to strangers, though suspicious and distrustful of them; unacquainted indeed with the practice of the higher virtues, but equally unfamiliar with vice in its darker forms. Towards each other they are kind and friendly, and to their own kindred very affectionate, of which Capt. Young and Lieut. Christopher saw many pleasing evidences in their attendance upon the sick. Humanity and charity are virtues in great esteem, but in relieving the wants of their fellow-creatures, they do so with ostentation. Their language, mode of government, religion, and superstitions were treated at length, and formed an interesting feature in the history of the people. Captain Young and Lieut. Christopher remained for some months on one of the islands of the group, for the express purpose of obtaining a knowledge of this hitherto unknown variety of mankind.—A rare and curiously modelled figure in gold was exhibited by Mr. Brown, in value, by weight, upwards of twelve pounds. It was found, that gentleman informed the meeting, at the margin of the lake Guativite, situated on the summit of a ridge of mountains about eight leagues from Santa Fe de Bogota, the capital of the republic of Columbia. This lake, previous to the conquest of New Granada by the Spaniards, was considered sacred by the natives of that country, and into it they were accustomed at certain periods to throw their treasures, as offerings to their deities. The scenery round the lake is magnificently romantic, and well calculated to make a powerful impression on the mind. By the remains still to be seen of extensive works, it is evident that various attempts had been made by the Spaniards to drain the lake, and it is on record that about eighty years ago, so much gold was got out, that the quinto to the Crown amounted to upwards of 80,000 dollars; at that time also an emerald of immense value was found and sent to Madrid. A very animated discussion ensued after the reading of the paper, the auditors numbering upwards of 100 persons. This shows the interest this new science is exciting, for few societies in London, muster more than 50 or 60 members at their evening meetings. It is an earnest that man will, ere long, assume his just station among the subjects of human inquiry.

Royal Medical and Chirurgical Society, May 28—Mr. Stanley, president, in the chair.

The following papers were read:—

Case of dissecting aneurism of the aorta, innominata, and right carotid arteries, causing suppression of urine, and white softening of the right hemisphere of the brain, by R. B. Todd, M.D., F.R.S., &c.

The patient, a stout plethoric man, ætat. 37, was suddenly seized, while dining at a friend's house at Norwood, in Surrey, with syncope, from which he soon recovered. He was taken to the house of another friend in the neighbourhood, and Mr. Street attended him. His symptoms at this time were violent pains in the loins, down the course of the ureters, thighs, and abdomen, with some tympanitis and swelling of that region, nausea, and scanty urine. Notwithstanding depletion, local and general, purging and diuretics, the kidneys ceased to act, and other signs showed themselves. He became paralytic of the left side; the pulse of the right side was distinctly smaller and weaker than that of the left; there was a bellows-sound in the course of the aorta, and innominata, and the breathing in the right lung was less audible than that in the left. There was also great drowsiness and sluggishness indicating oppressed brain. About the fifth or sixth day, the secretion of urine returned, but the cerebral symptoms shewed but trifling signs of amendment. The pupils which had before been unequal became equal, and some power returned to the paralysed side; but the pulse began to falter, and signs of an internal hæmorrhage manifested themselves, and on the eleventh day from his seizure he expired quite suddenly. A copious effusion of blood was found in the pericardium. This had escaped through a little fissure in the outer wall of the aorta, which formed the external wall of a recently formed aneurismal sac. This sac communicated with the aorta, through a transverse rent in its inner and middle coats, which originated in an ulcerated atheromatous spot. The blood which thus escaped from the artery made a new channel for itself along the aorta, and also along the innominata and right carotid arteries, by splitting the middle tunic of these vessels into two laminæ. The separation took place in the carotid to some distance up the artery and then stopped, the consequence of which was the plugging up of that artery, and the cessation of the circulation in it. The right hemisphere of the brain was ex-sanguineous, and all that part of it which is above the fissure of Sylvius (which is supplied with blood by the middle cerebral artery) exhibited numerous patches of softening without discoloration, affecting the white matter, as well as the grey substance of many of the convolutions. This softening Dr. Todd attributed to the stoppage of the circulation in the right carotid artery, the vertebral not being able to render its full share of blood, owing to the diminished calibre of the innominata and subclavian. The kidneys were in the second stage of granular disease. The temporary cessation of the action of these organs was, doubtless, due to a temporary impediment to the full flow of blood to them. The paralysis and the somnolency were clearly to be attributed, to the physical alteration in the right hemisphere of the brain.

The case was attended by Mr. Street of Norwood, and by Dr. Todd, and was seen once by Dr. Watson. Its description was illustrated by drawings, and by a preparation of the morbid parts.

Dr. C. J. B. Williams enquired of the author of the paper, whether he had especially examined the region of the back by auscultation. He thought from the situation of the fissure in the aorta, that the bellows-sound would have been heard better in that direction than any where else.

Dr. R. B. Todd had examined the back more than once, but could not distinguish the bellows-sound in that region.

Mr. Solly enquired if the left pupil remained dilated after the attack until death took place?

Dr. Todd supposed that Mr. Solly meant the right pupil, which certainly had been a little dilated, but recovered itself in a short time, and both the pupils continued of equal size to the last. The change in the condition of the pupil which occurred, was regarded as a faint indication that the state of the brain was improving, and hopes were for a time entertained that the patient would recover.

Mr. Phillips stated that he had had an opportunity of examining three cases of dissecting aneurism, but they all occurred in persons more advanced in life than was Dr. Todd's patient. They were all upwards of sixty years of age. In one case, a woman between sixty and seventy years of age, who had suffered more or less for years from chronic bronchitis, and who had been unable to lie down for some time, was seized with a fainting fit while sitting up, was placed in a horizontal position, continued in a state of syncope for sixteen or seventeen hours, and then died. On examination of the body after death, there was found a stellated rupture of the middle coat of the aorta, and blood was effused between the coats to some extent. The second case was that of an old man, nearly the same age, who had been ailing for some time, and who was suddenly seized with a fit of fainting while in a passion, and died forty hours afterwards. His principal complaint during that time was a sensation of suffocation at the chest. On examination, there was discovered a rupture of the middle and inner coats of the aorta within an inch of the sigmoid valves, and blood was found effused and coagulated between the coats the entire length of the arch, as far as the thoracic portion of the vessel. The difficulty he experienced with regard to Dr. Todd's case had reference to the connexion which was supposed to exist between the cerebral symptoms, and the injury to the aorta. He thought it might be as readily explained by regarding it as connected with the disease in the kidneys, which had induced suppression of urine. Such a state of the cerebrum did not occur when the carotid artery was tied, although a larger supply of blood was cut off from the brain than when the rupture which had been described took place; he should add however, that in two of his cases considerable cerebral disturbance occurred.

Dr. C. J. B. Williams agreed with Dr. Todd in the opinion he had expressed with respect to the cause of the paralysis. With regard to aneurisms in general, both true and false, he considered that their size after death bore little or no relation to their apparent dilatation during life, and this was more especially the case with thoracic and abdominal aneurisms. Of this he had seen several examples in practice. The dilatation in Dr. Todd's case was evidently much greater during life, than would have been supposed from the appearances presented by the drawing; this and the fact that the new channel in the aorta was situated at the posterior part of that vessel, had led him to ask the question respecting the auscultatory sounds heard in the region of the back, where he would naturally have expected to have found the *bruit* more marked and persistent; which, however, was not the case. With regard to the explanation that had been offered by Dr. Todd, of the symptoms that had occurred during life, he thought nothing could be more satisfactory than the way in which those symptoms were accounted for by the appearances after death, but he could not consider that the case would afford any assistance in forming a diagnosis in future. Various sounds and modifications were produced by this lesion; but no precise rule of diagnosis could be laid down. He did not consider that the brain symptoms could be accounted for by the disease of the kidney, which was present in this case.

Mr. Snow suggested that the channel in the posterior part of the aorta, alluded to by Dr. Williams, was not really a medium for the circulation, but a blind duct through which the blood could not pass, and consequently a *bruit* could not exist.

Dr. Todd agreed with Mr. Snow in the explanation

he had offered, and said that the new channel that had been formed, ended in a *cul de sac* near the origin of the renal artery. In some cases of dissecting aneurism, the blood after passing for a certain distance by the new channel, returns into its proper track lower down, and in such cases the *bruit de souffle* may be heard, but not in those cases where the abnormal channel does not re-communicate with the vessel from which it is formed. In the case he had narrated to the society, such a channel existed with regard to the right carotid artery, but there was an impediment at its commencement; the blood consequently did not circulate through it, and the preternatural sounds were not audible.

Mr. Lloyd considered that the condition of the brain was not attributable to a deficient supply of blood—a position which he regarded as untenable, and not borne out by recorded facts. He was rather inclined to attribute it to erysipelatous inflammation of the texture of the brain. He argued that as softening of the brain frequently occurs, without any previous obstruction in the circulation, when it did occur with it at the same time, it should be looked upon as a mere coincidence.

Mr. Stanley recollected a case which had been operated on some years ago at St. Bartholomew's Hospital, by Mr. Vincent; the patient was a healthy young man, not presenting previously any indications of cerebral lesion. The common carotid artery was tied; hemiplegia came on, and the patient died on the third day. White softening of the brain was found after death. In another instance, in which an operation was performed, an abscess formed in the right hemisphere of the brain; and in the case, in which Mr. Abernethy tied the same vessel, that being the first case in which the operation was performed, inflammation of the hemisphere on the same side as the operation, followed.

Dr. Willis related a case which had occurred to him about a year ago, of softening of the brain, following obstruction in one of the principal internal cerebral arteries. The patient was a lady of a very nervous temperament, and averse to occupation. He was called to her in consequence of her presenting symptoms of commencing paralysis, to relieve which he practised a small bleeding, after which the palsy increased, and terminated fatally. On examining the head after death, the middle lobe was found in a pultaceous diffluent state, and its nutritive artery was completely blocked up by a coagulum of blood. He considered that death of the cerebrum had been caused by the arrest of its circulation.

Mr. Lloyd thought that the disease which terminated the life of Dr. Willis' patient, was of an inflammatory nature in the first instance.

Dr. Mayo narrated the particulars of a case of softening of the brain, the semeiology of which presented nothing unusual.

Dr. Kingston thought the softening of the brain in Dr. Todd's case might be referable to the arterial obstruction, as the disease may be limited to that part of the cerebrum which is supplied by the diseased arteries. This theory is supported by the opinion of Dr. Abercrombie, who thought that white softening of the brain in aged persons was caused by obstruction of the circulation in the same way that dry gangrene of the extremities is produced by a similar cause.

A case of scirrhus of the thyroid gland; by R. W. Brown, Esq., Surgeon to the Bath United Hospital.—Communicated by Sir B. C. Brodie, Bart.

This case was considered by the author to be interesting in connection with the paper communicated to the society by Mr. Cæsar Hawkins, on Carcinoma of the Thyroid Gland. The patient, aged 60, began about Christmas, 1842, to have pain in the larynx, accompanied by hoarseness, and his voice gradually became feeble and stridulous, so that he could scarcely speak above a whisper. A hard swelling now presented itself in the situation of the left lobe of the thyroid gland, and which could be traced in the direction of the œsophagus. The integuments in this part of the neck became thickly studded with hard tubercles of a cancerous character. The patient at length had great difficulty of swallowing, which increased, and he died after much suffering in June, 1843. On the post mortem examination, the left lobe of the thyroid gland was found to be the principal seat of disease. It was enlarged, and converted into a mass of carcinomatous substance, white, hard as cartilage, and with some gritty particles dispersed through it. The lymphatic glands on each side were also converted into the same morbid structure, and compressed the œsophagus. Tumours of the same kind were found in other parts of the body, particularly in the lungs and in the liver.

Case of necrosis of the lower jaw recovered from without deformity, by William Sharp, F.R.S., F.G.S., F.R.A.S, senior surgeon to the Bradford Infirmary.

The patient, a female aged twenty, was first seen by the author in the beginning of September, 1842, six months after the disease began, with symptoms of necrosis of the lower jaw. He extracted one of the teeth, and found a small fungous growth attached to its fang. On the thirteenth of December he laid the sinuses, communicating between the diseased bone and the skin, into one, and slightly enlarged the opening; he then drew out with forceps the dead portion of the lower jaw, which was found to consist of about two thirds of the entire bone, and it contained several of the alveolar processes. The author was gratified on looking into the patient's mouth, to find that with the exception of the teeth which he had extracted, the whole set of excellent teeth were perfectly fast, and in their proper places.

The portion of bone which had been removed was exhibited to the society.

Mr. Snow exhibited to the Society an instrument of his invention for paracentesis of the thorax, without the admission of air or atmospheric pressure into the pleura. It consisted of a trocar and a double action syringe, with two distinct valves like the stomach pump. The canula had a stop-cock and brass cylinder attached to it, and the trocar, which was ground to fit the cylinder accurately, passed through the open valve of the stop-cock. In withdrawing the trocar from the canula, after perforating the chest, it was to be brought so far as to be clear of the stop-cock, which point was indicated by a mark on the trocar, and then the stop-cock was to be turned before the complete removal of the trocar. The canula could now be connected with the pump by means of an elastic tube, the tap re-opened and the contents of the pleura emptied through the pump, the integrity of the thorax as a pneumatic apparatus being preserved throughout the operation. Before introducing the trocar the skin should be drawn a little from its situation, and then by withdrawing the canula slowly at the end of the operation, the correspondence between the superficial and deepest part of the wound would be lost before air could enter the pleura. The instrument had been manufactured by Mr. Reid, of Regent Circus, for Mr. Snow, two or three years ago.

GOSSIP OF THE WEEK.

Apothecaries' Hall.—Gentlemen admitted Members on the 30th May, 1844.—Charles Hill, Thomas Blatherwick, Jonn Croft Croft, Edward Oliver Golding, Henry Beresford Pickess, Charles Robinson, Lawrence White, Charles Astley Wakefield, Henry Wright.

Royal College of Surgeons.—Gentlemen admitted Members on May 31st, and June 3rd, 1844.—J. J. Renwick, T. Shaw, C. Martin, J. T. Carr, E. Gibson, J. Allison, T. W. Christie, T. Cahalan, A. Clark, J. Bryson, W. L. Dickinson, H. S. R. Peace, R. E. Ellis, J. Hardwick, R. E. Semper, J. G. Defrier, J. L. Williams, J. M'Culloch, C. Brookes, W. Cholmeley, E. Crichmay.

We have had submitted to us by Messrs. Rayner and Co. an improved Lamp, in which science is admirably brought into the service of economy and domestic comfort. Dr. Ure, who has also seen it, has shared our opinion, and thus anticipates our eulogium. "Among the many applications of science to the useful arts, for which the present age is so honourably distinguished, few are more meritorious than the Camphine Lamps, by which we can produce a snow-white flame from the cleanly, colourless spirits of turpentine,—a pure combustible fluid, in place of the smeary rank oils, which contain a seventh part of incombustible matter. Being so rich in hydrocarbon, the spirits require peculiar artifices for complete consumption, and the development of their full power of yielding light without smoke or smell. This point of perfection seems to be happily attained by the invention of the two parallel flat rings in the Paragon Lamp, a larger and smaller forming a cone round the margin of the wick, which cause a rapid reverberation of the air against the flame; thus consuming every particle of volatilized vapour, and adding energy to the luminous undulations." It would hence appear that the Camphine is only rectified turpentine.

Appointments—Hospital Staff.—Assistant Surgeon, William Robinson, M.D., from the 52nd foot, to be Assistant Surgeon to the Forces; Vice Willis appointed to the 17th foot.

3rd foot—Assistant Surgeon, Alexander Smith, from the 17th foot, to be Surgeon; Vice Macqueen deceased.

17th foot—Assistant Surgeon, John Shaw Willes, M.D., from the Staff, to be Assistant Surgeon; Vice Smith promoted in the 3rd foot.

52nd foot—Raphael Woodman Reade, M.D., to be Assistant Surgeon; Vice Robinson appointed to the Staff.

Sheerness, May 31st. Promotions.—Acting Assistant Surgeons, W. Lawrence, J. Gallagher, G. Rae, M.D., to the rank of Assistant Surgeons.

Appointments. Assistant Surgeons—F. B. Pritchard to the Formidable, additional; G. Rae, M.D., additional to the Caledonia, for service at Plymouth Hospital; A. Brown to the Collingwood.

The Medical Bill that was to have been brought in on Tuesday evening, has been again postponed. It is possible that it will be considered on Tuesday evening next.

Mr. Lonsdale has been appointed Assistant-Surgeon to the Orthopedic Institution.

Tooth-ache.—An anonymous writer in the *Forceps* says, that one of the best palliative remedies, when tooth-ache arises from exposure of the nerve, is a mixture of morphia, creosote, and arsenic, made into a thin paste, and applied to the nerve on a small pledget of lint. If the tooth-ache be caused by fungus of the nerve, it is occasionally removable by the application of caustic, which, if repeatedly used, will destroy the diseased growth. Temporary relief from pain may also be obtained by causing the fungus to bleed freely, but the only permanent cure of this affection must be accomplished by the forceps, as the disease generally returns after a few months.

Excision of the opaque cornea.—Dr. Hamilton has published a paper in the *London and Edinburgh Medical Journal*, in which he recommends the excision of the opaque anterior portion of the cornea, in cases of blindness from extensive opacity of that membrane, the posterior normal part healing without losing its transparency, and thus affording a clear aperture, available for all the purposes of useful vision. In order for this operation to be successful, it is essential that the sentient portions of the eye be in their normal condition, the defect of vision arising solely from some obstruction of a mechanical nature, interfering with the admission of the rays of light. The eye must be also unaffected with synechia anterior, or closure of the pupil. The existence of staphyloma will diminish the chance of success. The cases appropriate for the operation are reduced, therefore, to those that may be described as simple opacities, in which there is very considerable obscuration of the cornea proper, covering the whole surface of the membrane, but not extending throughout its entire thickness.

A COURSE OF CLINICAL LECTURES ON SOME IMPORTANT POINTS OF SURGERY,

Delivered at St. George's Hospital, by Sir Benjamin C. Brodie, Bart.

Lecture IX.

I purpose calling your attention, to-day, to the consideration of a class of diseases of which you will see much, both in hospital and private practice. Disease of the urethra is always a subject of great anxiety to the patient, produces great distress, and, if neglected, proves fatal. Many diseases do this, but are less interesting, because they are incurable; but there are no diseases which admit of so much relief by proper treatment, as the diseases of the male urethra. I shall first speak to you of contractions of the canal: this you will say is stricture; so it is, and any contraction in this or any other canal might be so called, but in surgery, we only apply this name to contractions of particular kinds. These may occur either at the orifice of the urethra, in its membranous portion, or in the intervening space, and these three forms of the disease, all deserve a separate and careful consideration. Contraction in the external orifice of the urethra is frequently the consequence of an ulcer there, and you should always regard an ulcer in this part, with great jealousy, as the urine constantly flowing over it prevents its being healed, gives great pain on making water, and if you should get it to heal, it leaves a contracted cicatrix. Sometimes the contraction is confined to one side of the urethra, and it diminishes it to half its proper diameter, so that the patient makes water in a smaller stream; this produces little inconvenience; but if the contraction goes on, the passage is rendered so small, that the bladder is obliged to exert itself considerably in expelling its contents; the mucous membrane lining it becomes inflamed; pouches are sometimes formed between the muscular fasciculi, but these I shall speak of at greater length, when I come to strictures of the membranous part of the urethra. Sometimes an ulcer in the orifice of the urethra heals, and still the patient is able to make water freely; but you will find the contraction in the part continue till the stream is not bigger than a thread, then merely come away in drops, and then complete retention follows. When the prepuce remains in its natural condition, so that it can be drawn back, and the glans exposed, the treatment is very simple. Commence by introducing a small probe, then a director with a probe point, and by means of this introduce a small sharp pointed bistoury, and divide the contracted portion in one or two parts of its circumference, which will relieve the patient, and enable him to make water freely. But you must keep the part dilated by the daily introduction of a bougie, which should be passed in about an inch, and allowed to remain there several minutes; its introduction ought never to be omitted, because there is no method by which he can be completely cured. So long as its use is persevered in, the patient will make water easily; but if neglected, the contraction returns, and of course with it the difficulty of micturition. Some caution should, however, be observed in these cases in the use of the bougie. It should be so small as to enter easily, as the parts are always very tender; and here, therefore, I would warn you against the conical bougie, for if you employ it, it will give great pain, produce inflammation, prevent your going on with its use, and leave the part in a worse condition than it was before. But you may increase, gradually, the size of your bougie.

There are, however, some cases which are much more perplexing. In the case I have already spoken of, I have supposed the ulcer confined to the margin; but it may be the whole glans that has ulcerated and sloughed away; and, then, as the part heals, it leaves the orifice very much contracted; the pressure, at the same time, forms adhesions to the ulcerated surface where the glans was, and it is exceedingly difficult under these circumstances to find the orifice of the urethra. The late Mr. Ewbank (at that time assistant-surgeon, but afterwards surgeon to this Hospital) took me to see a case of this kind, the first I had ever seen. I took with me some bougies, expecting to find a common case of stricture; but, on examination, I found the prepuce could not be drawn back. On enquiring into the history of the case, I found that some time previously there had been a phagedænic ulcer there, the consequence of which was that the prepuce projected beyond the end of the penis, adhering firmly to every part of the glans, which caused the urethra to be so contracted at its orifice, that the water only came away in drops; and after this it became entirely closed, so that he could not make water at all. I attempted to find the orifice, by opening the prepuce, but it was like looking into a well. I then examined it with a probe, and found in some parts it would not enter at all; but, in others, I could pass it down some distance; here, then, I laid it open as far as it did not adhere; this exposed an irregular surface, and even then it was with great difficulty I discovered the orifice of the urethra which was not larger than a pin's head, and the point of the probe would not enter; I went home, and obtained an Ell's probe, such as is used in diseases of the lachrymal organs; this I introduced, and by gently dilating the orifice, was enabled afterwards to pass in a small probe, gradually increasing its size at each succeeding application, till I could pass a catheter, which enabled the patient to make water, but he did not recover. The continued retention had produced secondary disease of which he died. I have seen some other cases of a similar character since. Contraction of the orifice of the urethra is sometimes congenital; and I have seen cases where it has been in combination with natural phymosis. A child, perhaps, has a very small orifice to his urethra, so that he makes water with considerable difficulty; cheesy matter is deposited between the glans and prepuce, producing adhesion in all parts between them; this of itself is sufficient to produce the symptoms in question. A case occurred some years ago, where I had the opportunity of watching it for a very long time. The patient was between forty and fifty years of age, when he first consulted me: the contraction had existed from birth, and had been neglected; with some difficulty, I introduced a small bougie and afterwards taught him to do it himself; this at first produced pain and slight inflammation, which, however, soon went off, and then so long as he steadily persevered in its use he went on very well; but he neglected himself, and many years after, I saw him again; but then I found a warty excrescence at the end of the penis, a kind of fungous growth. This continued to enlarge till it occupied the whole of the glans, and then put on the appearance of malignant disease: in short it was malignant. I amputated the penis, but it was to late; the glands in the groin became similarly affected, and the patient died. It is not uncommon for malignant disease to follow long-continued, local irritation, and it appears to me that any part so affected may become the seat of actual malignant disease. I have seen many examples of this kind; and it serves to teach us that even simple things should not be allowed to pass too long, without some means being resorted to for their removal. A man came to this hospital with a sore leg, the part being covered with what is commonly called "proud flesh;" this had existed a long time, and I was obliged (before I could permanently cure this patient) to remove a portion of the tibia. Another case came under my notice of a patient who had suffered many years with fistula in perinæo; when I came to examine it, I found that what had been merely fistulous had now become actually malignant—carcinomatous, and he died from this disease, which spread so as to include the scrotum, and also the corpora cavernosa penis. The urethra may become contracted from other causes, and apparently without any reason become gristly, or cartilaginous, and entirely lose its natural appearance. This is not at all a common affection; the treatment when it does occur is very simple, but I am sorry to say not very effectual; simple, because there is only one thing can be done for it, viz, to dilate the orifice with a bougie, or if necessary, a sharp pointed bistoury; but this should not be done too freely, as you can never overcome the tendency to contraction when once it has occurred. There are some cases, in which the mucous membrane lining the urethra is thickened; but in these the disposition to contract is not at the orifice of the canal, but extends one or two inches down it; it appears as if there were chronic inflammation of the mucous membrane, going on to the deposition of pus,—purulent discharge; the stream of water gradually contracts, and if you feel the urethra through the corpus spongiosum, it is like a hard cord under the penis. In this manner, the canal may be contracted along one and a-half or two inches. These cases are somewhat troublesome to manage; the urethra goes on contracting, and you must constantly use a bougie to prevent it; but if you use one beyond a certain size, you will bring on a fresh attack of inflammation, and when this has subsided, you will find the contraction greater than it was before. It should be of such a size as not to give the patient much pain, and should be introduced every day very cautiously. In some cases a very good effect is obtained from the application of dilute mercurial ointment, or the citrine ointment (ung. hyd. nitratis.). I have also injected a solution of nitrate of silver (gr.ij.ad aquæ ʒj.) by means of a syringe having a long silver tube, with an eye at the end on either side, the same as a catheter. I was led to employ this latter remedy, from seeing its good effect in chronic inflammation of the conjunctiva and puncta lachrymalia; the question occurred to me: if it relieves inflammation of one mucous membrane, will it not be equally efficacious when applied to any other? There is another variety of contraction in the urethra, differing from those I have already mentioned. It occurs about midway between the orifice and membranous part of the urethra, and does not appear to be preceded by inflammation; all the patient observes is that the stream gets smaller, and a degree of hardness is felt when the part is examined. The contraction in these cases may occupy a considerable part of the canal, but, generally, the constriction is limited to a small space, giving the appearance of two funnels joined together at their small extremities. This form of the disease is easily distinguished from common stricture, as I shall presently explain. The cause of this is the same as that which produces stricture of the rectum or œsophagus. Probably the contraction of the lachrymal duct, producing fistula lachrymalis, is owing to the same cause. It appears to be the result of inflammation, but not its primary effect; the inflammation subsides, leaving the parts divested of their former elasticity. The disease may go so far as to produce complete retention of urine; and when this occurs, a very remarkable effect is occasionally produced: the urethra behind the constricted part becomes dilated to three or four times its natural size, so that, when the bladder contracts, the urine is received into and contained by this pouch. A gentleman consulted me some time ago, who had precisely the symptoms I have been describing; he had not passed any water for some days, and there was a large tumour behind the scrotum, containing fluid. I punctured it with a lancet, and out flowed the urine. I then proceeded to dilate the urethra. The pouch in this instance was as large as a second bladder. The dilatation in these cases is very difficult, though apparently more simple than when the stricture is further back; they are much more difficult to cure; in fact, the disease cannot be permanently relieved. The symptoms may be kept back a little by the daily introduction of a small bougie, but even its good effects are soon lost, and the symptoms return with equal severity.

WHAT IS THE VALUE OF LIEBIG'S THEORIES?

By Professor Schulz, of the University of Berlin.

(Continued from Page 180.)

I have shown in my pamphlet "Über Verjüngung," what enormous quantities of fat are formed in the intestinal canal, out of substances containing no fat; we have not the slightest proof of any change in respiration being connected with the formation of fat. The repose of animals rather affects their digestion than their respiration; besides, according to Liebig, respiration ought here to have a negative effect, and prevent the

excess of carbon being consumed. His hypothesis does not satisfactorily explain how fat is formed at all. In the second part of his book, "The transformation of Structures," he treats on the different chemical metamorphoses of proteïne, a substance which, on the groundwork of Mulder's researches, he endeavours to establish as the basis of all organic structures. Mulder found that caseine, albumen or fibrine, when dissolved in a ley of potash, and then treated with acetic acid, precipitate a substance which is perfectly similar, though obtained from any of the above three substances; so that their modifications only arise from the different quantity of ashes, of sulphur, and phosphorus, which these albuminous structures contain with the proteïne. Hence, by mere hypothetical calculations, Liebig attempts to prove, that most of the animal structures, viz.:—the glutinous (cellular) tissue, the muscular substance, the bile, the callous and cartilaginous substances, are mere modifications of proteïne, arising from small changes in the proportions of the constituents. Thus, proteïne consists of C^{48}, H^{72}, N^{12}, O^{14}; the arterial membrane of C^{48}, H^{76}, N^{12}, O^{16}; the feathers of C^{48}, H^{78}, N^{14}, O^{16}. Blood, composed in a similar manner to proteïne, contains the elements necessary for the formation of all these structures. It is true, Liebig would not have these comparisons remain an idle play of formulæ; but they afford no other light to physiology (for which they are particularly intended), than the fact so often and often repeated, that all organic structures, chemically analysed, are shown to be composed of carbon, hydrogen, oxygen, and nitrogen. The true difference of organic structures, does not arise from a different chemical composition, but from different organic forms, as the globular, the tabular, the thread-like form, &c. An indifferent substance, as albumen, forms certainly the base of all organic matter; still it is not this substance which fixes the peculiarity of individual life, but *its form*. Liebig imagines he utters a new theory, when he maintains that azotic remedies operate upon the nerves and brain, because their elements take part in the chemical process of nervous transformation. But this reference to the constituents of remedies has been repeated again and again; wholeworks on materia medica have based their classifications on it, but not one step was the science advanced by any such course. Professor Liebig's great achievement this way, is on the operation of quinine, on which his theory, he thinks, was never guessed at by preceding inquirers. But this view of matter teaches no more about it, than we knew formerly, and would leave us without any insight into the operation of quinine, if Liebig's hypothesis, as to azotic remedies acting on azotic structures, were the only light thrown on the subject. The apparent operation spoken of is nothing but organic excitement, and is very far from being occasioned by the remedy's chemical constituents. The elementary composition may be very different, without any change in vital excitement. It is on this account, the chemical analyses of the same organic structures give such different results, as regards the proportions of the constituent elements. Thus, the quality of meat and fat is different in those pigs fed with acorns—different in those fed with peas, and in those fed with potatoes. Though the food does not influence the organic vital irritability, the proportions of the chemical constituents must naturally be different in the fluid fat generated by feeding with acorns, from that produced by feeding with peas.

"In the third part, entitled, "On the Motions of the Animal Organism," Liebig seeks the primary cause of motor power in the chemical organic transformation. In the same way, in which galvanism, formed by the contact of two metallic plates with an acid, depends on the continuation of chemical action: vital power is, according to Liebig, dependent on the organic transformation, chiefly performed by the chemical action of oxygen. "Change of matter, mechanical exertion and absorption of oxygen, are so intimately connected with each other in the animal body, that the amount of motion, and the amount of transformed living matter, can be calculated to exist, in the same proportion as a certain quantity of oxygen absorbed is consumed in a given time by the organism." And again, "all parts of the animal body, destined by nature for transformation, are intersected in all directions by canals, which circulate a stream of oxygen in the form of arterial blood, necessary for the elimination of organic parts." Occasionally Liebig exerts himself to explain things, which are empirically false. Thus he believes no motor power to exist in the cellular organs, skin, &c. He does not seem to know of the turgor, the contractions, and the fimbriating movement. According to him, these organs (which certainly move themselves, though Liebig is not aware of the fact) are without motor power, because they do not come in contact with arterial blood! Life consists, according to Liebig, in "a consumption and supply of substances by transformation. Since different individuals consume different quantities of their bodily organs, a state is produced (?) in which the voluntary motions are suppressed, no consumption taking place for them, and this state is sleep!" In waking, the equilibrium between consumption and supply is restored. As he thus gives us the *chemistry of sleep*, he also favours us with the *chemistry of fainting*, of *paralysis*, &c. "Heat accelerates the transformation of living parts, therefore it creates an increase of bulk, and of vital power, in the different ages of man. Cold, on the contrary, checks transformation." This furnishes us with the chemistry of growth in youth—of decline in old age. Liebig favours us also with the *chemistry of disease*. Disease is a disturbed equilibrium between supply and consumption, or an abnormal state of supply and consumption. As concerning the normal transformation, Liebig compares man to an oven which is to be heated; for disease, Liebig uses the comparison of steam-engines, which regulate themselves. "If, in determination of blood to the head, extreme heat occasions an anomalous transformation in the brain, use is made of cold water, to cool the heat, and moderate the process of transformation; just as the tension of the steam-boiler diminishes by lowering the temperature. If, in consequence of diseased transformation, a greater quantity of force is produced, than the performance of normal motions requires, the involuntary motions are accelerated, and fever is thus produced. When the excess of force, created by transformation, falls upon the voluntary motions, a paroxysm of fever arises." In all this, Liebig overlooks the circumstance: first—that fever does not only consist in accelerated involuntary motions; secondly—that some involuntary movements are not accelerated; for, if those of the heart are, those of the intestinal canal are not; and thirdly—that the paroxysm is something very different from accelerated voluntary movements. Finally, we get *the chemical theory of respiration*. It is based upon the existence of iron in the blood, and the change of matter produced by the mutual action between the blood and atmospheric oxygen. Liebig says: "the molecules of arterial blood contain a combination of iron, saturated with oxygen. In passing through the capillary vessels, this compound of iron gives off part of its oxygen to certain constituents of the animal body, to produce transformation and secretion. The greater part of the oxygen combines with those substances of the animal body, which have become divested of vitality, and escapes with them from the organism. In its way, from the capillary vessels to the heart, the compound of iron, after having given off the oxygen, absorbs carbonic acid gas; by this means, blood is changed into venous blood, and arrives as such in the lungs. Here, the organic compound of iron has restored to it the lost oxygen, and in consequence carbonic acid is eliminated from the blood. All those constituents of the venous blood, which have an affinity to oxygen, are transformed into higher combinations of oxygen; a quantity of carbonic acid is thus formed, part of which is always retained in the blood. This carbonic acid is partly combined with soda, and is alike in both kinds of blood, because they have the same temperature (a mistake: for the arterial blood is from one to two degrees warmer); but, in arterial blood, which receives oxygen, more carbonic acid can be produced." Thus, Liebig demonstrates two processes of oxydation: the one in the lungs, by which the temperature of the lungs is maintained; and the other in the circumference of the body, by which the temperature of the body is maintained. Both processes are conducted by the iron.

To this, Liebig adds calculations on the quantity of iron contained in the blood, which quantity is more than sufficient to absorb the oxygen received; and then follow his observations on the deadly effect of prussic acid, which consists, as he says, in the combination and decomposition taking place between the compound of iron in the blood, on the one hand, and the constituents of prussic acid on the other; by which processes an alkalinity of blood is produced, and in consequence an inability of absorbing any more oxygen. Liebig seems to assume, here, the formation of a sort of Prussian blue, or of cyanuret of iron and potassium, and to overlook the fact that the hydrocyanates are as poisonous as the hydrocyanic acid itself, even where they cannot disturb the combination of iron contained in the blood.

Now, physiological researches show that the absorption of oxygen, by the blood-vessels, does not at all proceed from chemical substances contained in the blood (which could only be its cruor), but solely from the living contractility of the vesicular membranes, which enclose the cruor. Physiological researches show, furthermore, that the formation of cruor in the vesicles is only an effect and consequence of the absorption of oxygen; for the vesicles, colourless, and certainly containing no iron at first, are only reddened by the absorption of oxygen. We have shown this clearly in our work "On the circulation of the different animals," when treating on the history of the development of blood-vessels. Nay, I have further shown, *that the ability of absorbing oxygen diminishes in the older vesicles, in the same proportion in which cruor and iron increase; thus, those vesicles, which, according to Liebig's theory, ought to have the greater power of absorbing oxygen, because they contain the greatest quantity of iron, have precisely the least, and ultimately no more power at all, of absorbing oxygen.* All these hypotheses of the Giessen chemist neglect the fact, that the human body would deliquesce like a solution of salt, or sink like some pappy compound, if it consisted only of substances without organic forms, and that the organic form is the very cause of all vital functions. They, further, overlook that all substances, furnished to the body, must first lose their qualities as *matter*, and be assimilated to organic form, before the body can be nourished by them. It is only when life has fled, and organic form has become annihilated, that the properties of matter re-appear. Thus, the absorption of oxygen in the lungs, and the reception of food, do not produce life, as Liebig supposes, by change of matter; but the automatic excitement of organic form occasions their reception and consumption. Inasmuch as transformation takes place in the beginning and end of life—we must conclude that *this is the effect and consequence, but not the cause of vital power*. We must not obstinately shut our eyes to the great fact, that, whenever we undertake a chemical experiment with an organic structure, the organic form is annihilated, and thus no more vital excitement takes place; that it is, on the other hand, impossible to elicit a living effect from any chemical substance. From the circumstance, that chemical phenomena are connected with life, we are led into the erroneous belief, that these phenomena constitute life itself, whilst life is only an endless arrangement of them. There is a constant struggle between life and death—a battle between the body and external agencies, in the process of assimilation. The essence of life does not lie in the bodies' importation and exportation of external substances: it precedes, and is superior to that.

(To be continued.)

Obituary.—On the 29th April, at Bombay, James Drummond Campbell, aged 27, assistant-surgeon in the Hon. East India Co.'s Service.

LACERATIONS, &c. OF THE PERINÆUM.

By CHARLES CLAY, Member of the Royal College of Physicians, London, Graduate of Edinburgh, Author of "Peritoneal Sections," and Lecturer on Medical Jurisprudence, &c., Manchester.

On the question—Is artificial support to the perinæum necessary or advisable during the last stage of labour? if so, how should it be applied? and if not, what other means should be substituted for it?

This is a question of much greater importance to the practical accoucheur than would generally appear at the first consideration of the subject; and, perhaps, I may be deemed presumptious in attempting to advise a course, the very opposite to that which has been, and is now pursued by the ablest practitioners in this department of medicine. Before canvassing, however, the merits of the real question about to be considered, I will endeavour briefly to sketch a few particulars respecting the nature of the injuries to which the perinæum and parts immediately adjacent are particularly liable, as well as the causes which have led to the injuries *which artificial support is said in a great measure to be successful in preventing.* Before giving my own opinions, I shall here transcribe a somewhat long paragraph from my favourite author, Velpeau, abridged from his celebrated work, entitled, "Traité Complet De L'Art Des Accouchemens." I do this *first*, because there is no translation of this excellent work into the English language, valuable and important as it is; *secondly*, because, by giving an outline of Velpeau's details on any subject, I give a correct and elaborate essay of all that is required to be known on those subjects which he has treated; and *thirdly*, because his own opinions are exceedingly valuable, and founded on long experience and deep investigation.

In turning to most authors on midwifery, (and I have access to a considerable number), I find that lacerations and perforations of the perinæum during labour, are considered as of frequent occurrence in practice; and I lament to find that the great improvements in modern obstetrics do not seem (as in other instances) to have lessened the prevalence. It is this still existing frequency of the accident, which has rendered the questions appended to this article not only justifiable, but imperativelynecessary; not the slightest doubt existing in my mind, but that if the truth could be fairly investigated, it would be found that a vast majority, I might say, nearly the whole of such cases owe their origin to the undue, mistimed, and improper interference of the party assisting, which I shall prove, ere I conclude, I hope to the satisfaction of the reader. In the system of midwifery, just published by Messrs. Campbell, of Edinburgh, it is broadly asserted, page 395, edit. 1843, that "*this is one of the most frequent accidents in the puerperal state.*" I have no doubt of the fact; and I am also equally certain, that the accident *is more frequent now than formerly, when the efforts of nature were left more to themselves*, perhaps, through the timidity or desire of non-interference of practitioners in former days, which, after all, is much better than the too forward, officious zeal, of some modern practitioners, who value their time at a higher ratio, and commit outrages against nature by dictating to, and rendering assistance, before it is duly and truly required.

One thing is certain: the accident ought not to be as prevalent as it is, and where it does occur, with a few very rare exceptions, it is a proof of bad practice.—One short quotation from the work of Messrs. Campbell of Edinburgh, page 238. "It is very well known to everyone who has practised extensively, that the perinæum has been injured under the utmost caution and most judicious management; while it is no less true that it has often escaped unhurt, even when it must have been utterly neglected, as in females who have brought forth without assistance. What conclusion is to be deduced from these facts? Simply this: that if the patient were to control her exertions, as is often done by females producing illegitimate children, the accident would be of very rare occurrence, whether support were afforded to the part or not. The circumstance of those who are assisted, meeting with the accident, and of women delivered alone escaping it, proves pretty clearly that injudicious efforts on the part of the patient form the most frequent cause. What takes place during the delivery of each of these classes, affords further support to this opinion. *Females who are assisted, exert themselves to the utmost of their power* during the pains, totally regardless whether their struggles may be heard or not, whereby the passages are hurriedly, or prematurely distended, and the accident in question is very liable to be produced. The mothers of illegitimate births are those who bring forth unassisted, and to preserve their character have good cause for concealing their situation; they, therefore, bear the child under restraint; or, in other words, with a view to conceal their indiscretion, they do not exert their propelling powers so energetically as the mothers of legitimate infants, so that in them the external orifice is dilated with slow and uniform gradation; and, consequently, with less risk of injury." I introduce this quotation to show that, as regards the fact of the frequency or non-frequency of this accident in the different classes alluded to, the authors are perfectly right; but in their endeavours to attribute the mischief to the women themselves, they entirely overlook officious interference as a cause, though the fact is inadvertently admitted in the quotation just given: "Females who are assisted, exert themselves to the utmost of their power," and why? because the meddlesome midwife or ignorant practitioner, by endeavouring to assist prematurely, is constantly provoking unnecessary pains, and calling forth the most violent exertions of the female prematurely, and though she may have *had frequent labours* before, yet laceration is the consequence. On the contrary, females (mothers of illegitimate children) chiefly first pregnancies, are often in the vigour of youth, or pretty far advanced in life, before the misfortune happens; in either case, the parts are often disposed to rigidity, *yet, in secret, and without any assistance, they rarely, if ever, suffer from lacerations.* I think, too, the argument of not exerting themselves too violently, goes for nothing; it is evident the exertion is sufficient for the accomplishment of the purpose in their cases; and every one knows that in labours those make the most noise and exert themselves most energetically are they who are least experienced in the matter, *as in first labours particularly;* and, however great the wish of concealment, the violence of pain will betray them except in very few instances indeed, which may form exceptions, as there always will be to general rules. But what is still more remarkable in the earlier authorities on midwifery, is that we find little on this subject, and, in many such, injuries are never mentioned at all, not because they had any desire to conceal their mal-praetice, for, in other instances, (and it is right to reason from analogy,) they are even more explicit and candid as to their faults in practice than the moderns. But, to proceed more strictly with the arrangement I proposed to myself on sitting down to this article, I shall now give the substance of what the celebrated Velpeau says, in reference to this interesting subject, in his second volume, Traitè Complet de l'Art des Accouchements, at page 631; under the head of "Déchirures du périnée," he makes the following observations, which well deserve the attention of the reader.

"*Laecrations of the Perinæum.*—Under this head are usually considered, not only lacerations of the true perinæum, but also injuries of the vaginal coats, along with perforations of the perinæum. By lacerations are meant tearings from the edge of the sphincter ani, or vaginal edge, towards the centre of the membrane, termed the perinæum; whereas perforations are when the centre of the membrane gives way, by a solution of continuity, leaving the edge of the vaginal entrance and the sphincter ani entire. I shall speak of one as of laecerations, and with M. Moreau use the word perforations for the other. 1st, as to perforations. Central rupture of the perinæum, in other words, perforation, was first observed by Harvey in a mare belonging to the Queen of England; then again by Bianchi in a woman who had suffered from disease of the vagina; also a case by Violet, which, in 1829, gave rise to no little dispute among the French practitioners. Many other cases are related, but not sufficiently authenticated. Some practitioners are of opinion that this species of injury is scarcely possible during labour. M. Capuron has maintained, and continues to do so, that no case has yet been known to establish the fact of the fœtus being expelled through the perforation, instead of the vaginal opening. At first sight, it certainly does appear difficult to conceive that the perinæum which, in its natural state, is not more than an inch, or, at most, an inch and a half in length, should, by perforation, present an opening of sufficient magnitude to allow the head and shoulders of a full grown fœtus to pass through, and yet the vaginal edge and sphincter ani to remain entire; but it only requires a little reflection to admit that such is possible. The perinæum is capable of immense extension. Aecoucheurs know well that, in the last stage of labour, it is so much extended as to form a cap-like covering to nearly the whole head or breech of the child. At such a moment, should a rupture take place in the centre of the perinæum, the opening would suddenly extend in every direction so as to allow the head or breech to pass through, a circumstance equally as reasonable as the passage of the head or breech through the vagina, which often offers quite as much, if not more, resistance.

"M. Capuron was not correct in stating that the central opening in the perinæum, was not of sufficient extent to admit the passage of a child through it; but, as the wound enlarges in every direction to a very great extent, his mere assertion is of little value. M. Capuron further states, that perforation of the perinæum has only been seen by practitioners after delivery, and desires the further evidence of persons of eminence worthy of credit as to the passing of the child through this opening. On this ground I am able to confute his argument. If a person sees a case of perforation, such as that described, and the umbilical cord passing through it, and drawn away through it, there is every reason to suppose that the delivery of the child was through the same opening. For, if the perinæum be once perforated in the manner above described, I cannot conceive how even M. Capuron himself *could effect the delivery of the child through the vaginal outlet.* But there are also facts and cases, well authenticated, of this rupture, with men of known talents. I will here give an example in my own practice. Madame B. B., Rue Voltaire, had been in labour since the preceding evening; I was sent for at five o'clock in the morning, Jan. 24th, 1825; it was her first labour; the pains had been moderate from six o'clock up to midnight; at two o'clock they were intense, at which time the head was in the pelvic cavity; the midwife, observing that the head was emerging, as she thought, from the anus, endeavoured all she could for an hour, to prevent its exit there, and push it in the right direction, sustaining the part she concluded as perinæum with all her strength. The perforation, however, was complete; and when I arrived, and caused the midwife to withdraw her hand, I saw the whole of the vertex of the child's head had already passed through the perinæal opening in the first position, and was immediately followed by the whole body, which was that of a fine healthy boy. The vaginal entrance was closed, and the cord lying through the perforated opening; and through the same opening, I completed the delivery. Before the head fairly emerged, it appeared as though it was escaping by the anus; the vaginal edge was rigid and thick; but, after delivery, when the parts had somewhat of their natural appearance, it was plain that the sphincter ani had not suffered any solution of continuity, and the edge next the vagina was equally complete; the fringed, ragged, unequal wound was convex in appearance, a little inclining to the right, and nearer to the anus than the opposite extremity of the perinæum. I prescribed rest, lying on the side, lotions of marsh mallow. No dressings were applied, and, by the 18th day, the wound was completely cicatrised. Madame B. became again pregnant; and, the year following, was delivered without the least accident, not requiring any assistance, the child being born before the husband could procure any attendance.

"M. Coster has since communicated to me a similar case; the woman aged 23. The child, of a moderate size, was quickly expelled through the

perinæum, during a violent pain: a thick band, equal to the finger in size, was between the head and the vaginal opening, which disappeared on the parts recovering from the accident.

"B. Coutouly, M. Evrat, and M. Joubert have also had similar cases which they have published. —Nedey, Denman, M. Champenois, M. P. Guersent, M. Francou, and some other authors, have not been able to give undeniable proof of the fact at the time of labour, but no more details are desired on this point; it is not possible to deny the precision of their observations, nor need we give a great number of other examples. Thiébault has observed it in the case of a woman, a patient of his own. Meckel had a case in 1811; Merriman another in 1816. Other cases were published by Douglas in 1822; by Frank and by M. Master, in 1823; by Gravis, Lebrun, M. Moschner, M. M. Jungueman, Blundell, Ryan, Dupuy, Hernu, Dupareque, and Trinchinetti, making no less than thirty cases of the passage of the child through perforations in the perinæum, without laceration of the sphincter ani, or vaginal edge of the perinæum: sufficient evidence to decide the question of the fact, on which any further discussion is useless.

"The causes of this accident have been well exposed by M. Moreau, viz.: the too sudden evolution of the head from the pelvic cavity, in too straight a line, that is, not conformable to the sacro-vertebral curvature; ossification of the coccyx; contracted pubic arch, and great length of the symphysis pubis; tumefaction of the labia; morbid length and rigidity of the perinæum; narrowness of the pelvic basin; violent efforts of the female; sudden descents of the head; other parts accompanying the head, as the hand, or foot, and even shoulder or foot presentations, as in the case of M. Dupuy; in one word, everything which may obstruct the proper movement of the head through the pelvis, in its proper axis, or have a tendency to force it in some other direction."

The author then proceeds to the prognosis, and treatment of perforations, into which it will be unnecessary to follow him, at least at the present stage of our inquiry, and I shall next turn my attention to the injuries more strictly termed lacerations.

(To be continued.)

PARISIAN INTELLIGENCE.

(FROM OUR OWN CORRESPONDENT.)

Paris, June 6, 1844.

On Sub-cutaneous Surgery.—By Dr. Jules Guerin, M.A.M., &c. *Introductory Lecture.* (Continued.)—II. *Practical part.* The scientific part, which I indicated in a summary manner, may, perhaps, be considered by some persons merely as a programme of curious researches, interesting in a speculative point of view; because, in their opinion, whatever does not produce an immediate practical application, or cannot be converted into hard cash, seems to be of very doubtful utility. But this ought not to be. The gold contained in the alloy is without value to those who cannot recognize it, fashion it into shape, or who are ignorant of its use. Fortunately, besides its theoretical and speculative considerations, the sub-cutaneous method presents useful and perfectly practical results; and we may expect still more than have as yet been realized, when we reflect on what it has already produced. But, before going further, it may not be uninteresting to shew the affinity of the practical with the purely scientific part; and let me state, before-hand, that he who wishes to learn and employ advantageously the sub-cutaneous method, even in its practical point of view, must not expect to succeed if he is not initiated into all the peculiarities which form the basis of the science. In my opinion, the practical part cannot be separated from the scientific; and, in general, this fact is neglected in the different branches of the healing art. Practice, disengaged from science, acquires nought but arbitrary conclusions, and ill-grounded maxims, forming, in reality, a sterile and dead letter. The empirical and common employment of a method always betrays him who makes use of it, without understanding it; and the disadvantages, which result therefrom, cause not only a failure to the operator, but likewise a discredit to the art. I cannot resist quoting an example in illustration, one quite conclusive. The operation for strabismus is unquestionably the most brilliant and the most positive of all that have been proposed in myotomy, as it fully justifies all the theoretical inductions, and realizes completely all the promises held out. Notwithstanding, what has taken place? this method, adopted in ill-suited cases, and by incompetent operators, has produced cruel deceptions. It was supposed that, in strabismus, the division of the muscles ought to be performed constantly in the same way, (and that, perhaps, not the best) in all cases, and at every stage, and that this was enough to effect a cure. What happened? frequent failures, and but few *half* cures: and these increasing in a direct ratio with the number of persons who operated, without being acquainted with the principles, rules, and preliminary precautions of the operation, and who thus ended in discrediting the method altogether. And what is the opinion generally received, not only in society, but likewise among physicians and surgeons?—that the cure of strabismus is a deception. Nay, more; the practitioners who devote conscientiously their existence to the study of the theory and practice of this branch, are freely accused of quackery and imposture, and, if needful, the failures resulting from empirical treatment, are quoted as proofs.

The practical part, alone, of the sub-cutaneous method, cannot be of great utility; it is the rules without the principles; it is the empiricism, the routine, and what is shallowest and least certain. The basis of this method is, that immediate organization takes place in tissues when they are kept from the contact of the air, and the end to be attained is thus evidently indicated. All our efforts must tend, therefore, to prevent wounds from communicating with the atmosphere, and all our modes of operating must be directed in consequence. I shall, therefore, abstract from my scientific researches the principles and rules of the method, in order to render the practical part equal to the scientific. But, as you will remark that the phenomena of immediate organization differ in each series, in each application of the principles, although the result be the same in all; so you will perceive the rules peculiar to each differ according to circumstances, but through which the end to be attained will invariably be pursued. The didactic exposition of the general rules of the method will, therefore, be followed by those peculiar to each operation; a great number of which may be indicated at once. They may be included under two heads, *incisions and tapping*: or those performed on solid tissues, or in liquid effusions. These divisions are the same as those indicated in studying the scientific part of our subject, i.e.: the sub-cutaneous division of tissues, or penetration into the different cavities; or, in other words, the consideration of the non-inflammation of the divided tissues, and the unalterableness of the effused liquids.

Under the first head, and in following an anatomical order, I will mention,—*Skin*:—The division in cases of abnormal adherences, or cicatrices—*Tendons*: Their division, 1°, to remedy deformities; 2°, to facilitate the reduction of long standing, or recent luxations, and of fractures.—*Aponeuroses*: Their division, 1°, as an orthopœdic method; 2°, as a means of relaxing the parts in inflammatory engorgements, or effusions.—*Muscles*: Their division, 1°, as an orthopœdic method; 2°, as a means of facilitating the reduction of recent luxations, or fractures; 3°, in a more special point of view--the reduction of strangulated hernia; 4°, for the radical cure of hernia; 5°, the division of the sphincter in cases of fistula in ano; 6°, their sub-cutaneous cauterization as a means of obtaining artificial contraction.—*Ligaments*: Their division, 1° as an orthopœdic method; 2° as a means of obtaining the reduction of certain recent luxations, or fractures; 3° their cauterization, or calefaction, as a means of shortening, or strengthening them.—*Arteries*: 1° sub-cutaneous scarification, or cauterization, of certain fungous tumours; 2° obliteration by division, scarification, or puncture; 3° sub-cutaneous ligature.—*Veins*: 1° sub-cutaneous scarification, or division, in varix, and its different varieties; 2° ligature.—*Lymphatic vessels and ganglions*: division of the vessels as a preservative treatment in bubo; division and scarification in old-standing hypertrophy of the ganglions.—*Nerves*: 1° sub-cutaneous division of the trunks or branches in neuralgia; 2° sub-cutaneous scarifications of the minute branches in cases of severe pains in the tegumentary surface; 3° sub-cutaneous cauterization, or calefaction of certain nerves in certain affections, as in arthralgia, and similar pathological states.—*Cartilages*: sub-cutaneous symphysiotomy.—*Bones*: 1° the sub-cutaneous removal of small exostoses; 2° sub-cutaneous fractures, performed in order to remedy certain deformities from abnormal callus; 3° removal of splinters, resection of pointed extremities of fractures, which, in recent cases, threaten to pierce the skin; 4° scarifications of the surfaces of tumefied, engorged, osseous extremities; 5° cauterization, or calefaction of the same; 6° extirpation of osseous tumours. Under the second head, I will mention: 1° sub-cutaneous puncture and incision of phlegmon in its first stage, with the intent of preventing its development; 2° the puncture and voiding of meliceris, with scarification of the cyst. These two may be considered, to a certain degree, as an intermediate operation between those performed on solids and those on liquids. 3° Sub-cutaneous puncture and evacuation of chronic abscesses; 4° sub-cutaneous puncture and evacuation of psoas abscesses; 5° of sanguineous tumours, or serous effusions, formed after a sub-cutaneous operation, or violent blows, and especially in *cephalotomie*; 6° of hydarthrosis; 7° the puncture, evacuation, and scarification of synovial cysts, and other articular swellings; 8° extraction of foreign bodies from the articulations; 9° radical cure of hydrocele and hæmatocele; 10° tapping in hydrocephalus; 11° tapping of hydro-rachidian tumours, in new-born babes; 12° Operation of empyema, and tapping in hydro-carditis; 13° tapping and evacuation of tumours in the liver, the ovaries, and other abdominal cysts; 14° finally, numerous other operations, which cannot be performed by divisions or puncture, but which, to a certain degree, may reap benefit from the advantages attendant on this method. Among these, I will mention the Cæsarian section; and, however extraordinary this may appear, I trust to be able to shew that it is not groundless. This is the programme of the practical part of these lectures; greater developments are unnecessary to establish the possibility and the efficacy of this method, and I will now explain the mode in which I intend exposing, discussing, and proving, the various scientific and practical parts which form the basis of these conferences.

III. The study of each of the above divisions comprises: 1° *A short history*—2° *A didactic description*—3° *An experimental or clinical demonstration.*—A few words will point out the utility of these divisions, and the mode I intend following in developing them.—1° *History.* However new a subject may be, it cannot be without a precedent in the science. Its preliminaries have often a very distant analogy with it, and more apparent than real. Without saying how far this may be the case in respect to the sub-cutaneous method, it is evidently submitted to the same law; it is, therefore, necessary not to omit examining the facts, traditions, and opinions, which have been advanced in past times. This is useful, whether we examine the method in a general or special point of view: in its scientific or practical parts. It is not necessary to lay greater stress on this fact to point out its utility—such is now generally adopted; and that is sufficient. Certain circumstances, however, will make us attach more value to the precise knowledge of the history of each question. I will only mention the two following:—1° The want of a rigorous determination, as to what has been previously attempted in any method, leads to error; all to the detriment of science and its followers. An experiment, a method, a process, are supposed to be analagous to such as have failed formerly; this is sufficient to damn beforehand the innovation, under the plea that it

is but a repetition of an attempt already made to no purpose. This motive of opposition comes naturally to the aid of that, which is with difficulty averted from any new step made in medicine. Science feels the first shock; as long as the error lasts, the innovation is kept in suspense. And now we turn to the *savant:* the pretension of his having found, in a former mistake, present truth, doubly deprives him of the merit of the innovation; he has invented nothing; he has reproduced but an error. Now, however minor the interest attached to the individual may be, in respect to that of science, still it is sufficient to augment the utility of giving a good history. 2° One of the principal objects in a science, is to class the knowledge acquired; now this can be attained but by an exact and precise knowledge of its history. Each question has its own bearings; and if care is not taken, on each addition or correction, to mark the precise resemblance and difference, a confusion will arise which in its consequences merits attention, and of which examples are not wanting. Thus, to favour progress, to protect the science and the *savant*, and to prepare a proper determination and classification of the materials which compose our art, is sufficient to authorize, if not command, the research for, and the methodical exposition of, the preliminary history of each question. Yet not only these points, but many others, will present themselves during the enumeration of this part. 2° *Didactic Description.* This forms one-half the duty to which the *savant* is subjected. He ought to describe what he does, and how he does it, to give to others the means of controlling and verifying what he advances. This necessitates an exactitude and a precision which must comprise the minutest details of the question. To-day, more perhaps than ever, it is customary to deny the possibility of whatever is contrary to our opinion, and this constitutes an easy and expeditious method of putting aside what displeases us; it is, therefore, highly important to remove every pretext; since those, who seek to find others in fault, have in their own sentiments a cause sufficient to make them err, without adding to it that produced by the insufficiency or error of the description. I will, therefore, endeavour to make this subject as methodical, clear, and exact, as possible. 3° *Experimental or Clinical Demonstration.* This part is the indispensable and natural complement of the two former. Each dogmatic exposition will be followed by a series of experiments on the dead body, on animals, or by operations on the living subject. Moreover, as a proof of the advantages of these operations, I will shew, as often as possible, the patients on whom they were performed.

This is the programme of the facts and opinions, which I purpose passing in review in these lectures. If the developments, into which I have entered, do not render perfectly intelligible the scientific and practical questions which I intend debating, and the mode of propounding and demonstrating them, you will still have been convinced that my efforts will constantly tend: 1° in a *scientific point of view*, to establish a new fact, to lay down its laws, to determine its cause, and to study it in its general consequences; this fact is *the immediate organization of sub-cutaneous wounds*; 2° in *a practical point of view*, to establish the principle and the rules of a method, of which the chief object is to perform as many operations as possible under the skin, so as to prevent the development of suppurative inflammation.

On the Treatment of Phthisis.—Dr. Beau, in an article just published, recommends the following remedies in the different stages of this disorder:—1*st stage.* If there exist neither fever nor any notable symptom of phlegmasia of the pulmonary organs: temporary cauteries under the clavicles, renewed from time to time; sulphurous syrup of tar; Morton's pills; cod liver oil; nourishing food; exercise on horseback and on foot. If there be fever and bronchitis, &c.: tartar emetic and ipecacuanha in small doses, frequently repeated. If there be a slight gastritis, indicated by vomitings, epigastralgia, redness of the tongue, constipation: a white *looch*,* to which may be added ol. ricini ℥j, must be given, by a tablespoonful every hour, until gentle diarrhœa is obtained; as soon as the irritation is allayed, a broth made of calf's lungs, mixed with equal parts of ass's milk, and a jelly made of the lichen islandicus,† may be prescribed; and if the amelioration persist, the following potion may be given:—℞ syrup. catechu., syrup. tolutani, aa ℥ij; extract. cinchon. grs. xviij. M. three tablespoonsful daily; tar-water and the mineral waters of *Eaux Bonnes*, two-thirds or three-fourths, with milk one-third or one-fourth, may be given with advantage.—2*nd stage.* The following palliative medicines may be useful: aquæ distillat. laurocerasi, ℈j—℥j per diem; extr. belladonnæ combined with digitalis; extr. opii. with balsam. tolutan.; emplast. picis burgund., on which a few grains of antimon. tartarizat. or chlorhydrat. ammoniæ may be spread; an analeptic but not stimulating food, if, notwithstanding the fever and diarrhœa, the patient has not lost his appetite, and if his digestive functions are unimpaired.—3*rd stage.* The remedies here employed must be such as will alleviate the paroxysms of suffocation and sustain the forces:—such as diffusible stimulants; dry cupping on the loins, and internal parts of the thighs; mustard pediluvia and manuluvia; tonic and stimulating syrups, of cinchona, of cortex aurantiorum, to which may be added a little syrup. etheris; caudles, with coffee or *anisette* in them; meat jelly; and such like.

On Typhoid Fever.—Since January, this disorder has reigned epidemically in Paris, was at its maximum of intensity in April, and now is beginning to decrease. Though frequent in private practice, it was principally observed in the hospitals; and to such an extent, that at St. Louis and la Salpetriére, it became necessary to augment temporarily the medical wards; and, at the same time, the Hotel Dieu, Charité, and other hospitals, in the interior of Paris, received a far greater number of patients affected with this disorder. This fact may be established beyond a doubt; although, in the present day, many cases are considered as typhoid fever, which formerly would have been classed under the denominations of gastro-enteritis, and other affections. In the present instance, the disease offered certain peculiarities, not generally met with:—1° a catarrhal principle; 2° a bilious or mucous one; 3° a remittent or intermittent form. And, might not this be attributed to the mildness of the winter, and the prevalence during spring of cold damp winds? as may be seen in the following table, where it is evident that the disorder increased in intensity as long as the winds remained westerly, and decreased as soon as they became easterly:—

Months.		East. days	West. days	North. days	South. days	Mean Temp.
Dec.	1843	12	12	7	19	40° F
Jan.	1844	10	18	17	9	37½ F
Feb.	„	5	18	12	14	37½ F
March	„	10	20	10	14	44½ F
April	„	15	9	19	6	54½ F

The symptoms were:—1*st stage.* Cephalalgia; cough; lassitude; frequent shivering fits; anorexia; tongue foul; pain in the bowels; constipation, or slight diarrhœa; facies anxious; pulse frequent, small, feeble; insomnia; febrile exacerbations every evening.—2*nd stage.* They differ here considerably;—in some cases, the patients were seized with furious delirium; face injected and animated; *subsultus tendinum;* excessive irregularity of the pulse; and signs of meningitis;—but, at the same time, other symptoms were observed: tongue moist, foul; breath fetid; petechiæ; lips dry and parched; yellowish tint around the mouth and alæ nasi; exacerbations and remissions of the symptoms of phrenitis; and finally, the face offered the violet colour observed by Stohl in bilious affections. Here, the fatal termination took place on the fifth or sixth day. In others, the disease lasted much longer, and the fever was more violent; the abdominal symptoms predominated; and the patient died worn out on the 40th, 50th, or 60th day, and even later. The treatment differed according to the practitioner; thus, local and general bleedings, purgatives, an expectant or symptomatic method, and emeto-cathartics followed by purgatives; but those which succeeded the best were:—that recommended by M. Sandras at the Hotel Dieu, who prescribed seidlitz-water, in small doses, continued for some time; the mortality was one in seven. A remark made by that practitioner was that, in the *post-mortem* examinations of the patients, who died after twenty-four or twenty-eight days' illness, the ulcerations of Peyer's glands were found cicatrized; consequently, that their lesion could not be considered as the cause of the disease:—that employed by M. Delaroque; the number of patients was sixty; the deaths three; (Jan., 1—in extremis on his entry—Feb., 1—March, 1) or one in twenty, and even one in thirty, for the first death may be excluded. The remedies prescribed were: emeto-cathartics in the commencement of the disease, followed by purgatives, (seidlitz water) given daily until the disease yielded, and finally tonics. But this affection is not the only one which reigned epidemically in Paris; for the last number of the *Annales de Therapeutiques* contains some interesting and useful remarks on an epidemic of erysipelas, which attacked the patients in the surgical wards of the different Parisian hospitals, produced by the slightest contusion or irritation, the opening of an abscess, venesection, &c.; and which in many cases proved fatal. At the Charité, it presented a phlegmonous character; at St. Louis, it was complicated with hospital gangrene. The apparition of this last was preceded by a violent pain in the part; the wound was covered with a greyish, soft, vesicular pseudo-membrane, became fungous, the seat of a bloody suppuration, and cicatrization ceased progressing. Cauterizations made with the nitric oxide of mercury stopped its progress, but the wound healed very slowly. At the Hotel Dieu, venesection was frequently succeeded by phlebitis, or intense erysipelas, which spread itself to the surrounding parts; abscesses followed, which in some cases healed readily, but in others gave rise to erysipelous phlegmon, and sometimes proved fatal. The treatment adopted was antiphlogistic in the generality of cases. Professor Gerdy, at the Charité, scarified the parts deeply, whenever the disease assumed a phlegmonous character, and then prescribed emollient cataplasms, abstinence from food, and cooling tisannes. Professor Blandin used the method described already, (vide *Medical Times*, vol. 9, page 410.) This method failed, notwithstanding, in many cases. "Might not," remarks Dr. Rognetta, "the hyposthenisating method, adopted by the Italian schools, be followed with advantage; in which the nitras potassæ and the sulphas quininæ, conjointly with local bleeding, are employed; the more so, since M. Mojon prescribed with success a strong solution of antimon. tartariz. externally, and sulphas quininæ internally." Dr. Jobert de Lamballe, at St. Louis, employed an ointment containing nitras argenti, in the following proportions:—℞ nitrat. argent. ℥j—℥iij, adipis. ℥j. M.; the parts to be covered with a pretty thick layer each time. The effects of this application were a blackening of the skin and a slight miliary eruption, which soon disappeared. Never any serious accidents.

Academy of Sciences. Sitting of the 3rd June.—M. Elie de Beaumont, V.P., in the Chair. Book received. On the Dinornis, an extinct genus of tridactyle struthious birds, with descriptions of portions of the skeleton of five species, which formerly existed in New Zealand, by Professor Owen, F. R. S., Z. S., &c. (part 1)

Researches on Iodine, by M. Millon; memoir

---

* *White looch.*—℞ Amygdal. dulc. ℥xviij, amygdal. amar. ℥ij, sacchar. alb., ol. amygdal. dul., aq. distill. flor. aurant. aa ℥xvj, pulv. gum. tragacanth, grms. xvj.; aquæ puræ, ℥cxxv. Make an emulsion with the almonds, water, and nearly all the sugar; triturate the gum with the remainder of the sugar; add the almond oil; and afterwards, gradually, the emulsion and the orange flower water, taking care to stir it constantly.

† *Gelatin of lichen islandicus*, composed of pulv. lichen islandicus, ℥ij, sacchar. alb. ℥iv, ichthyocollæ, ℥j.

presented by M. Pelouze, M.A.S. The author studied: 1° the action of nitric acid on iodine; 2° The action of sulphuric acid on iodic acid; 3° Two new compounds of oxygen and iodine. 1° Nitric acid with $4\frac{1}{2}$ equivalents of water dissolves iodine without oxydyzing it; with three equivalents, changes it into iodic acid; with one or two equivalents, forms a new acid, which contains less oxygen than those hitherto discovered, and of which the formula is $I O^4$ (hypo-iodic acid.) 2° M. Gay Lussac asserted that sulphuric acid decomposes iodic acid into iodine and oxygen; H. Davy, that their union gave rise to a yellow compound which he supposed to be formed by the two acids, a fact which the researches of Serullas controverted. Near the boiling point, five parts, in weight, of sulphuric acid dissolve one of iodic acid; but if the mixture is heated still more, pure oxygen is disengaged, and the liquid first assumes a dark yellow colour, which becomes deeper and deeper with the loss of oxygen, and afterwards becomes green so soon as iodine escapes with the oxygen. During the different phases, the following compounds are formed: 1° Several combinations of sulphuric and iodic acids; 2° Combination of the three acids—iodie, hypo-iodic, and sulphuric. 3° Combination of hypo-iodic and sulphuric acid; 4° The union of sulphuric and a peculiar acid containing less oxygen than hypo-iodic acid, represented by the formula $I^5 O^{19}$, and which may be called *sub-hypo-iodic acid*. From this fact, it may be concluded that acids have a tendency to combine with each other as with the different bases; and might not the same result take place among these last? 3° The two new compounds I, O^4 and $I^5 O^{19}$ may be placed beside hypo-chlorie acid, Cl O_4, and chloro-chloric $Cl^3 O^{13}$, and chloro-perchloric acids $Cl^3 O^{17}$.

On Butyrone.—Memoir read by M. G. Chaneel. M. Chevreul obtained, from a dry distillation of butyrate of lime, a volatile aromatic oil, of the odour of the essential oil of the *labiæ*, but in too small a quantity to analyse it. According to M. Læwig, the formula of anhydrous butyric acid is, $C^7 H^6 O^3$; and that, by the distillation of the butyrates, *butyrone* is obtained, formula $C^6 H^6 O$; but the last researches of Messrs. Pelouze and Galis, prove how erroneous this opinion is. When a small quantity of pure anhydrous butyrate of lime *is heated with care*, it is decomposed into carbonic acid, which unites with the lime, and into a volatile oil, which escapes, and which constitutes the butyrone, nearly pure and but slightly coloured; the residue is carbonate of lime, nearly white. If the temperature is raised still more, the gaseous products are from 3 to 4 per cent. of the butyrate; the greater part being composed of biearbonated hydrogen, soluble in sulphuric acid. A remark may here be made, that when anhydrous butyrate of lime is employed, water is never disengaged—a fact the more extraordinary, as in the distillation of animal matter, a certain quantity of water is formed from the elements of the substance itself. By several distillations, 100 parts of anhydrous butyrate of lime gave 42 to 43 parts of impure *butyrone*. This distilled, under 212° and above 352°, two compounds of butyrone, and two peculiar substances, are obtained; and, between the two degrees, butyrone. This substance, distilled anew, is a colourless limpid liquid; having a penetrating smell *sui generis;* hot, pungent taste; density 0·83; boils at 355° F.; submitted to a low temperature, (from a mixture of carbonic acid and ether,) forms a crystalline mass, lighter than water, and nearly insoluble in this liquid, to which, however, it communicates its odour; soluble in alcohol; burns with a bright light; takes fire spontaneously when mixed with chromic acid; exposed to the air, it remains colourless, though it absorbs a considerable quantity of oxygen; by analysis, its formula is $C^7 H^7 O$, which represents two volumes of the vapour of butyrone. Butyrate of lime, when distilled, is decomposed into carbonic acid, which unites with the lime, and *butyrone*, as is indicated in the following formula.

Butyrate of Lime.		Carbonate of Lime.		Butyrone.
$Ca\ O.\ C^8\ O_3\ H^7$	=	$Ca\ O\ C\ O^2$	+	$C^7\ H^7\ O$

On the action of Nitric Acid on Butyrone.—By the same.—When equal parts of nitric acid and butyrone are mixed together, the latter collects itself in the upper part, and assumes a dark red colour; heated moderately, after a certain time a rapid action takes place suddenly in the mixture, and a great quantity of ruddy vapours are disengaged, which would burst the apparatus were it not instantly removed from the fire. These vapours, made to pass through water, leave on its surface a volatile liquid of an ethereal smell, somewhat analogous to butyric ether. When the vapours cease to be disengaged, on pouring the residue in a considerable quantity of water, an azotized acid collects itself under the water, which is *butyro-nitric acid*. Its characters are:—an oily liquid, of a dark yellow colour; aromatic smell; easily takes fire, and burns with a red flame; insoluble in water; soluble in alcohol; density greater than that of water; does not freeze when exposed to a low temperature by a mixture of carbonic acid and ether; forms, with the bases, crystallizable salts, of which the formulæ may thus be established:—

Butyro-nitric acid..	$C^7\ H^6\ O,$	$Az\ O^4$	+	$2HO$
Salt of potass	$C^7\ H^6\ O,$	$Az\ O^4$	+	$\begin{cases} KO \\ HO \end{cases}$
Neutral salt of silver	$C^7\ H^6\ O,$	$Az\ O^4$	+	$2AgO$
Acid	$C^7\ H^6\ O,$	$Az\ O^4$	+	$\begin{cases} 2AgO \\ HO \end{cases}$
Salt of lead	$C^7\ H^6\ O,$	$Az\ O^4$	+	$Pl\ O$

Shewing, that an equivalent of hydrogen is eliminated and replaced by one of hypo-nitric acid.—When an alcoholic solution of potass is mixed with butyro-nitric acid, the liquid becomes coloured, and small crystals of a yellow colour are deposited, which explode at 212° F., a character common to all the butyro-nitrates; insoluble in alcohol; soluble in above 20 times their weight of water; the aqueous solution forms a yellow precipitate with the salts of silver and lead, and a dirty green with those of copper. That of silver soon becomes violet; is soluble in a considerable quantity of water, and crystallizes by spontaneous evaporation. From the aqueous solution at 212° F. an equivalent of base is precipitated and replaced by an equivalent of water.

On Chloro-butyrine—By the same.—This compound is obtained by the distillation of the perchloruret of phosphorus and butyrone; is a colourless and limpid liquid; lighter than water, and insoluble in it; soluble in alcohol; of a peculiar and penetrating odour; inflammable, and burns with a flame bordered with green; boils at 255° F.; the alcoholic solution not acted upon by the nitrate of silver; but if, after burning it, this salt is added to the residue, a notable quantity of chlorine is shewn to be present by an abundant precipitate of chloruret of silver. Its analysis gave the formula $C^{14} H^{13} Cl$, which represents four volumes of vapour.

On the Ligature of the left Iliacus Externus.—M. Malgaigne related a successful case of ligature of this artery, on a young lawyer, for a very large aneurism, seated in the groin, and extending upwards to the spine of the ilium. The operation was performed on the 11th of February, by a vertical incision, inclining inwards. One ligature only was applied, which came away on the sixteenth day. Five weeks after, when the wound was nearly closed, it was opened afresh by the bursting of the aneurismal sac, which, however, gave rise to no serious accidents; for the patient pleaded a cause on the 11th May, three months after the operation. To-day, the general health is good; the left lower extremity is as large, as warm, and as strong, as the other, though it is impossible to feel any pulsation in the arteries. No symptoms of hernia as yet.

Academy of Medicine.—Sitting of the 4th June.—M. Ferrus in the chair.—The *Ministre du Commerce* addressed a letter relative to the discovery of the cow-pox mentioned in my last.—M. Bousquet stated that, on Saturday last, he had vaccinated several children with this vaccine, and that he would make known the result to the Academy.—M. Cornac. Though I was not present at the last sitting, in which a discussion relative to my proposition, concerning Dupuytren's bust, took place, still I intend adding nothing to what was said; to-day, I wish to mention that I regret to learn that the architect has announced that there is no room for busts; the more so, as nephew to Portal, our late perpetual honorary President, I claim that honour for him, already accorded by a vote of the Academy.—The President, in reply, stated that M. Cornac was misinformed; the architect never having said anything to that effect.

On Myotomy and Tenotomy.—Prof. Roux, as President of the Commission named to examine M. Malgaigne's memoir, stated: that after having met, they requested the author to present the patients mentioned, in order to enable them to form a judgment; one only answered the appeal; letters were then written to those whose addresses were known; none came, and some did not even answer. In this dilemma, the majority of the commission determined to go themselves to the patients; but the minority being of a contrary opinion, it was decided that the Academy should be consulted as to what must be adopted, and, at the same time, be requested to adjoin two new members.—After a very animated discussion, in which Messrs. Gerdy, Cloquet, Velpeau, Nacquart, Roux, Castel, and Husson, were heard, M. Guerin rose and said: "It is my intention only to give some explications relative to the scientific part of the question. Eight months ago, I requested a commission to be named, in order to examine my patients: this was not accepted; but since then, several practitioners have thought proper to do so without my leave, and have published facts which I considered erroneous. I, therefore, solicited the *Conseil des Hopitaux* to name commissaries to examine them, which was accorded; this commission, chosen from among some of the most honourable members of our profession, are now actively occupied in this examination, and I abide their decision. As to the question now agitated, I did nothing for or against it, because I consider that it was more in a personal than a scientific point of view that the researches were made."—Prof. Adelon proposed that the majority of the commission should continue, notwithstanding the opposition of the minority: (adopted.)—Professor Cloquet: "As part of the minority, and because I consider it contrary to the dignity of the Profession and the Academy, of which I am a member, to go to the dwellings of the patients, who might shut their doors in our faces, I give my demission."—M. Amussat: "I am, as member of the commission, of M. Cloquet's opinion, and do not think that the Academy can oblige us to do what is repugnant to our feelings. I, therefore, give my demission."—Professor Roux proposed that two new members be added to the commission: (adopted.)—The President informed the Academy, that the nomination will take place on the next sitting by *scrutin*.

On an Epidemy of Encephalo-rachidian Meningitis.—M. Bricheteau read a report on a memoir of MM. Parisot and Brassard on this disorder, which reigned in 1841, at the hospital of Poictiers. Conclusions—insertion in the Bulletin:—M. Rochoux does not think that a well-authenticated fact of meningitis has ever been recorded, and considers that an error of diagnosis has been made by the authors.—M. Martin-Solon said, that when the case was not before us, it is impossible to decide positively; consequently, he thought the assertions of the authors could not be controverted; the more so as the true characters of meningitis existed.—M. Bricheteau: the *post-mortem* examinations having proved the existence of meningitis, and the symptoms being similar in these cases, and in those which ended favourably, he did not see why the assertion of the authors could be doubted. (Conclusions adopted.)

On a Case of Calculus, complicated with a Vesico-Vaginal Fistula, by M. Segalas, M. A. M.—It is well known how difficult these fistulæ are to get rid of; so much so, that, not long since, a distinguished surgeon asserted that their cure, when a loss of substance existed, was impossible. This opinion was emitted by Professor Blandin, while relating the case of a patient on whom he had performed an operation to remedy the defect, but unsuccessfully; which failure in this, and similar cases, he attributed to the position of the parts implicated in the disorder. On the other hand, the presence of a calculus in the female is very

common, and for these reasons, the following case is interesting. Four years ago, the patient consulted me, and, on examination, I discovered the presence of a vesico-vaginal fistula, and a calculus: the former produced by difficult parturition, the latter, perhaps, the result of the former. The calculus was easily broken in pieces, and removed by two operations of lithotrity; and this done, I directed my attention to the fistula. Having placed a gum elastic sound in the urethra, with the help of a speculum, I cauterized the fistula with the nitras argenti, which caused its diameter to diminish several lines. These cauterizations were repeated several times with evident benefit; so much so,that, three months after, the opening was perfectly closed, and the cure performed.—M. Amussat asked, if the fistula was really vesico-vaginal, because he had never succeeded in curing them, whilst he had often done so in those of the urethra.—M. Segelas said: that evidently it was a vesico-vaginal fistula, because the urine flowed out constantly, and because, with the speculum, it was easy to prove that it was the bladder, not the urethra, which was the seat of the disease.

Garland de Beaumont, D.M.P, B.L.. & S., &c.
Honorary Physician to the Spanish Embassy.

LIEBIG'S RESEARCHES ON THE URINE.

The first question examined by Liebig is, what is the substance which imparts to the urine its property of reddening blue vegetable colours. In most works this has been ascribed to the presence of uric or lactic acid, but Liebig says that no positive and definite proof of the existence of the latter in urine, has been given. In every instance where the formation of lactic acid has been observed, the result of careful examination has proved the presence of a non-nitrogenous substance, of an identical, or at least similar composition with it. It is itself a non-nitrogenous substance, and nothing has hitherto been observed tending to show that it may be produced from the elements of a nitrogenous substance by its decomposition and the transposition of its elements. The formation of lactic acid, therefore, in the graminivorous and herbivorous animals, which take starch and sugar in their food, may be regarded as highly probable, and, yet chemists have in vain sought for it in the urine of the cow and horse,which is strongly alcaline, on the contrary, and contains carbonated, hippurated, or benzoated alcali, or alcalies, combined with mineral acids, but no traces of lactates. On the other hand, the urine of man, and of carnivorous animals, when healthy, has a strongly acid re-action, and in it and in the blood the lactates are described as being constant constituents, although lactic acid has never been obtained from them. The ground for this supposition appears to be that some non-crystalline matters, possessed of an acid re-action, have been found in the extracts of those fluids, and which matter after incineration, left a carbonated alcali as a residue, thus presenting a remote similarity in behaviour to the alcaline lactates. The experiments of Enderlin have shown that lactic acid is not contained in the blood or any other fluid in the bodies of carnivorous animals; and Pelouze has proved that Henry's experiments, in which he detected lactate of urea in urine, are not to be relied upon. The lactate of barytes is readily soluble, yet if the water of barytes be added to strongly acid urine, a copious precipitate of the urate and phosphate of barytes is formed, and the urine does not hold any salt of barytes in solution, which it would do if its acid re-action were really owing to the presence of lactic acid. A very similar result follows the experiment, if the carbonate of magnesia and calcined magnesia be employed instead of barytes. A copious white precipitate ensues, and the urine possesses a feebly alcaline re-action, and contains a trace of magnesia in solution. These experiments, however, are not conclusive, because as urine contains a certain amount of alcaline phosphates, *i. e.* the phosphates of soda and potash, and as barytes and magnesia form insoluble salts with phosphoric acid, it might be supposed that the neutral lactates formed upon the neutralization of the urine with the two bases, had been decomposed, together with the phosphates of soda and potash contained in the urine, and transposed themselves anew with these substances into phosphate of barytes or magnesia, and into neutral lactate of potash or soda. More direct evidence is therefore requisite, and this Liebig furnishes by an immediate search for lactic acid, his experiments being performed on large quantities of putrid urine, which he employed, because lactic acid is not destroyed by the putrefactive process. He infers as the result of his inquiries, that not only is lactic acid absent from the urine, but that that fluid does not contain any substance capable of giving origin, by its putrefaction, to its formation; and he adds, that if we examine somewhat more closely and minutely the experiments made by Berzelius, and from which he inferred the presence of lactic acid in urine, we find that not one of them amounts to a positive proof that lactic acid really forms a constituent of fresh urine. All Liebig's experiments indicated the presence of an organic acid, but after the removal of all the inorganic acids and bases contained in the urine, this acid proved to be a mixture of acetic acid, with a brown resinous substance, rich in nitrogen. The existence of acetic acid in putrid urine was demonstrated by further experiments, and had been previously shown by Proust and Thenard. Proust also ascertained the existence of benzoic acid in putrid urine, and his discovery has been confirmed by Liebig, who remarks further, that it does not exist as benzoic acid in fresh urine, since it has been proved by the experiments of Ure and Keller, that crystallized benzoic acid is converted into hippuric acid in the organism, and appears in the urine as hippurate of soda. The hippuric acid in the urine of the herbivorous animals is decomposed when putrefaction takes place, and benzoic acid is one of the products, and it is consequently fair to conclude that the benzoic acid of putrid human urine has the same origin. This opinion has been fully confirmed by the results of minute examinations. Hence, an urine obtained from persons living on a mixed animal and vegetable diet contains hippuric and uric acid in about the same proportions. Hippuric acid may be obtained in the following manner, even from proportionally small amounts of fresh urine:—fresh urine is evaporated in a water-bath to the consistence of a syrup; it is then mixed with some hydrochloric acid, and shaken with its own volume of ether, by which the hippuric acid is dissolved. It usually happens that the mixture does not separate spontaneously, but that the ether remains enclosed by the fluid, like froth; the separation of the ether takes place immediately upon adding to the mixture, after having allowed it to stand at rest for an hour, one-twentieth part of its volume of alcohol. The froth then disappears, and the fluid separates into two layers; the upper layer contains the hippuric acid in solution, but besides it also contains urea, owing to the addition of the alcohol. This upper layer is carefully removed by means of a pipette or syphon, and shaken with small portions of water; the water removes the alcohol and urea, whilst the hippuric acid remains in solution in the ether, by evaporating which, the acid is obtained in crystals. These are usually of a yellow or brown colour, caused by the presence of a resinous substance, which may be easily and completely removed by means of charred blood. In its pure state, hippuric acid produced from human urine, presents the same long, shining, transparent, four-sided, obliquely truncated prisms, by which the hippuric acid obtained from the urine of animals, is so easily detected and distinguished from benzoic acid. The hippuric acid of human urine is not volatile at the subliming temperature of benzoic acid: at a higher temperature, it undergoes fusion, forming a brown red liquid, and yields upon dry distillation the same products, which common hippuric acid forms under the same circumstances, viz.:—a red-coloured oil, smelling like Tonquin beans, ammonia, benzoic acid, and a copious residue of carbon. It dissolves in nitric acid at a high temperature, and yields upon cooling, crystals of benzoic acid, owing to the decomposition which it undergoes. It contains 10 per cent. less carbon than benzoic acid. As the different articles of food used by man do not contain any benzoic acid in their composition, from which the hippuric acid could be formed, the only conclusion that can be come to, is that it is a product formed in the organism from the elements of the non-nitrogenous aliment.

The nitrogenous resinous substance which has been more than once alluded to, as present in all the fluids obtained in the examination of putrid urine, is a product of putrefaction, and of an acid nature. Liebig looks upon it and the acetic acid, which is also present, as the products of the decomposition of the colouring matter of the urine. Not, the slightest trace of alcohol has ever been detected in urine excreted after the use of spirituous liquors, and therefore it cannot be the source of the acetic acid. Sugar or sugar of milk added to urine, which is afterwards left to putrify, remains unaltered, at the end of three months, and further prevents the putrefaction of urea.

The bibasic and tribasic phosphates of the alcalies are carried into the human frame through the medium of the ordinary food: these salts have a tolerably strong alcaline re-action, and thence is derived the alcaline condition of the chyle, lymph, and blood of animals which feed upon animal and vegetable substances. The serum of the blood can only be considered as a combination of albumen, with an alcaline phosphate; the fibrine of the blood or the fibrine of the muscular fibre is a combination of albumen with phosphate of lime. The salts which enter the system, are excreted through one of two principal channels; they must be carried off either in the fæces or in the urine. They pass off with the fæces only, when the amount of salt contained in the fluids in the intestines is larger than that contained in the blood; if it be equal or inferior to it, the soluble salts are re-absorbed by the absorbing vessels of the intestinal tube, and enter the circulation, and are then removed from the body by the urinary organs and channels. If the amount of salt contained in the intestinal tube is larger than that in the blood, the salts exercise a purgative action. Among the products of the vital processes, which, together with the soluble phosphates, are removed from the organism through the urinary organs and channels, there are two organic acids, namely, uric and hippuric acids, both possessing the property of combining with the soda, or potash of the alcaline phosphates, and acquiring in the combination a higher degree of solubility, than they possess, *per se*, at the common temperature of the body. It is obvious that by the accession of these two acids, and by their action upon the phosphates of soda, an urate and hippurate of soda must be formed on the one hand, and an acid phosphate of soda on the other, consequently the urine must acquire an acid re-action. There is another source of the acid condition of the urine, which is referred to the presence of sulphur in some portions of human food. We know from the experiments of Kohler, that the soluble sulphurets became oxydised in the organism; and that thus, for instance, sulphuret of potassium becomes converted into sulphate of potash; and it is, therefore, unquestionable, that the sulphur of the constituents of the blood, derived from the aliments, or, what comes to the same point, the sulphur of the transformed tissues, becomes finally converted into sulphuric acid by the oxygen absorbed in the process of respiration, and thus that it must appear in the form of sulphates in the urine. From this cause the original amount of these salts contained in the aliments, becomes increased. The alcaline base, which is combined with this sulphuric acid in the urine, is supplied by the soluble alcaline phosphates, and the latter, in consequence of the loss of part of this base, are converted into acid salts.

Acting upon these views, Liebig has been enabled to prepare an artificial urine, possessing the properties of natural urine, even although sulphuric acid were altogether excluded.

The acid nature of the urine of carnivorous animals, as well as that of man, depends upon the nature of the bases partaken of in the aliments

and upon the particular form of their combinations. The alcalies contained in the flesh, blood, and other parts of animals, are invariably combined with phosphoric acid: the acids formed in the organism by the vital process, namely, sulphuric, hippuric, and uric acids, share the alcali amongst them, thus giving rise to the liberation of a certain amount of phosphoric acid, or to the formation of a certain amount of acid phosphates of soda, lime and magnesia. The addition of a vegetable diet, will render the urine either neutral or alcaline in proportion to the quantity of vegetables consumed. The urine of all animals feeding upon vegetables, such as grass, herbs, roots, &c., has an alcaline reaction. The urine of the horse, cow, sheep, camel, rabbit, guinea-pig, ass, &c., is alcaline; it contains alcaline carbonates, and the addition of acids produces a lively effervescence. The acid, neutral, or alcaline reaction of urine of healthy individuals, does not depend upon any difference in the processes of digestion, respiration, or secretion in the various classes of animals, but upon the constitution of the aliments, and upon the alcaline bases which enter the organism, through the medium of these aliments. If the amount of these bases is sufficiently large to neutralize the acids formed in the organism, or supplied by the aliments, the urine is neutral, whilst it manifests an alcaline reaction, when the amount of alcaline bases, thus supplied to the organism, is more than sufficient to neutralize the acids; but, in all these cases, the urine accords with the nature of the aliments taken.

In the application of these views to medicine, Liebig observes that future properly-directed experiments will prove whether or not sanguification is absolutely dependant upon the presence of alcaline phosphates; whether weak solutions of the alcaline phosphates are not the best solvents for uric acid deposited in the bladder, and likewise what is the influence which aliments, rich in sulphur, such as mustard, for instance, exert upon the separation of uric acid in the bladder, in consequence of the formation of sulphuric acid. By a judiciously selected diet, the nature of the urine may be altered at pleasure with absolute certainty; it may be kept alcaline for a long time without injury by a vegetable diet,—one of the first conditions for the prevention of the formation of uric acid. At the same time, all substances which, like wine or fat, take possession of the oxygen necessary for the transformation of uric acid into carbonic acid and urea, must be prohibited.

Ammonia is met with in healthy urine only in very minute or doubtful traces, and it is a product of the putrefactive process. Fresh urine evolves ammonia when treated with alkalies; but it does not yield a precipitate with chloride of platinum. The amount of ammonia formed in the healthy organism is very minute, not being sufficient even to neutralize the acid, from which proceeds the acid reaction of urine and of saliva. Experiments to determine the amount of ammonia in healthy urine may be of service in judging of pathological states; for, in fevers and other diseases, the quantity of ammonia increases considerably. For this purpose the chloride of platinum is an unsafe reagent, in consequence of the formation of ammonia by its action on the organic constituents of urine. The magnesian salts would, perhaps, answer the purpose better.—Condensed from the 'Lancet.'

EXTRACTS FROM THE AMERICAN JOURNALS.

(From the New York Journal of Science.)

On the Treatment of Fractures of the Clavicle. By Abm. L. Cox., M.D., of New York.

The difficulty of obtaining a perfect control of this fracture, by the different bandages now in use, is very generally admitted by practical surgeons. This however, is no less certain, than that the great principles on which such control is attempted, are well ascertained and universally admitted. The action of the sterno-mastoid and great pectoral muscles, holds the sternal fragment in its proper position, while the scapular portion falls with the weight of the arm or by the action of the muscles, and is then drawn inwardly, so that the inner portion overrides the outer, and the position of the shoulder is altered from its natural state, to one more inward, downward, and forward.

The indications of treatment are, therefore, obviously to extend, elevate, and hold back the shoulder. For this purpose, surgeons formerly resorted to a figure-of-eight bandage, applied over the shoulders—a plan of treatment liable to the objection, that it does not meet all the proper indications of the case, and does not insure a perfect restoration of the functions and configuration of the fractured shoulder.

Dessault's bandages have also been generally used, and are designed with reference to the great and acknowledged principles of the case; but it is very generally admitted that these bandages are not as successfully used as is desirable, and many surgeons have consequently returned to the old figure-of-eight bandage in preference to them. Even our schools, if I am correctly informed, teach their abandonment; a fact to be regretted, as they certainly have several decided advantages over the more simple means now generally superseding them.

Of these, the first is the advantage of a direct and perfect extension of the fractured bone, effected by the cushion in the axilla, and the transverse turns of the roller over the arm of the fractured side, round the body, and under the arm pit to the sound side. This important point of proper extension is well attained and kept by this part of Dessault's management.

The great defect, which, as far as I have been able to learn, is pretty generally admitted against the bandages in question, exists in the last bandage, the object of which is to retain the fractured shoulder in a sufficiently elevated posture.

Dessault's direction for its application is, to commence with a roller nine yards long, at the axilla of the sound side, to bring it in front of the chest over the shoulder of the fractured side, down behind the arm to the elbow, then to bring it in front of the chest to the point of beginning, then over the back from the axilla to the fractured shoulder, crossing it to the front of the arm, under the elbow, and so obliquely over the back again to the axilla of the sound side, and in this way till the roller is applied.

That this plan should fail in keeping the fractured shoulder and arm in a proper elevation, is, I think, obvious *a priori*, and unfortunately it is found to be so in practice.

The axilla is below the shoulder of the opposite side, and the bandage, therefore, exerts a direct influence to depress it just in proportion to the strictness of its application. If, indeed, the turns which are made under the elbow of the affected side could be brought over the shoulder of the sound side, thus making the sound shoulder a *point d'appui* from which to suspend the elbow and arm of the fractured side, there would be some influence exerted toward the end in view. But when we reflect that this turn would support the elbow only by an oblique application, and that the bandage, from its yielding to the weight of the arm, could afford little or no support, thus applied, it needs but a moment's reflection to perceive that the end which the surgeon has in view is completely lost by passing the turns of the roller *under the axilla* of the unaffected side.

What has been said will, I trust, serve to prepare the reader for the suggestion which it is the object of this paper to make in the modification of Dessault's bandage.

Instead of making the axilla of the sound side the point of support of the shoulder of the fractured side, I propose that this point of support be sought close to the neck, on the side of the fracture. The roller may start from the sound axilla, pass over the other shoulder, down behind the arm and under the elbow, then upward over the fracture, obliquely across the back, and under the axilla of the sound side; thus making a figure-of-eight, by which the elbow will be drawn directly upward, and the point at which the bandage crosses on the shoulder being properly secured by pins, will be retained permanently close to the neck by means of the turns which pass under the sound axilla. This arrangement seems to possess all the properties at which the last bandage of Dessault is aimed, and of which it undoubtedly fails.

But one case has occurred to me whereby I could test the soundness of my reasoning by an appeal to practical results. This happened in an elderly woman, who fell from a chair in attempting to wind the kitchen clock. Dessault's plan failed, after careful and patient repetition; so also did the old figure-of-eight bandage, and several other modifications of them which successively suggested themselves to my mind in the management of her case.

I made the application, which I have attempted to describe above, with the best results. It retains the shoulders in its proper position, and the bones in perfect coaptation, and is at the same time comfortable to the patient.

It is well to commence by preparing the arm of the affected side with a roller, carefully and accurately applied. This precaution has the double advantage of guarding the arm from the pressure of the turns of the first roller, and also of furnishing the means of fastening the last application to the elbow by means of pins.

If it shall be thought worthy of trial by the profession generally, I believe it will be found to be an improvement; and I therefore feel it to be a duty to make the suggestion, and submit it to the judgment of my medical brethren. No one can be more aware than myself of the very simple nature of the alteration in Dessault's bandage, that I have ventured to propose; but if it should be found on trial to be better adapted to attain the very ends, and to apply the principles of practice, which Dessault taught, it will doubtless be justly appreciated by the profession.

Discharge of a Lumbricus Teres, eleven inches long, from the Male Urethra. By Peter F. Clark, M.D., of New York.

On Friday morning, March 22d, I was called to visit Mr. Philemon Fowler, residing at 117 Varick-street. He stated, that on Wednesday morning, the 20th, feeling an uneasiness in his bowels, he concluded to take some purgative medicine. The cathartic failing to operate, and his distress increasing, aggravated by an excessive itching in the glans penis, he in the evening, took an infusion of senna and salts, which, aided by an enema, opened his bowels freely, and afforded relief to all the symptoms except the itching. He urinated as freely as usual during the day and evening, and after the action of the purgatives, obtained some rest. At ten o'clock on the following morning, he voided urine again; and at eleven o'clock, in making another attempt, he passed but a trifling quantity, the flow being suddenly stopped from some cause which he could not comprehend. The itching ceased about the same time. The day was spent in frequent and unsuccessful efforts to urinate. About nine o'clock in the evening, having removed his clothing preparatory to taking a warm hip bath, and while unpinning a flannel bandage, he observed something about half an inch in length, dangling from the urethra, which he at first supposed to be a string. He took hold of it, and as inch after inch of the strange object was drawn forth, curiosity changed to amazement. On its entire removal it proved to be a *worm*. It was a male Lumbricus Teres, eleven inches long, and in no respect different from the ordinary worm of that description, found in the intestines: and it is the only worm passed by him, now thirty-three years of age, since childhood.

Immediately after its passage, a copious flow of urine followed, affording complete relief. Now the question arises—How came the worm in his bladder? A brief review of a former sickness will throw some light on this interesting point. In the spring of 1842, he placed himself under my care, presenting the following symptoms: great

prostration of strength, emaciation, œdematous extremities, hectic fever, tenderness and soreness in the hypogastric region, frequent inclination to urinate, and great difficulty in doing so, the urine sometimes bloody, and at others showing deposits of mucus, of puriform matter, and of a white pulverulent substance.

An examination proved that there was no stone in the bladder, but detected a partial stricture of the urethra.

Inflammation and ulceration of the mucous membrane of the bladder with stricture, manifested by such symptoms, did not afford much ground for hope as to any favorable result. The attempt was, however, made to afford relief, by a variety of means, and those that ultimately proved most beneficial, were, frictions on the surface, the warm hip bath, the frequent application of blisters to the hypogastric region, dilating the stricture by the use of bougies, and the internal administration of the tinctura ferri muriatis. By the persevering use of these means, he improved; and by the spring of 1843, he had so far recovered his health and strength, that he resumed his occupation (that of a carpenter). From that time to his present illness, he has been able, most of the time, to perform the labour of a moderate day's work, or to walk with comfort and without fatigue, five or six miles in a day.

I had not supposed that the organ, all this time, was restored to a sound and healthy state, nor did I encourage him with the hope that he would completely regain his health; but I had reason to believe, that the ulcerative process was arrested, and hoped that the disease was so far stayed, that some years of comfort and usefulness would remain to him. It is now, however, evident, since the passage of the worm, that adhesion has taken place between a contigous surface of intestine and the bladder, and that a communication was formed by ulceration; and that this probably took place eighteen months since, may be inferred from the fact, that such a process was going on. It is singular that the first proof of such a state of things, should be the passage of an intestinal worm per urethram; for there never has been, in the alvine evacuations, anything having the appearance or smell of urine, nor has there been anything in the urine having the remotest resemblance to the intestinal contents.

On the Use of Mustard in the Convulsions of Children.
By Charles S. Tripler, M.D., Surgeon U. S. Army.

Let me suggest to the profession, through your Journal, the use of *Mustard* in the convulsions of children. I had an obstinate case last summer, from teething, in which everything was tried, that I, or others, could think of, without success. As neither antimony, sulphate of zinc, sulphate of copper, ipecacuanha, nor any other emetic usually given, seemed to make any impression upon the stomach, I thought I would try mustard, with a view to its emetic effects. In a few minutes it arrested a fearful attack of convulsions, that had lasted five hours; and that too, *without vomiting* the patient, for some time afterward.

A short time since I had three more cases in the course of a fortnight; with the first I tried the usual remedies, and I also made an ineffectual attempt at venesection (leeches could not be procured). The case still resisted, when the use of mustard again occurred to me. I gave it, and the patient was relieved in five minutes. With the other cases I used the mustard at *once*, and successfully. Its efficacy seems to have no relation to its emetic properties; for its sensible effect, in these cases, is as frequently to purge as to vomit. From my experience of the remedy, I do not hesitate to recommend its employment in these troublesome cases, in preference to any other internal remedy with which I am acquainted.

QUERIES.

Finding Drowned Bodies.—If penny rolls are set floating upon a stream, will they not stop where some eddy or counter current produces still water; and is not that the very place in which it is probable that the dead body also will have rested? The fancy about quicksilver, or "silver alive," is probably of the same authority as the old statement, that quicksilver in a hot loaf or boiling pudding will make them jump about.

Conical Cornea.—Is it possible that there may be such a disease as a stricture of the ring of the sclerotica, surrounding the cornea, by which it may be preternaturally protruded; and would not the proper means of treatment in such case be a sympathetic relaxation of the sphincter by aperients, nauseating medicine, &c.?

Oleata.—There are, in the Continental Pharmacopœias, some ancient processes retained for extracting the virtue of herbs by means of oils. Have any series of experiments been made as to the production of medicinal *soaps* by combinations with the vegetable alkalies of the later chemistry?

Cod-Liver Oil.—Has any sufficient chemical examination taken place, to ascertain the peculiar active principle of this remedy; and whether it is not a product of the same nature, as that in the biliary secretions of other animals? The strong faith of seamen in this medicine, formerly forced it into the practice of the medical authorities at Liverpool.

Q.

GERMAN CHEMICAL SCIENCE.

(From our Correspondent, Dr. Muspratt.)

Chemical Laboratory, Giessen, June 6, 1844.

My excellent friend, Dr. A. W. Hofmann, assistant to Professor Liebig, and one of the most rising chemists of the present day, has been pursuing, with great industry and his accustomed cleverness, his investigation with *cyanol* and *leucol*. He has obtained some very beautiful reactions; he has replaced portions of the hydrogen in cyanol by chlorine and bromine, and in one instance has obtained these two bodies in the same compound. To give you a lucid idea of his unexpected results, I shall employ formulæ, commencing the series with an hypothetical radical.

Hypothetical radical	=	C^{12} H_5	or Phen.
Phenamide Cyanol	=	C^{12} H_5	$+ NH_2$
Chlorophenese	=	C^{12} $\left\{\begin{matrix}H_2\\Cl_3\end{matrix}\right\}$	$+ NH_2$
Bromophenese	=	C^{12} $\left\{\begin{matrix}H_2\\Br_2\end{matrix}\right\}$	$+ NH_2$
Amabrophenese	=	C^{12} $\left\{\begin{matrix}H_4\\Br\end{matrix}\right\}$	$+ NH_2$
Chlorobrophenese	=	C^{12} $\left\{\begin{matrix}H_2\\Cl\\Br_2\end{matrix}\right\}$	$+ NH_2$

The above compounds are very remarkable, as they retain all the striking properties and reactions of cyanol, and are well worth studying as being the only bodies known containing chlorine or bromine that act basically.

Dr. Hofmann has also ascertained that, when another equivalent of the hydrogen in cyanol is substituted by chlorine, a singular body is formed, which combines neither with acids nor alkalies; and further, that, when an excess of this gas is transmitted through the menstruum, perfect dissolution of the molecules ensues, chlorophenessic acid, &c. being formed, and nitrogen eliminated. By referring to his excellent treatise upon the "Organischen Basen in Steinkohlen-Theeröl," which I translated at his request for the "Philosophical Magazine," you will find, that, after repeated analyses and experiments, he proved cyanol to be identical with *benzidam*, and *anilene*, the base of which is procured by the dry distillation of anthranilic acid and indigo. Having perfectly satisfied himself upon this point, he directed his attention towards leucol, when he remarked the following:—"A short time after I had commenced the investigation of this base, I was inclined to consider it the same as that Gerhardt obtained by the action of hydrated potash on *quinine*, *cinchonine*, and *strychnine*; for the composition in two parts of *chinoiline* and *leucol* is not very different, and the two bodies possess a strikingly similar smell. I soon, notwithstanding, convinced myself that they were totally distinct; their behaviour towards a solution of *chromic acid* is quite dissimilar; while chinoiline and its salts give a beautiful orange yellow crystalline precipitate, leucol is oxidised and converted into a black resinous oil." He has, however, only very lately re-studied these bodies again, and obtained the yellow reaction with leucol and chromic acid. The reason why a black resinous mass resulted with the first prepared leucol and chromic acid was on account of the base containing traces of cyanol. *Chinoiline* and *leucol* are identical. From these valuable results, I am sure that within a very short time the number of organic bodies will be greatly diminished. In conclusion, I shall remark that much more credit is due to the chemist who proves satisfactorily the identity of two or more bodies, than to the one who discovers a host of new ones.

MEDICAL LEGISLATION.

(From a Correspondent.)

Infectious Disease.—Whenever typhus, or any other such complaint, has been in a house, a magistrate should be empowered to inspect it personally, or to depute some proper persons to do so. Two justices should then be empowered to direct the removal of the thatch, the altering of windows, so as to open, the removal of cess-pools, proper drainage, lime-washing, &c. &c. The charge not to exceed £10., and to be levied upon the owner of the property, whose duty it is to prevent such injurious effects upon the public.

Adulterations.—It is almost impracticable to prove, in the ordinary manner, the use of alum, soap, plaster, ground-bones, alabaster, &c. &c., in bread; or the use of cocculus indicus, &c., in beer; or powdered glass in snuff; or sugar of lead in wine; or copper in pickles; or any other death-dealing fraud. A magistrate should be empowered to convict upon the mere fact of the presence of such articles being chemically ascertained, and it should not be any excuse that the vender might be innocent, as he ought to be made responsible for ascertaining the purity of the article in which he deals. The fines would pay for the employment of official chemists, making occasional circuits, and placing themselves under the control of the local magistracy. The extent to which malt liquor is now adulterated is intolerable, and many publicans actually wilfully do this, in order to force labourers into the ruinous, but more profitable, consumption of spirituous liquors.

Poor-Law Medicine.—This department will never be right, until the appointment of medical officers is taken away from the Boards of Guardians, and placed in some responsible public authority. It is quite revolting to see the canvassing, jobbing, and intriguing, which attend all appointments by elective boards. The parties are utterly irresponsible, except to their own partizans, which is a responsibility for evil instead of good; and public opinion does not reach them, as they are quite below its operation. If these officers were appointed by some exterior authority, that authority dare not make appointments without proper investigation; and the elective bodies, which are so improper for appointment, would, in that case, be found well-suited for exercising an inquisitorial power.

Quackery. — The Medical Profession may quietly make up their minds that the public will not submit to any further restriction upon quack medicines. The proper course, with regard to them, is a fair and open chemical examination; an investigation of their properties; such as we find in Paris's *Pharmacologia*. It is not to be denied that the prejudices of the Faculty have desperately resisted the introduction of many useful remedies; and, in spite of all our knowledge, the action of almost every medical substance in existence is merely experimental. We should not forget the discovery of iodine; and the chemical blunder as to the supposed operation of burnt sponge. Persons, resident in the country, also know well the actual necessity of some cheap female midwives.—To the end of time, uneducated people will cling to charlatans and imposters in religion, politics, law, and medicine.

NOTICE TO CORRESPONDENTS.

Mr. H. (Manchester) *who has his doubts, from information, whether his name has not been forged to an address, "respectfully asking perjury" from the Council of the College of Surgeons, and industriously but fruitlessly circulated in Manchester—should communicate with Mr. Belfour.*

An Advertiser, of Oxford Street *(who gives us his name) sends us a letter, announcing the different stories told him by different agents as to the circulation of a contemporary, varying between them several thousands. After many strictures on the dishonest tactics of the party, to whom our correspondent bears less love we fear than becomes a good Christian, he thus concludes: "all hope of my giving them advertisements was cut off, the moment I saw them agreeing to stake £50. on the question, whether the "Medical Times" had twice their circulation or not, and then when you handsomely met them, shirking the affair so disgracefully."*

Mr. Ryder.—*For the diploma, an apprenticeship is not, for the license it is, necessary.*

If a Surgeon *will authenticate his communication in reply to Dr. Storer, (and in these cases, we like to have public name against public name,) we will publish the letter.*

A Sufferer *will find several* succedanea *given in recent numbers of the "Medical Times." The only thing we should rely on is gold.*

"The College" *writes impertinently, but correctly and cleverly. The word was remembered as "subsequent," and was only altered the last thing before going to press. To have made the correction complete, would have caused the worse evil of delay.*

B. B. B. *has used* expressive *initials. We should call him a treble beast, if a hard name could cure his manners and disgusting propensity. We cannot answer the enquiries put to us.*

Mr. D. Smith.—*We do not give advice in such cases. Our correspondent should consult a respectable practitioner.*

W. Gal.—*Make a solution of iodide of potassium, and divide it in three glasses; to the first, add bichloride of mercury, a brilliant red precipitate of periodide of mercury falls; into the second glass, pour a little solution of nitrate of silver, the yellow iodide of silver falls; into the third glass, pour some solution of sulphate of zinc, a white precipitate, the iodide of zinc falls.*

M. A., Dr. H,, Amicus, A Council-man, M. R. C. S., Philo-justitia, *declined.*

The Boston paper is of great interest to us, and will be shortly turned to profit.

Vaccination.—*Dr. Epps submits to us, as evidence of the "position that* Britain, *in reference to vaccination, holds amongst the nations of the earth, and the influence of* climate *on the vaccine virus," a letter from Mr. Tatum, British Vice-Consul of Venice, mentioning that—*

"Count Palffy, the Governor of the Venitian Provinces, had ordered an annual payment of 50 florins, (about £5 sterling,) to be made to the Royal Jennerian and London Vaccine Institution, on condition, however, that there be sent out two packets of the vaccine lymph yearly, the one to arrive in the month of March, and the other in October. It has been found," *says Mr. Tatum,* "that the matter, as commonly made up between flat glasses, seldom succeeds in this country, and I am particularly to request that the supplies you may send may be in *hermetically closed bulbs.*—The Vaccine operation does certainly very frequently fail here, and from a statement which has lately fallen under my observation, it appears very probable that during the *scirocco*, or prevalent south-west wind of this country, the constitution is not in a state to receive the impression, and as this wind is characterised by both heat and damp, it may find its way between the flat glasses, and destroy the effect of the lymph. The same cause may account for what these medical men generally assert, namely, that they *cannot depend on matter* which has been *several times transferred from subject to subject*, and hence their need of fresh supplies."—*Dr. Epps very reasonably asks whether it would not be well for medical practitioners to study vaccination in its various phases more than they do.*

A Constant Subscriber.—*A party from the Hall, who can prove the validity of the License, should be subpœnaed. We believe it was the bad law of a contemporary that led to the notion that the License proved itself. For a time the License was its own proof; but this was by a temporary statute, which has expired.*

Next week we shall give Lectures by Mr. Guthrie, Mr. Wharton Jones, Dr. C. J. B. Williams and Prof. Schönlein; an Original Paper, by M. De Cassis, of Paris, on Varicocele, with a new mode of Treatment; a Pencilling of Dr. Knox, the anatomical Professor; an Original Paper of deep research (part of a series) on the Theories of Liebig, with new Views, &c.

THE MEDICAL TIMES.

SATURDAY, JUNE 15, 1844.

No anatomy, no medicine.—BICHAT.

WHO shall over-rate the value of anatomical science? Is medicine, in its highest phase, and most successful exercise, a blessing? Is ignorant empiricism, blundering blindfold amid the most fragile and delicate of Nature's divine handiworks, a curse? Do we value, intellectually, the high teachings given by an understanding of the most perfect and wondrous mechanism infinite power has invented? Do we admit, socially, that a world is bettered by its Galens, its Scarpas, its Hallers, its Hunters, its Bells, its Meckels, its Müllers? Is ignorance and misery to be deprecated: science and happiness desirable? Each ready answer "Yes," is the eloquent panegyrie of the priceless value of ANATOMICAL SKILL. Of boundless, ever-during import to each man's knowledge, it is at one time or another of vitally practical concern to each man's happiness.

As in the darkest caves of ocean is found the gem of purest ray serene, it is amid the horrors of the dissecting-room that is elaborated society's highest blessing—the accomplished Doctor. Surrounded there by facts which, in large letters, tell to him the secrets of our physical nature: the dead man lying before him, exposing the most mysterious recesses of his wondrous structure as in an open book, the doctor is often enabled, in the hour of his neighbour's sickness and peril, to see his corporeal derangements as through a transparency—is taught the causes of health's flight—has imparted to him the best aids for Nature in her struggles with disease: and when the awful scale hangs doubtful between life and death, is often empowered to interpose, like an earthly providence, and give man, in his extremity of weakness and helplessness, another lease of days.

Thus excellent as a part of human knowledge, thus vitally important in its relation to human happiness, we should be prepared to expect that an enlightened Government, solicitous for the welfare of its subjects, as is ours, had provided some very careful and elaborate system of laws, by which so great a boon should be ensured in its utmost fulness. How stands, however, the fact? We fear, in such a way, that a second De Lolme, if writing honestly, would find in it but an equivocal compliment to the genius and character of our British constitution, as exhibited in social action. For centuries we had no legal provision at all, and at present have a law which seems expressly designed to make anatomical studies a matter of pains and penalties!

It is impossible, on the most cursory perusal of the ANATOMY ACT, not to see that, in the first place, while it allows unclaimed bodies in hospitals, workhouses, and prisons to be given for dissection, it permits the ruling authorities of those institutions to refuse giving them at their own caprice or discretion. To favour dissection, these functionaries must take a trouble not required: to discountenance it, they have only to indulge their love of leisure. And, secondly, we have another equally striking defect, that no steps are taken to secure a fair and moderately expensive distribution of the bodies among the pupils requiring them.

The practical consequences of an Anatomy Act so fundamentally defective have, of course, been as mischievous and absurd as any reasoning man would have predicted. First: some of the schools for teaching anatomy have been placed under very disadvantageous circumstances, both in reference to competition with rivals, and to a due cultivation of the science with regard to students. The unclaimed subjects of the hospitals going, as a matter of course, to the schools connected with them, the private schools are dependant for their supply principally on the parishes. Now, as many of the hospitals are allowed by the Act to agree with parishes to receive their sick, provided the unclaimed bodies of the dead are given to the hospital schools, the source of supply to the private school-pupil is thus made still smaller. Secondly, some of the guardians of workhouses have felt themselves justified in refusing to give up *any* unclaimed bodies for dissection. Among others, we may name the Board of Guardians of Marylebone. Thirdly, for the last-mentioned, and other reasons, a great scarcity of subjects has been maintained, and corresponding high charges made to the students for them. Thus, from three to four pounds was not an unusual charge, and in the early portion of the session, no parts frequently can be procured, even at this high rate. This great evil has not been confined to London, but has extended to the various provincial schools. Fourthly, by some legerdemain, the expense of burial is made to fall on the medical students, and while the lecturers, according to the chances of the institution, are charged sums varying from about 3s. to £4, the price for the students scarcely ever descends below £3. Fifthly, the practice of making lecturers and students pay for the burial of subjects has led to some extraordinary scenes. Thus, to save expense, in less than two years, between three and four hundred bodies were buried in unconsecrated ground, an undertaker's man in a surplice reading the burial service The less expenditure thus

gained, never fell to the benefit of the student. With such facts as these open and notorious, Sir James Graham, the gentleman who is to legislate for the profession so shortly, knew so much about our wants, as on Tuesday night to affirm that no enquiry on the Anatomy Act was necessary, and that the measure had secured us an ample supply of subjects!

We believe we are right to the letter in affirming, in opposition to so "satisfactory" a statement, that the supply is often small, always irregular, and not rarely of a bad kind; that the subjects sent in are often much decomposed; defy injection; and thus make Anatomy unprofitable to the student, disgusting to the teacher, tempting both to become strangers to the dissecting-room. When dissection is most required, as in the beginning of the session, it is made all but impossible, by the extreme scarcity of bodies.

Although the loss of practical professional ability is the greatest injury arising from the dearness of subjects, there are not wanting others. The worthy student pores over the part which he has purchased so dearly, as something to be made the most of. He continues his investigation unrepelled by the increasing decomposition, and when all the distinctness of outline, which could give a value to his studies, has disappeared, he is still tempted to pore over it, to the serious detriment of his health. It would be difficult, in this aspect, to ascertain how many pupils are thus disgusted into dissipation; and how many others, more persevering, have their lives placed in jeopardy!

Another circumstance, well worth being pondered over, is this: the world is taught that England offers no facility for the ground-work of all medical competence: it is not the abode wherein surgical science is to be sought. Why is it that we shall perpetuate the now-prevailing opinion that, to be educated in England, is not to be acquainted with medicine as a science? Why shall not our national repute be studied, our national pecuniary interests be consulted, by making London as a medical, what it is as a mechanical, school, not the deserted of her own children, but rather the sought of the children of all countries?

In conclusion, let us say one word on the motion in the House of Commons which has led us to this important subject. Mr. Roberts who has made Anatomy the subject of Parliamentary discussion three times this session—is the inventor of a process by which he claims to preserve bodies in a proper state for dissections through weeks and months. He conceives that as he was excluded out of the profits of a patent by expectations held out by anatomical teachers and the Government, that the country would purchase his secret. He was fortunate enough to receive high testimonials from most of the higher surgeons of London: and by Mr. Warburton and Sir George Sinclair, to whom he confided his arcanum, he was favoured with certificates the most conclusive. The secret is the same: Mr. Roberts, its inventor, is the same: but Mr. Warburton and Sir B. Brodie will not believe it, or have become other people themselves. Without charging Mr. Roberts with deception, they treat themselves as deceived. Thus dolefully and humbly does Mr. Warburton acknowledge his manifold transgressions:—

When Mr. Roberts had first applied to him to assist him in his object of attaining a grant of money, in consideration of the disclosure of this process, he had certainly required to be satisfied that it was not only effective, but economical and expeditious; and, on being informed of its nature, he had satisfied himself of its being so; but, upon hearing that Mr. Roberts had carried on an agitation against the Anatomy Act, he declined further proceedings with the matter, till persuaded by Sir G. Sinclair. He had been "soft" enough to resume his application to Government, recommending a much smaller sum, however, than was required by Mr. Roberts. The Home-office rejected the process, and then it appeared that various anatomical authorities, especially the Anatomical (?) Society, had described the process as inefficient.

And then Mr. Warburton having a clear breast himself, proceeds to lecture Mr. Roberts on his "moral conduct," in calling popular attention to the practical bad working of Mr. Warburton's only Parliamentary child. Now, without attributing to Mr. Roberts "immorality," because he took too much trouble to show the parishes how his stuff would save paupers' bodies—we must confess that we see in the course of policy he took, none of that superior ingenuity, which must have been exercised to dupe the London surgeons so effectually, supposing that they have a leg to stand on in their present opposition to his antiseptic fluid. The adoption of his process must stand or fall with the professions' approval: the general public could never force the teachers to use it, even if (what is equally unlikely) they had forced Government to buy it. To call attention, therefore, to dissecting irregularities, was to interpose an obstacle in his path very unnecessarily, and to give his former supporters that interest in a change of opinions with which it is always highly improper to tempt any man's frailty—especially *against* ourselves.

The perseverance, if not the success, with which Mr. Roberts has forced this matter on the House, should give the Profession a lesson. From a mere chance of a Parliamentary gratuity, a private and comparatively obscure individual has forced a medical subject three times in one session on the notice of the house and country. The interested activity of Mr. Roberts has done more for medical grievances in the House, than the sense of wrong in the Profession outside, or the sense of justice and sound policy of all the members within. What an important intimation does this circumstance give us of what might be done for the medical community if we had but one Member in Parliament there to represent our interests!

OBITUARY.—At Dundee, Dr. Lawrence Davidson.

SLEEP WAKING, OR SECOND CONSCIOUSNESS.

By H. BROOKES, Esq.

(Continued from page 182.)

It has often been contended by some parties that the state of Second consciousness is a state of being decidedly superior to that of First consciousness, and as often by others, that it is decidedly inferior. Neither position is strictly correct, as applicable to the majority of cases, however true either may be in regard to individual ones. In the examples I have already given, we have seen equal or greater intellectual power manifested in the accomplishment of certain objects, than the individual could have manifested in the waking state, and many examples might be quoted, where sleep-wakers have accomplished, without difficulty, objects which, in their waking moments, they would not have dared to attempt, and would, most probably, have failed in if they had. But this ceases to appear extraordinary when we reflect that they see only *the one object* they have in view, and not the difficulty or danger by which it is surrounded—that the external senses being closed, and many of the cerebral organs in a state of sleep, the concentration of their intellectual energies is undisturbed by impressions from within, or from without; and, *therefore*, are necessarily capable of acting with much greater freedom and power in the particular direction in which they are exercised; but the mental manifestations are necessarily wanting in unity and extent.

Some cases, however, exhibit indubitable evidence of a decidedly superior mental condition during sleep-waking, of which the following case is an interesting illustration; it is related by Dr. Abercrombie:—"A servant girl, an orphan of the lowest rank, after being in bed about two hours, usually became restless, and began to mutter to herself: she then uttered sounds precisely resembling the tuning of a violin, and, after some prelude, dashed off into elaborate pieces of music, which she performed in a clear and accurate manner, and with a sound exactly resembling the most delicate modulations of that instrument. During the performance she sometimes stopt, made the sound of retuning her instrument, and then began exactly where she had stopt, in the most correct manner." This would appear inexplicable, but for the fact that this girl had, when a child of seven years old, resided for some time in the house of a farmer, and slept in a room separated by a very thin partition, from one which was frequently occupied by an itinerant fiddler, a musician of very considerable skill, who often spent a part of the night in performing pieces of a refined description. His performances, however, were *not then* noticed by the child, except as a disagreeable noise, and it was several years after, (during which she had suffered from long and severe illness), that this curious reminiscence was manifested.

"After a year or two her music was not confined to the imitation of the violin, but was often exchanged for that of a piano, which she was accustomed to hear in the house where she now lived, and she began to sing, imitating exactly the voices of several of the ladies of the family. In another year from this time, she began to talk in her sleep, in which she seemed to fancy herself instructing a younger companion. She now often descanted, with *the utmost fluency and correctness*, on a variety of topics, both political and religious—the news of the day—the historical parts of Scripture—public characters, and particularly the characters of members of the family and their visitors. In these discussions she shewed *the most wonderful discrimination, often combined with sarcasm*, and *astonishing powers of mimicry*. Her language throughout the whole was *fluent and correct*, and her *illustrations* often *forcible and even eloquent*. She was fond of illustrating her subjects by what she called a fable and in these her imagery was both *appropriate and elegant*. She was by no means limited in her range: Bonaparte, Wellington, Blucher, and all the Kings of the earth figured among the phantasmagoria of her brain; and all were animadverted upon with perfect freedom from restraint. The *justness* and *truth* of her remarks excited the ut

most astonishment in those who were acquainted with her limited means of acquiring information. She has been known to conjugate correctly Latin verbs, which she had probably heard in the school room of the family, and she once spoke several sentences in French, at the same time stating that she heard them from a foreign gentleman, whom she had met, accidentally, in a shop. Being questioned on this subject when awake, she remembered having seen the gentleman, but could not remember a word of what he said.

"During her paroxysms, it was almost impossible to awake her, and when her eyelids were raised, and a candle brought near her eye, *the pupil seemed insensible to the light.*

"For several years she was during the paroxysms entirely unconscious of the presence of other persons, but about the age of sixteen she began to observe those who were in the apartments, *and she could tell correctly their numbers*, though the utmost care was taken to have the room darkened; she now also became capable of hearing and answering questions that were put to her, and of noticing remarks made in her presence; and with regard *to both* she shewed *astonishing acuteness.* Her observations, indeed, were often of such a nature, and corresponded so accurately with characters and events, that by the country people she was believed to be endowed with *supernatural power.*

"During the whole period of this remarkable affection, which seems to have gone on for ten or eleven years; she was, when awake, *a dull, awkward, girl, very slow in receiving any kind of instruction*, though much care was bestowed upon her, and in point of intellect was much inferior to the other servants of the family. In particular, she shewed no kind of turn for music. When awake she had no recollection of what had passed during her sleep, but during her sleep was more than once heard to lament her infirmity of speaking in her sleep, adding how fortunate it was that she did not sleep among the other servants as they teased her enough about it as it was."

But it is also alleged that in such states of second consciousness, powers, or faculties, have been manifested, which do not belong to the patient or others in the normal state; as, for instance, the power of seeing, hearing, smelling, tasting, and feeling, through the forehead, hands, feet, and epigastrium, independently of the proper organs of those senses; and, notwithstanding the intervention of opaque substances; and extravagant as this allegation, doubtless, appears at the first glance, there are certainly many well authenticated facts recorded which appear to confirm its truth. It is as much our duty to examine *those facts* carefully and dispassionately, as it is our duty so to examine any others; but many start away, at the very threshold of the enquiry, alleging its utter absurdity, *impossibility*, &c., without stopping to enquire if it may not, nevertheless, be *true*, which is, or ought to be, the primary enquiry, and much of this has doubtless arisen from the slovenly manner in which the proposition is usually stated. In fact it amounts simply to this: that during an abnormal state of the nerves of the organs of sense, which incapacitates them for transmitting impressions to the brain, the brain may receive impressions of light, sound, &c., through the medium of other sentient nerves; and that those nerves and the brain may be in such an exceedingly sensitive condition as to transmit and perceive even the faint impressions of light which may pass through substances, which, *to our ordinary organs of vision, appear* impervious to rays of light. For the non-observer of the facts to argue that these things are *impossible* is far more absurd than for the observer of the facts to contend that *they are true.*

It is perfectly true, that in several cases where the sleep-waker has *appeared* to manifest a power of vision in distinguishing objects, &c., the facts may be explicable upon the assumption, that the patients had a previous knowledge of their positions, &c., and remembered them—or that they were guided by *feeling*—or that they had visual perception by the eye; but in some of the cases I have already cited, neither of these explanations will hold. In the case of the Archbishop of Bourdeaux, who wrote, perused, and corrected sermons, pieces of music, &c., a piece of pasteboard was held under his chin to prevent vision by the eye.

In the cases of Castelli and the watchmaker's apprentice, the eyes, though open, were "*fixed* with a *vacant stare*"—"had *no life* in them," the pupil being, as it is found to be, in almost all these cases when examined, *insensible to the stimulus of light*, and, therefore, in a state incompatible with vision by the eye.

But the most trustworthy cases of this kind are of comparatively recent date, and are authenticated by men of most undoubted honour and integrity. M. Petitin, an eminent physician, and honorary and perpetual president of the Medical Society of Lyons, in 1787, published an account of a cataleptic patient of his, who for a long time appeared to be in a state of absolute insensibility. No stimulant had any effect upon her—her eyes and ears had entirely lost the power of receiving sensations. He was greatly astonished, however, by the *accidental discovery*, that she heard him perfectly, when he spoke to her over the region of the stomach. Having satisfied himself of this fact by *repeated trials*, he afterwards found that it was the same in regard to the senses of *sight and smell.* The patient read when the book was applied over the stomach, even through an opaque body. Some years after the publication of this Memoir, he found other cataleptic and sleep-waking patients (eight in the whole) who exhibited the same phenomena, with this difference, that in some of the cases this power of perception appeared, not only at the epigastrium, but also at the extremities of the fingers and toes. One of them distinguished a letter, addressed to her, which was *folded four times*, inclosed in a semi-transparent box, AND HELD IN HIS HAND UPON HER STOMACH—and another of them enumerated exactly the most remarkable articles which were in the pockets of a whole company.

Dr. Joseph Frank, (in his "Prax. Med. Univ. Precep." 1817) has given a long account of a curious and highly interesting case of a similar description which occurred in his own practice, in which the senses of sight, hearing, and taste, were manifested through the epigastrium. Dr. Despine, in 1826, details of another sleep-waker, the daughter of a Greek at Grenoble, that "not only did she hear through the palms of her hands, but *we saw her read* without the help of her eyes, and with the extremities of her fingers, which she rapidly agitated over the page which she intended to read, and without touching it, as if to multiply the falling surfaces. She thus read a whole page of a novel by Montholim. At other times we saw her read on the dial, and through the glass of a watch, the hour indicated by the hands. She also wrote several letters, corrected them by a second reading, marking the mistakes as she went on, and rectified one of them word for word. *During all these experiments a screen of thick pasteboard intercepted in the most effectual manner every visional ray which otherwise might have reached the eye.* The same phenomena were manifested at the soles of the feet and the epigastrium, and the patient seemed to experience a painful sensation when simply backed."

In the "Bibliotheque Medicale," Dr. Delpit has recorded another "who read, and that distinctly, when her eyes were entirely closed to the light, by passing her fingers over the letters. I made her read in this way whether by daylight, or in the most profound darkness, printed characters, on opening the first book, which came to my hand, and sometimes written characters, by presenting to her notes, which I had prepared on purpose before I went to her."

The celebrated M. Dumas mentions "a young lady who came to Montpellier, to consult the physicians respecting an hysterical affection accompanied by catalepsy, and who experienced during the whole continuance of her attacks such a concentration of the sensibility in the precardial region, that she referred to that part all her sensations of light, hearing, and smelling, *which were not at these times produced through the usual organs.*"

In the "London Medical and Surgical Journal" for Dec. 1832, an account is given of a young man at Bologna who suffered from convulsive attacks, followed by total insensibility, except at the epigastrium and palms of the hands, where *feeling* seemed to remain in all its energy. He heard and answered questions when put to him in a low voice, provided the mouth of the speaker was placed near the epigastrium, *and during these trials great care seems to have been taken by plugging, bandaging, &c.*, to block up the passages of the ears.

In 1834, Dr. Belden, a physician in America, published a detailed and most interesting account of a great number of experiments, instituted by himself, Dr. Woodward, and a number of other medical and scientific gentlemen, in the case of Jane Ryder, a young female who was subject to frequent attacks of abnormal sleep, and Second consciousness, and this apparent vision without the eyes. These attacks were of very frequent, almost daily, occurrence, for a period of I think six or eight months, so that ample opportunities were afforded for verifying observations. In this state, with the eyes closed and covered, plaistered up and bandaged in every conceivable way, she saw to read and write, and to do everything she was accustomed or wished to do, with as much facility as she could in her normal state; and even saw to read *a name and address, written in a small and illegible character, in pencil, in the most profound darkness.* Her paroxysms and this power gradually declined as her health improved under medical treatment. In the "Medical Times" for the last year, vol. 8, Dr. Durand, of Caen, in Normandy, details another case of catalepsy, in which the patient, a young lady, of the highest respectability and integrity, heard and saw through the epigastric region, and subsequently through the fingers and toes. He made the discovery *by mere accident quite unexpectedly*; but he was enabled to repeat his experiments, and verify his observations in the presence of numerous medical and scientific friends, during a period of two months.

These cases, be it observed, are all totally unconnected with Mesmerism; have been reported by different observers, mostly medical men of eminence in their profession; and have occurred in different countries, and at different periods, as the result of disease; and surely they constitute a body of evidence sufficient to make out a *prima facie* case that such a power may, in certain abnormal conditions of the human economy, be manifested. The fact is *not opposed* to all the known laws of nature, but is perfectly consistent with them, thought it may be opposed to many of our "preconceived notions" of those laws,—which notions, therefore, may be considered ill-founded ones.

But another and equally extraordinary power is alleged to have been manifested in Second Consciousness, viz.: the instinctive perception of disease, and its nature, in themselves and others; the prediction of its crises and duration; and the indication of appropriate remedies. Were it compatible with the limits of these articles, a host of authorities might be quoted, proving that this power, so hastily assumed to be of modern origin, is really as old, or rather older, than the art of Medicine itself, which, in fact, appears to have taken its rise from it. Hippocrates, Galen, Julius Scaliger, Pliny, Celsus, and others, all notice its existence; and many cases of modern date might be mentioned, in which it has been manifested; but, for the present, I will quote the following only:—

"Dr. Descottes, in the year 1760, attended, at Argentin, two young, hysterical women, who were much attached to each other, and who knew each others' situation, although living separately in distant houses; and who, moreover, *always predicted their own state of health, and that of the other*, three or four days in advance." The celebrated Dr. Wienholt mentions two cases of a like description; and Dr. Sprengel, one of the most learned and eminent physicians in Europe, in the 2nd vol. of his "Institutions of Medicine," says:—"I have *myself seen* a young man, a relation of my own, who had never been treated in this artificial manner (i.e., by Mesmerism), who was therefore a natural somnambulist—who, in the very crises themselves, *predicted with the utmost certainty* the repetitions of the accesses, prescribed the appropriate remedies, and foretold the period when the disease would terminate.

(To be continued.)

THE SURGICAL COUNCIL'S MANIFESTO.

It is with much regret that we have to direct attention to a document to which we have been requested to give insertion in our columns. After the announcement, which appeared in the *London Medical Gazette*, of the 17th of May, and which, bearing, as it seemed to us, all the characters of an official, or, at least, an authorized statement, was immediately copied into this journal; we have experienced not only regret, but disappointment, that the Council of the College of Surgeons should have put forth such a document. It is perfectly true that they owed to the Members of the College an explanation of the motives by which they were guided in the first exercise of the power of selection for the Fellowship intrusted to them; and though this explanation is far from satisfactory, though the principles of selection, which they adopted are distasteful to the majority of the Members of the College, unequal in their operation and necessarily leading to much injustice to very many eminent and accomplished surgeons, had any disposition been shown to exercise the additional powers which they possess *in a more liberal and equitable manner*, the first error in judgment would have been, we doubt not, passed over in consideration of the difficult position in which they were placed, from the limited number of those on whom they could then confer the Fellowship. But when we find the Council avowing their intention of persisting in the same invidious course on this second occasion, when no such restriction is placed upon them, we can only lament over their blindness and infatuation, and apply to them the old but pithy proverb: "*Quem Deus vult perdere prius dementat.*"—We have no design of going through the statement. Our opinion has been so recently expressed on the subject, as to render it unnecessary, and it is scarcely needful for us to avow, that the weak and every way unsatisfactory specimen of special pleading before us, is not calculated to change that opinion. We cannot, however, but agree with the Council in the concluding paragraph of their statement, "that no alteration in the Charter, nor any legislative enactment, can materially change the condition of those who have been for some time established in practice:" and that "in the medical profession each individual makes his own place in society; intellect, knowledge, and integrity, being equally appreciated and respected in every grade and station." It is precisely for these reasons that, in conferring the elective franchise on the members of the College, any other distinction, where all were before equal, than that which seniority of standing confers, was as unealled for as it is unjust. The consolatory reflection addressed to the excluded that, "if the elder class of practitioners are interested in these changes, it is less on their own account, than on that of their sons and successors," is so equivocally expressed as almost to convey an insult, although we cannot for one moment suppose that such was intended.—*Provincial Medical and Surgical Journal.*

MEDICAL REFORM.

To Sir James Clark, Bart.

My dear Friend,—Thy views on the subject of medical reform, explained and advocated in thy letters to Sir James Graham, appear to be so well adapted to the present exigencies of our profession, and to accord so well with the wishes of its judicious members, that I cannot but desire that they may, to a great degree, be carried out by the bill which is about to be passed. Although I am far from thinking that it would be expedient, either to abolish, or altogether to re-construct, the two great existing chartered bodies, the Colleges of Physicians and Surgeons, I regret that partial legislation should so far precede the general, as to give these bodies their new charters, before the passing, or even publication, of the general measure.

In principle, the step is objectionable, and practically, it will be productive of serious inconvenience and difficulty. I think it should not be forgotten that to the Apothecaries' Company we are bound to ascribe much of the improvement which has been effected as to the average of acquirement at present possessed by the general practitioners throughout England, and I cannot help desiring to see a full measure of justice dealt out to that body, when the two other bodies are receiving so much of royal favour.

The immediate object of this letter is to place in a connected whole, several points which I have already had the pleasure of throwing before thee in conversation, and by which, it appears to me that thy own plans may be effectually accomplished.

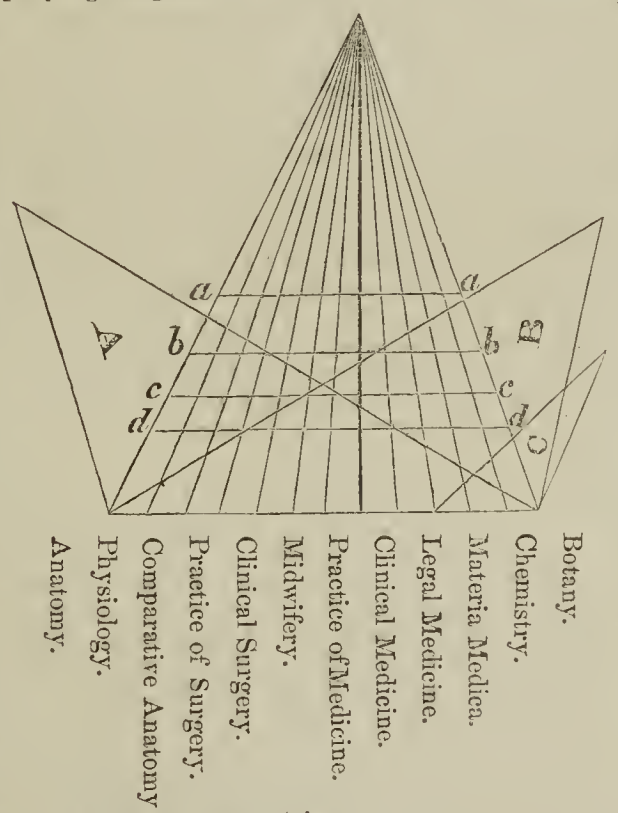
I would assume, in the first place, that there be a common examination for the license to practise to be submitted to by all, whether their object be to apply themselves more particularly to medicine or surgery, or to combine the two—that for the convenience of students, examining boards for the granting of this license should sit in London, Edinburgh, and Dublin, granting diplomas on the same terms, and, as far as may be, equalising the severity of their tests.

This examination may be considered as a state or legal examination, whilst other examinations are to be regarded as academic.

Though *bonâ fide* degrees in medicine and surgery should only be attainable from the recognised universities of the kingdom, or from such foreign universities as may, by courtesy, be allowed to entitle their graduates to proceed *ad eundem gradum*, the examiners for the license might, I think, be permitted to receive testimonials of proficiency tested by examination from other academic bodies specially permitted to grant them.

I make this proposal merely to avoid the apparent severity of driving all students to some university for academic examination, though I hold it to be very desirable, and even expedient that they should voluntarily adopt this course.

The mutual relations between the examinations for the license to practise, and those for academic degrees; and also between these and the Colleges of Physicians and Surgeons, and the associated body of pharmaceutists, will, perhaps, be rendered most easily intelligible by reference to the accompanying diagram.



(*A*) College of Physicians.
(*B*) College of Surgeons.
(*C*) Pharmaceutical Body.
(*a*) Doctor of Medicine or Surgery.
(*b*) 2nd Academy, Examination for B.M. or B.Ch.
(*c*) State or Legal Examination.
(*d*) 1st Academy, Examinations.

At the base of the triangle are seen the departments of scientific and practical knowledge required for medicine, surgery, and pharmacy. Of the pharmacian is demanded but a limited number of these acquirements, but he may carry them to their highest pitch, and receive corresponding honour and credit for his proficiency. It is important that he should seek these acquirements in the same schools with professors of the other departments. Their future cordial co-operation—their mutual understanding of each other—and their common direction to the same objects, could scarcely be secured by their systematically frequenting different schools. The pharmaceutist, however, has nothing to do with the state examination in medicine, but presents his testimonials of competent or proficient acquirement in his peculiar departments, and is received or rejected by the Pharmaceutical Society, upon grounds on which that body should be as competent to decide as the Colleges of Physicians and Surgeons are with respect to the claims of their candidates. The safety of the public would, however, be consulted by the enforcing of a limited but practical state examination for the pharmacian, as well as for the physician and surgeon.

Above the line indicating the state examination are placed those which mark the Batchelor's and Doctors' degrees in medicine and surgery. There will, consequently, be no danger of any university being subjected to the degradation of seeing its graduates rejected at the state examination, except in particular cases, in which the ordinary course may have been deviated from, and in such cases discredit could hardly be produced.

Let us next consider the relation which the Colleges of Physicians and Surgeons would bear to this scheme.

It is to this subject I wish to invite particular attention, as it is mainly concerned in the adjustment of the differences which now divide our profession.

1st, Of the College of Physicians.

So long as the term* physician is understood to mean medical men who are worthy of the Doctor's degree, and whose design it is to occupy the position of consulting practitioners, the college should adhere to its former practice of admitting those only who have proceeded to the Doctor's degree. By deviating from this practice it may, doubtless, admit some very competent men, but it runs the risk of doing otherwise, and manifestly deprecates the honour and privileges which it is understood to confer, and it is not to be presumed that a medical man, every way suitable for admission into the College of Physicians, would fail in the preliminary step for obtaining a Doctor's degree. Admission to the college would, therefore, require the production of certificates of having passed the state examination, of having received the Doctor's degree from certain recognised Universities, of having attained a certain age, and of having been engaged a certain period in practice or professional studies of a practical nature, together with the proofs of respectability of character. The satisfactory production of these proofs should entitle the candidate to be enrolled amongst the fellows of the College. There is, however, one case to be provided for. The professional studies and the Doctor's degree may have been received in some foreign school, of the precise value of which ignorance or doubt may exist, and yet such individuals may have the opportunity of entering the College with the minimum of required knowledge. This, however, could be easily guarded against. There would then be perfect equality of the Fellows of the College, but provision would be required for the constitution of the Council. The close character of this board forms its most obnoxious feature, and subjects even its unexceptionable acts to suspicion. To obviate this I would recommend that two-thirds of the council should consist of such ordinary members or fellows as will come on by rotation in the order of their standing, without reference to place of residence, professional distinction, party, or any other less worthy title. They should remain on the Council for a certain period, say four or five years, and not come on again, on this footing, unless it should again come to them by rotation. Any fellow may, however, waive his right to be on the Council after it has come to him in due course. The remaining third should be elected by the Council having been pro-

* It has been contemplated to extend the application of this term—See "Remarks on the Practice of Medicine, by a General Practitioner."

posed and duly announced to its members individually, a certain period prior to their election.

The third part so elected should be chosen from the ordinary members generally, on grounds of which the Council should be the judges. This third would necessarily constitute the working part of the Council, and their mode of nomination would enable the body to avail itself of the choicest talents of the profession for every important and worthy object. At the same time the mode of determining the other two-thirds would secure the existence of a majority of such a character, as, if the occasion required, would have it in their power to check any party movement, so as to obviate all jealousy on the part of the body at large, much more effectually than could be done by any elective process, which the scattered members of the college, widely differing as to their energies, leisure and interest in the subject, could permanently and generally adopt. The two-thirds would be the honoured guardians of the privileges of their body. They would be looked to as such by their brethren, in return for which they could scarcely regard it as a hardship to hold themselves in readiness for any emergency during the limited period of their office.

2ndly, College of Surgeons.

The premature concession of a new charter to this body which has, infused so much general discontent amongst its ordinary members, seems to preclude the possibility of legally enforcing the same principle which has just been laid down for the College of Physicians, but I conceive that it might, with so little change, be made to apply to the body under its present charter, that it will be quite possible for the present council to introduce it by a modification of its bye-laws.

It appears to me that the adoption of a plan similar to that which I have just sketched, would ensure an amount of publicity and equality which should satisfy the most democratic member of our profession, at the same time that the executive boards required for the management of the affairs of the profession, might proceed with their duties undisturbed by the jealousy or needless interference of their fellow members. The highest honours, as well as grades of his profession, would be open to every medical man by the effectual exertion of his talents and acquirements, whilst those who remain in less conspicuous positions, amongst the various causes which they might assign for the fact, could never ascribe it to the partiality or injustice of self-elected bodies.

Before I conclude I have only to add a few words regarding the boards for conducting the state examination.

The Government, under whose direction these boards would necessarily be placed, should send the requisition to the Councils of the Colleges of Physicians and Surgeons, and to that of the body of Associated Pharmaceutists, calling for the nomination of a certain number of examiners in each department. They should not, however, elect those who are members of council for the time being, but appoint a few members of the council to act as a committee of examination, whose duty it should be to confer with the examiners, in order to ensure the efficiency, and, as far as possible, the uniform severity of the examinations.

The safety of the public, the character of the profession, and the interests and privileges of the constituted bodies would, I believe, be perfectly secured by measures of the kind which I have suggested, and individuals would, at the same time, be very secure against the possibility of exclusion from the colleges, through anything bordering on jealousy or intrigue.

Local jealousies, to which, unhappily, the present system affords an opening, could scarcely be admitted, seeing that the state examination, when passed at any of the boards, would qualify for practice throughout the British dominions, and the perfect equality of fees, and, as far as possible, of tests, would give none the preference on the ground of economy or facility. The different colleges, also, should, as far as possible, equalize their expenses, and the transfer of membership from one to another, which convenience may require, might be readily effected on the payment of a moderate fee.

There would still be some competition between the various medical schools, but it would be a competition of the most open and honourable character, and pupils would be mainly attracted by the success and celebrity of the teachers, or by the convenience of locality.

Thine sincerely,

THOS. HODGKIN, M.D.

HOSPITAL REPORTS.

ROYAL WESTMINSTER OPHTHALMIC HOSPITAL, CHARING CROSS, June 12, 1844.

Several operations for cataract, artificial pupil, and strabismus were performed this day, after which Mr. Gutbrie addressed the following observations to the students in attendance :—

GENTLEMEN,

I regret much I have not been able to give the clinical lectures, for the last three months, I promised in the early part of the season. I have had a good deal of occupation of my own, and I have been pressed beyond measure by the various things I have had to do with the Medical Poor Relief Committee of the House of Commons. My correspondence has been perfectly ridiculous in extent. I have had as many as ten, twelve, and even thirteen letters from several unions, and the examination and preparation of evidence, &c., has not left me a spare moment by day, and scarcely enough for sleep. I am gratified, however, by the thought that I have been able to do some good, and I trust I shall have the pleasure of seeing many, if not all of those evils removed, which have caused so much annoyance to the medical profession, so much distress and misery to the sick poor.

The Committee of the House of Commons have sat twenty-two times ; they have enquired very closely into many points, and carefully into all. They fully investigated the statements made against several of the metropolitan unions, and are now engaged with the Midland and South Western unions. Time however presses ; the principal facts relating to each union can in future only be elicited, and the Committee will scarcely bring this part of their labours to a conclusion before the end of the month. I shall be glad to find that they will then report the evidence they have taken to the House of Commons, and allow it to be printed.

The enquiry into the Northern and Welsh Counties, will, I fear, occupy the remainder of the session. We must, therefore, wait events, satisfied that great good must some day ensue, and you must on this account pardon my neglect of you here. I am sure Mr. C. Gutbrie and Mr. Dasent will do their best to let my absence be as little felt as possible. I will, however, give some lectures, beginning next week, on the operations of cataract, and particularly on those which I have lately performed by extraction.

WESTMINSTER HOSPITAL.

Ulceration and gangrene of the appendix cæci vermiformis.

An aged woman, of the name of Shoobred, was admitted into Anne's ward for abscess in the perinæum. She also presented symptoms of inflammation and ulceration of the intestinal canal, accompanied with difficulty of breathing, and other indications of a diseased condition of the lungs. A short time before she died, the right leg became very œdematous, and resembled in some degree the appearance of a limb affected with phlegmasia alba dolens. The facies hippocratica was extremely well marked the day before she expired.

Autopsy.—The body was examined on the 16th of December, about forty-eight hours after death. It was exceedingly emaciated. From the symptoms which had shewn themselves before death, structural disease of the lungs was anticipated, but not to the extent that was discovered. The upper lobe of the left lung contained a large vomica—large enough, indeed, to receive the double fists in its cavity ; the greater part of both lungs was studded with tubercles in various degrees of softening, and also contained numerous vomicæ ; there were extensive adhesions between the pleuræ on the left side. There was rather more fluid than is usual in the cavity of the pericardium, but the heart appeared to be healthy. Ulcerations were visible on the mucous membrane of the intestines ; the appendix cœci vermiformis was found ulcerated and gangrenous, and instead of terminating in a *cul-de-sac*, there was a large opening, formed by ulceration or sloughing, communicating with the cavity of the abdomen, in which there was effused a small quantity of sero-purulent fluid. The edges of this aperture were thickened, and affected with unhealthy inflammation. The mucous membrane of the cœcum caput coli was injected, thickened, and ulcerated. The appendix vermiformis was found lying in close apposition to the right iliac vein, and, from its appearance, and the swelling of the right limb which had occurred, it was suspected that that vessel had been affected by an extension of the inflammation. It was accordingly slit open, when the suspicion was verified. It was found to be filled with coagulated and decomposing blood, and with effused lymph to a considerable extent: the part more immediately in apposition with the appendix was contracted, and directly above it was a healthy clot of blood. The coats of the vein were thickened in their whole extent. The large intestines were distended with fæcal accumulation.

The details of this case are exceedingly meagre and scanty, the patient not having been seen by the reporter during life, but the appearances disclosed by the post-mortem examination of the body, possess sufficient interest to authorize their publication. The case occurred at a time when instances of inflammation and ulceration of the appendix cœci vermiformis were attracting considerable notice, and the attention of the profession was directed to a class of diseases hitherto almost unknown to the majority of medical men, and respecting the diagnosis of which there yet remains a great deal of obscurity. This case is one of extreme interest, involving as it does, extensive disease of the lungs, gangrene of the appendix cœci vermiformis, and phlebitis of the right iliac vein. Which of these three diseases was the immediate cause of death, may, perhaps, admit of some discussion ; but it is highly probable it was the combined effect of the two latter, as the diseased condition of the lungs must have existed for some time, and the fatal termination, if produced by it, would have been more gradual in its advent.

Considerable interest attaches to the two latter causes, to which death might be ascribed.

We are not acquainted with the use of the appendix cœci vermiformis : the part it plays in the human laboratory is not at present known; but it would appear to be of the utmost importance, if we may draw inferences from pathological anatomy. Several cases have been placed on record, in which foreign bodies arrested at this part in their progress through the intestines have produced an attack of inflammation, which has terminated fatally in a very short time. In the course of the winter 1831-32, Mr. Hooper narrated a case at the Medical Society of London, which he, at the time he was in attendance, believed to be a case of cholera, but which, on examination of the body after death, proved to be a case of inflammation of this part of the intestines, caused by the presence of raisin-stones. Mr. Iliff, of Newington, published soon afterwards a detailed account of a case, in which a raisin-stone in the appendix caused inflammation and death. The symptoms were chiefly pain, and tenderness in the abdomen, vomiting and purging, and occasional rigors. The patient, a boy twelve years of age, sunk gradually. The appendix was found inflamed and ulcerated ; the raisin-stone was discovered in the centre of the ulcer. He alludes also to two other cases, in one of which a small bean, in the other a calculus, gave rise to the disease. In the last case, the pain was referred to the lower part of the abdomen on the left side—rather an extraordinary situation for the pain considering the anatomical disposition of the parts.

The phlebitis was evidently induced by an

extension of the inflammation from the appendix vermiformis to the right iliac vein, over which it lay, causing an effusion of lymph, a partial contraction of its calibre, and in all probability that swelling of the lower extremities, which took place a few days prior to death. In the first part of the sixteenth volume of the Medico-Chirurgical Transactions, Mr. Lawrence has narrated a case of a similar swelling occurring in a woman affected with cancer uteri, and in whom the saphena, femoral, and iliac veins were inflamed, as likewise the hypogastric and profunda, the whole of these vessels being rendered impervious by the effusion of lymph. Dr. Graves and Dr. Stokes have mentioned similar cases occurring both in the male and female, and consider them as analogous to the disease of the puerperal female, called *phlegmasia dolens*. Dr. Lee, of the British Lying-in Hospital, in a paper published in the second part of the fifteenth volume of the Medico-Chirurgical Transactions, is also of opinion that phlebitis causes this peculiar swelling of the lower extremities, but Messrs. Dance and Tonnellé have narrated cases of uterine phlebitis, where no such symptom occurred; and Dr. Ryan, with several other writers, totally deny that inflammation of the veins is the cause of phlegmasia dolens. Velpeau, Ribes, and Bouillaud refer it to inflammation of the veins, and Dr. Dewees as positively declares it is owing to inflammation of the lymphatics. Two cases have been recorded in the *Medical Gazette* of a disease closely resembling phlegmasia dolens occurring in the upper extremities, which was found to have been produced by inflammation of the veins. They occurred in the City of London Lying-in Hospital, and were seen by Dr. Liddesdale and Dr. Gordon, and by Messrs. Coulson and Rance. The cause of phlegmasia dolens is as yet not fully understood, and it is certainly rather difficult to believe that it can be *always* caused by phlebitis, considering the little risk there is of a fatal termination, and the exceeding mortality attendant on inflammation of the veins.

MISCHIEFS ARISING FROM JARRING MEDICAL GOVERNMENTS.

To the Editor of the 'Medical Times.'

Sir,—There is one class of medical men whose case, amidst the promised alteration in the existing medical laws, I fear is in danger of being unprovided for; but I am sure it is not in the nature of your good journal to withhold a helping hand from any who *honorably* solicit its assistance at this crisis, by stating the case in one of its columns, and thus bringing it into the notice of those having power, and who, but for that, may possibly overlook it. It is this,—A man educates himself with a view to practise in one of the British colonies. He knows that the Apothecaries' certificate is in all foreign parts equivalent in value to so much waste-paper; but the diploma of the College of Surgeons being respected in those parts, he *preferably thus* qualifies himself; but suppose some circumstances afterwards to occur, either to prevent his going abroad, or *having gone* there, to compel him to return;—what is such a man to do, who has no other means of maintaining himself, and perhaps a family, than by his practice? He may not even be able to present himself for examination at the Hall, should he be desirous of doing so, in consequence of the preliminaries to that examination being different from those required by the College; yet he may be a sound practitioner, and a man of much experience; but because his mode of education has not fully accorded with the rules of the Hall, he is, after probably returning with shattered health to his native country, denied the means of getting his livelihood in any way but by *pure* surgery or midwifery. Can you, Sir, inform me if there is a prospect of any relief from the present tyrannical and misconstrued law, in such cases as these.

I am, Sir, yours respectfully,
R. T.

June 3rd, 1844.

[We think that the cruel and anomalous hardships complained of by our correspondent must be attended to in the New Bill, if not before it is introduced, at least, before it can *pass*. His observations show how utterly incomplete has the Apothecaries' Hall ever been as a governing institution, in which the body of general practitioners could be, we will not say, honorably, but, in any way, included. The army, navy, and the colonies, have had medical attendance adjusted for them, after a fashion which would intimate, that the state knew little, and cared less, about a corporation which has been made (wisely) so very troublesome, and (unwisely) so little creditable, to those forced into joining it. With such a *national* slight on the Hall's utility, with so many worthy and distinguished men legally practising without its cognizance or certificates, how is it possible that the public can believe its license a matter of any value, as testing a man's qualifications?]—Ed.

PERISCOPE OF THE WEEK.

Veratria in facial neuralgia.—Dr. Le Calvé cites two severe cases of this painful disorder, which were entirely cured by frictions with veratria ointment. The first is that of a person employed as inspector of a telegraph, who, having exposed himself for half an hour to a very cold air, was a few minutes after seized with violent pains. They proceeded from the frontal branch of the ophthalmic nerve and radiated over the temple; the eye was injected, and there was considerable spasm of the eyelid, and dread of light. Dr. Le Calvé immediately prescribed the veratria ointment. After the first friction, at the end of a few seconds, the pains ceased with exceeding rapidity. The patient thought himself cured, and was soon asleep. At two in the afternoon a fresh attack came on, which yielded to a friction continued for four minutes. In the evening a preventive friction was made, and the patient passed an excellent night. The next day, about six in the morning, the pains re-appeared; but this time they proceeded from the superior maxillary nerve, at the point where it issues from the infra-orbital foramen, and thence they spread rapidly to the posterior and superior dental branches. A friction which lasted five minutes caused this attack to disappear. It was followed by a few others which always yielded to the same means. From this period, for more that a year, the neuralgia has not re-appeared. The other case was that of a merchant's clerk, about forty-one years of age, of sanguine temperament, who was seized six days after a journey, during which he had exposed himself all night at the coach window, with a violent pain proceeding from the frontal branch of the ophthalmic, and radiating over the temple and the whole of the right side of the back part of the head. Dr. Le Calvé found his patient in violent agitation, and uttering piercing shrieks. The right conjunctiva was much injected, the eye was suffused with burning tears, and the dread of light was extreme. There was also a lancinating pain at the bottom of the orbit. The veratria ointment was immediately applied, and the pain yielded to a friction which lasted sixty-two seconds. At two in the morning a fresh paroxysm occurred, which yielded like the former to a friction of two minutes. Fifteen months have elapsed without any return of the neuralgia. In the preparation of the ointment, Dr. Le Calvé gives the preference to rancid lard, as it favours the formation by its acidity, of acetate of veratria.

Salivary Concretions.—It appears from an analysis of several salivary concretions conducted by M. Bibra, at Erlangen, that they consisted of a nucleus of albumen, and mucus, surrounded by concentric layers of saline matter, consisting of phosphate of lime 38·2, carbonate of lime 13·3, phosphate of magnesia 5·1, fatty matter, with traces of soda 3.1, organic matter 35·0, water 5·3.

Filing the teeth.—Mr. Robinson, in an article on filing the teeth, published in the *Forceps*, says, the teeth that are more generally attacked with caries, and for which the application of the file is more frequently brought into request, are the four central incisors and canines of the upper jaw, although in many instances it may be used with success to the bicuspides and molares of both jaws. The permanent central and lateral incisors of the upper jaw frequently decay at an early period at their sides. This arises either from a too crowded state of the mouth, and the undue influence exercised on the parts by their too rapid advance before the maxillary arch is sufficiently developed to admit the increased size, or from the patient at that period neglecting to perform those daily ablutions so essential and necessary to the health of these organs. In either case it unquestionably forms the exciting cause of caries in those situations, which, if allowed to extend beyond a certain point, renders the operation both difficult and dangerous to the tooth itself, owing to the confined space the operator has to use his instruments, with that force so requisite to the well packing of the gold to the exclusion of all foreign substances, with the liability of fracturing the enamel. Even if this difficulty should be overcome, the tooth may be broken in the attempt at stopping it, or the gold may become loose at the end of a few months. Hence arises the necessity of filing in the early stage of caries, in preference to stopping. In every stage which requires the use of the file, the dentist ought not to be content with merely dividing the teeth, but should extend the operation until the whole disease in the tooth is eradicated, and presents a surface as white as the healthy part of the tooth. A considerable portion of a tooth can be filed away without the slightest injury, if the operation be performed with caution, and the posterior portion removed without any perceptible disfigurement; in many cases, the caries can be removed by scraping away with an instrument, without having recourse to the file. Mr. Robinson has frequently, after dividing a tooth, discovered near its cutting edge a large cavity, which it would be impossible to remove without destroying more than half the tooth, and disfiguring the patient; in any attempt to stop it with gold, the chances would be, either a fracture or an imperfect stopping. In these cases, he has substituted gum-mastic steeped in water—an admirable substitute—which has remained in the cavity for months, and can be renewed at pleasure by the patient. In many instances, when the cavities have been examined three or four years afterwards, they have been found perfectly healthy, not in the least indicating a return of the disease.

Hæmorrhage after extraction of teeth.—Mr. Purland, in a letter published in the *Forceps*, commenting on a communication which appeared previously in the columns of the Medical Times, recommends that, in cases of hæmorrhage after the extraction of a tooth, a somewhat firm roll of lint, about the size of a common walnut, should be dipped into common vinegar, inserted, (in the mouth, we presume, but it is not stated where) and the patient is to bite firmly for an hour. He says he has used it in hundreds of cases with success, and that it has also been recommended by his late father and grandfather. Mr. Purland's directions, respecting the use of his vinegar styptic, are somewhat obscure.

Arteriotomy, and its consequences.—[This and the twenty-two following articles, constitute the principal contents of the last two numbers of the *Lancet*.]—Mr. Liston, in describing the operation of opening the temporal artery, says, one of the branches, the anterior or middle, not the main trunk, should be selected, and the point of the instrument, a common bleeding lancet, should be entered, so that it may penetrate the vessel; and in bringing it out, the shoulder should be carried forward, so that the superficial incision should be a little longer than the deep one. The object in making the external incision larger than the internal one, is to allow the free escape of the blood, and thus to prevent the extravasation of blood into the cellular tissue. There is no necessity for exposing the vessel by dissection with a knife, and then opening it with a lancet. Sometimes, bad consequences follow the partial division of this artery. The bleeding may be generally arrested by properly-applied pressure; but sometimes it is necessary to extend the incision, and to cut rather deeper, and, by moving the lancet freely from

side to side, to divide the vessel completely, that it may retract and contract, and thus the bleeding be stopped. Aneurism, or troublesome bleeding with ulceration, may follow as a consequence of the partial division of the artery. Aneurism is easily recognized, and is best treated by tying the vessel on each side of the tumour, the anastomoses of the artery being so great and so free that a single ligature will not be sufficient. Pressure may be tried, but it will be at the risk of excoriation and sloughing of the integument. A much more troublesome affection is, the formation of an ulcer, with occasional hæmorrhage. Pressure may serve to stop the bleeding for a time, but the ulceration will continue to spread, and it will be ultimately requisite to cut freely through the ulcer, divide the vessel, and secure it with ligatures. If the parts are much condensed, as they generally are, the ligatures must be passed by means of a sharp, curved needle.

Idiopathic erysipelas.—Mr. Craig comments on a paper by Dr. Wilson, noticed in the "Periscope" of the Medical Times, and dissents from the Doctor's opinion in many essential points. He regards the fever which is present in idiopathic erysipelas, as symptomatic, and not primary, and he considers that the severity of the fever and the degree of depression are the result of the erysipelatous disturbance. The treatment he adopts is regulated by the views he entertains of the nature of the disease.

Acute rheumatism and heart-disease.—Dr. Furnivall, in a brief paper, seeks to explain the cause of acute rheumatism, and the tendency to disease of the heart, by the evidence of an acid diathesis, prevalent throughout the whole system, and visible in the secretions, especially in the perspiration. He observes, that as the perspiration and urine are secretions eminently depuratory of the blood, it appears to him that an unusually acid state of all these must involve a supposition that the blood itself, instead of being partly alcaline, as in health, has, by disease undergone a modification, approaching to a reverse condition, and that it is labouring to relieve itself of its morbid load, through these sècretions. In addition to the non-alcalinescence of the circulating fluid, there is a manifest increase in the quantity of fibrine it contains; and these two morbid states of the blood, he conceives, must tend powerfully to excite inflammatory action in the serous membrane of the cardiac ventricles, and of the left ventricle in particular. The subversion of the alcaline state in the blood could not but prove highly exciting to the endocardium, thus causing hypertrophy and inflammation; while the superabundance of the fibrine tends to favour the formation of deposits within the fine interstices of the cardiac valves and parts adjacent, leading to an embarrassment of their action, until the valves can no longer subserve their natural functions. In addition to these causes, the chosen seat of rheumatic action is the fibro and fibro-serous textures, and as they abound in and about the heart, there is another cause powerfully determining the morbid action of the heart. Dr. Furnivall's practice is to add an alcali to the medicine usually prescribed for the relief of rheumatism; and he says he has not had one case of heart-disease in acute rheumatism, where the alcaline treatment has been fairly carried out. His conjectures as to the *modus operandi* of the alcali are, that it may act, first, as a neutralizer of the acid predominant in the system, and as a restorer of the alcaline condition of the blood: secondly, as a thinner of the fibrine superabounding in the blood, for the physiologists of these days correctly maintain that a gently alcaline condition is essential to the normal fluidity of the blood: thirdly, it may act as a sedative, indirectly, by the two first modes of action: and, lastly, it may act as a diuretic, thus helping to carry off the morbid elements of the blood.

Ovarian Disease.—Mr. Wilkins narrates a case of ovarian disease occurring in the person of a young female, in whom the nature of the disease was at first mistaken; mercurialization, local depletion, diuretics, purgatives, extensive counter-irritation, and iodine were tried, but all failed in affording any relief, and, consequently, tapping was had recourse to. When that operation was first performed, after breaking down the walls of several sacs, about five pints of highly albuminous fluid escaped through the canula. It was of necessity repeated in a short time, at the same place as on the preceding occasion; but then not above an ounce of fluid, as thick as the white of an egg, could be obtained, notwithstanding repeated attempts at breaking down the walls of the sac with a probe. The instrument was therefore withdrawn, and re-introduced about four inches to the left of the previous incision, and about twenty pints of decidedly ovarian fluid passed uninterruptedly from the canula. The operation was again speedily required, and the withdrawal of the fluid at that and a subsequent occasion was followed by severe spasmodic cough. On examining the abdomen some days after the tapping, a small, soft tumour was perceptible a little to the right of the puncture, in the median line, which was looked upon as an obliterated cyst. The patient's health improved somewhat, but the sac again filled, and in the course of a month the abdomen had resumed its former bulk. About this time the patient was seized with acute pain in the right side, extending down to the groin, the pain being increased on pressure, and on drawing a deep breath, and attended also with considerable anxiety and febrile action. She was treated with calomel and opium, diuretics, poultices, &c., under which she improved considerably, and passed large quantities of urine, a corresponding reduction in the size of the tumour resulting. When the inflammatory symptoms had subsided, she was reduced a third in size, had regained her appetite, walked about with ease, and appeared much better in every respect. The sac, however, again began to fill, and by the lapse of another month, the abdomen was again very large, and then there occurred a repetition of the symptoms just described, with a similar result. There has not been since any necessity of tapping, and though now of an immense size, the patient is able to walk about, enjoy her food, and appears to suffer comparatively little inconvenience. Mr. Wilkins expresses himself as ready to perform extirpation of the diseased ovary, should the patient require it; but we judge from the hypothetical language in which he has concluded his proposal, that he is more than doubtful of its propriety. We would earnestly advise him to let well alone.

Ammonia externally in neuralgia.—Mr. Barrett applies the strong liquid ammonia by means of a camel-hair pencil to the palate and fauces, in cases of facial neuralgia, and he has found by it the most severe cases lessened and relieved in a very few minutes. He has tried it in five cases. The application, we should judge, is not unattended with danger.

Extirpation of Dracunculi from the Eye.—Dr. William Lovey records two instances of the dracunculus being found moving beneath the conjunctiva of the ball of the eye. The patients were both natives of Africa, (Kroomen). They applied to him, one in April, and the other in June, 1842, complaining of itching, and a sensation as if something was moving about in the eye; on examination, Dr. Lovey observed a worm moving round and round the cornea, beneath the conjunctiva, causing very little, if any irritation, for up to the date of their application for advice, they appeared to have been unconscious of the presence of a foreign body. The extraction was performed without any difficulty by snipping off a small portion of the conjunctiva, raised on a tenaculum, over the centre of the worm. Neither of the dracunculi, when extracted, was found to exceed two inches in length.

Orchitis treated by hyoscyamus.—Two cases are reported from the practice of Mr. Gay, at the Free Hospital, of orchitis following gonorrhœa, in which fifteen drops of the tincture of hyoscyamus were given every four hours, with the effect according to the report, of curing the disease. In the first case the patient was also purged, ordered to keep the recumbent position, and use the cold water lotion to the inflamed part. The accessory treatment in the other case, beyond the exhibition of a small purgative, is not mentioned. Considering the uncertainty of action of hyoscyamus, we are certainly not much inclined to place confidence in the curative effects, in orchitis, of fifteen drops of the tincture given every four hours. We observe that a gleety discharge having remained in one of the cases after the removal of the inflammation of the testicle, an injection of two grains of nitrate of silver to eight ounces of water was directed to be used. Although this injection is not of much strength, still we think it is advisable after an attack of orchitis, not to have recourse at all to stimulant injections, for fear of a recurrence of the inflammation.

Railway travelling and abortion.—Under this very extraordinary head, Mr. Rankin writes a letter to shew that in Scotland, at least, abortion has been more frequent since the introduction of railways, and he is desirous of ascertaining whether a similar result has been produced in England. The question is one of considerable interest.

The apothecaries' company.—Mr. Bird recommends that this company should confer the elective franchise on its licentiates, and that they should have the privilege of electing their council and examining body. In making this suggestion, it is very evident that he is unacquainted with the constitution of the company, which is one of the trading companies of the city, and, in so far, totally distinct and separate from the court by which the license is granted. The court of assistants conducts the trading affairs of the company, and has the general management of the pecuniary interests of the members, who, be it observed, possess the freedom of the city, and enjoy privileges to which the mere licentiate, who passes an examination before the court of examiners, cannot become entitled except by purchase. The two courts are totally distinct in their duties and privileges, and so are those who are subjected to their control. The one confers municipal, the other professional rights.

The Nutrition of Plants.—Dr. Ayres has performed a few experiments to ascertain the validity of Liebig's opinion that the humus or decaying vegetable matter of the soil is not absorbed directly by the roots of the plants, but that by its gradual decay, it furnishes an atmosphere of carbonic acid around the roots, and that this carbonic acid is absorbed, and carried into the plant, and he considers that this view is fully sustained by the result of his experiments. The proportion of carbonic acid, however, contained in a given quantity of sap is very small, and there does not appear to be any contained in it during the heat of the day.

Observations on Midwifery.—The reflex motor action, like the Liebigian views in chemistry, is now being twisted and forced into use to explain everything that is explicable, and many things that are really inexplicable. We say not this in mockery, but rather in regret, to find that experience has no longer its wonted influence, and that no sooner is a hobby mounted, than it is ridden post haste to the ———, not only by the original owner, but every one who can get hold of the stirrups or bridle, or even thinks he has possession of a hair from the tail, is eager to boast of it, and to employ it to enhance his self-importance, with just as much reason for doing so, as the street-sweeper had to be proud of the remark addressed to him by George the Fourth. Although these observations have been suggested by the perusal of the paper whose heading we have placed above, we do not mean to imply that they are to be considered as directly bearing upon its merits; but they are intended to be regarded as generally applicable to the small fry, who, despairing of making themselves a place in the scientific world by their own merits, follow in the wake of some leviathan, whose progress they impede by their concourse, like the fabled Remora of old, whose attachment to shipping was believed by the North men to ensure its destruction. Mr. Smith's remarks in the paper headed *Observations on Midwifery*, are condemnatory of the practice of taking a pain; he advises that "the vaginal examination should be made during the remission; for the knowledge and application of

he principles of reflex-motor action, proves the hole system of taking the pains in labour to be rong, and in many cases injurious in its ffects. There can be no doubt of the existence of an excito-motory and reflecto-motory system of nerves, presiding over the ingesta and egesta, of which latter class of functions parturition is one of the most important. No one, recognising the function of the true spinal narrow, and applying it to the process of labour, an doubt that, manipulation by the accoucheur, whether in the vagina, at the os uteri, or within he uterine cavity, must increase the energy of the nuscular contractions, which constitute uterine ain. The effects may not follow instantly, but he subsequent train of reflex actions are sure to e increased in intensity. In cases of acute labour, herefore, when the contractions of the uterus and bdominal muscles are excessive, frequent examinations must necessarily prove injurious. Many cases of ruptured uterus have occurred at the moment of taking a pain, when the organ was contracting powerfully; and Denman candidly relates a case in which the taking a pain immediately produced a puerperal convulsion." This extract contains the entire pith of Mr. Smith's communication, and if we except the remarks respecting the taking a pain, and the applicability of the reflex theory, we shall find that the doctrine that he inculcates of not making frequent examinations is one enforced by all accoucheurs of experience. We do not consider that Mr. Smith has made out a case against the propriety of taking a pain, when the examination is carefully conducted, and not practised too frequently; we feel assured that under such circumstances mischief cannot follow, save in some rare isolated cases, which cannot be taken into the account, nor be allowed to serve as a reason as to the propriety of a practice so manifestly useful. If the accoucheur is only to make an examination during the remission, and to withdraw the hand when the pain comes on, and so we understand Mr. Smith's recommendation, labour will be of necessity much protracted, and the medical attendant will be left almost entirely in the dark as to what is going on. Mr. Smith says "it may be laid down as an axiom that in well-formed women, when the uterus acts powerfully, and the presentation has been ascertained to be natural, no manipulation should be resorted to in natural cases, until the head of the child presents externally." Had we acted in accordance with this axiom in a recent case, we should probably have had to treat a case of ruptured uterus, nor can we admit the generality of this axiom, although we are fully aware that a "too meddlesome midwifery is bad."

Fibrous and cancerous tumours of the breast.—Mr. Prowse narrates the case of a lady who, at the age of seventeen, accidentally received a severe contusion on the left breast, which afterwards inflamed, was treated by suitable remedies, the injured part remaining in an indurated state, with no apparent alteration in size for many years. At length it gradually increased to be as large as a walnut, and then remained stationary. The lady married, and had eleven children. At the age of forty, cancerous disease manifested itself in the uterus, beginning at the os uteri, and extending throughout the substance of the organ, and finally destroying life at the end of seven years. The case is published by Mr. Prowse as bearing out Cruveilhier's views of the connection between the fibrous and cancerous tumours.

Poisoning by the oil of bitter almonds.—Mr. Smith was called to a little girl, who had taken several drops of the essential oil of bitter almonds, dissolved in spirits. When he arrived, there was no radial pulse on either side; there was considerable swelling of, and undulatory motion in the jugular veins; the carotids beat quickly and fully; the limbs were relaxed, the eyelids closed, the eyes both drawn to the left side, the pupils dilated, and the jaw firmly clenched in rigid spasm. The breathing was slow and gentle. The eye had a brilliant and glassy appearance throughout—*mere physical brilliancy without mental expression.* There was perfect insensibility. The treatment consisted in the use of a mustard emetic, and the exhibition of brandy and water and ammonia internally, as well as the external use of ammonia, in frictions and by the nose, hot bottles of water to the feet, &c. The child recovered. The cold dash on the cervical spine has been found very serviceable in cases of poisoning by hydrocyanic acid.

Atropine as a substitute for belladonna—Mr. Cooper recommends the use of atropine as a substitute for belladonna, in dilating the pupils in cases of cataract, &c. He employs it in the proportion of two grains dissolved in a drachm of spirit to seven drachms of distilled water. A colourless solution is the result, equally efficacious in its action, and much more elegant than the ordinary preparations of belladonna. A full drop placed on the eye produces speedy and complete dilatation of the pupil in the generality of cases, although in some instances a stronger solution may be required. Mr. Cooper has used it in the proportion of four grains to the ounce, without injurious consequences.

Hæmorrhage after delivery.—Mr. Hicks attended a lady in her confinement, and left her in the morning, after delivery had taken place, apparently doing well. In the evening he was sent for, in consequence of alarming syncope, when she presented the appearances following hæmorrhage, notwithstanding which, the uterus was duly contracted, and the external discharge, although rather more than usual, not sufficient to account for the urgency of the symptoms. Mr. Hicks made a vaginal examination, and removed a clot of blood as large as a child's head, and two or three smaller ones, after which the symptoms gradually subsided, and the patient became convalescent. In another case, occurring after miscarriage, the patient became typhoid, apparently from commencing decomposition of the coagula of blood.

The mortality at different ages in certain diseases.—Dr. Watt, City statist, considers that the data he has obtained seem to demonstrate that the proportion in the amount of deaths under any given age, by fevers, measles, scarlet fever, small-pox, and hooping-cough, to the whole amount respectively, are almost identical, although the same amount of deaths by the same disease is very different in each city. In some instances, where the circumstances of the people vary much from each other, a corresponding variation takes place in the mortality at the same ages. This is peculiarly exemplified by the deduction, in reference to small-pox, from the New York and Philadelphia mortality bills; but, notwithstanding the great difference between the results in America and in Scotland, in the mortality from this disease, it is important to observe that the proportion of the deaths by this disease in New York exactly corresponds with those for the same age in Philadelphia, the circumstances of these towns, in relation to small-pox, being much alike. The variations in the higher ages may probably depend on causes capable of detection on further enquiry; and such interferences being allowed for the intimate correspondence of the results pointed out, cannot be looked upon as accidental, but as the result of precise laws, which regulate the amount of mortality at every age. Two causes must be especially considered as having a constant tendency to effect a certain variation in these results—viz.: medical treatment, and a proper supply of wholesome and nutritive food.

Calamine, or carbonate of zinc.—Dr. R. D. Thomson has ascertained that the calamine sold in London is usually destitute of zinc, and at his request Mr. Murdoch analysed the calamine of commerce of Glasgow, the result of his experiments being,—that it consisted principally of sulphate of barytes, and did not contain any zinc or magnesia. The colour of the adulterated article was supposed to be produced by American bole.

Precipitated sulphur.—This substance, which ought to be prepared by boiling sulphur with lime, or potash, precipitating the solution with hydrochloric acid, and throwing the precipitated sulphur on a filter, and washing it, has been shewn by Mr. Murdoch to consist of sulphate of lime, 50·73, water of crystallization, 13·42, and sulphur, 35·85. It is, consequently, manifestly impure.

Oxide of zinc.—This oxide according to Mr. Murdoch, generally contains some carbonate of zinc or some of the carbonate with which it has been precipitated. When to the solution of this oxide in hydrochloric acid, an excess of caustic ammonia is added, some brownish red flocks of peroxide of iron remain undissolved, containing perhaps a little alumina, amounting to about one-half per cent.

Red oxide of iron.—This oxide, as sold in the shops, has been found to contain a small percentage of alumina.

Tartarized antimony.—This salt generally contains a small quantity of peroxide of iron.

Venereal warts.—Under this title a case is reported from the Lock Hospital, of extensive warts on the labia, followed by ulceration and sloughing of the left labium, extending upwards to the pubes, the sloughing process being ultimately arrested by the application of nitric acid. The case is principally remarkable for the amount of local mischief.

Injury to the knee.—A man was admitted into the Dreadnought hospital ship, with considerable swelling of the left knee, and pain in the part on walking, or putting the foot to the ground; there were also two sinuses on the internal surface above the joint, two inches distant from each other. These did not communicate with dead bone. The man referred the injury to a blow that he had two years previously from a paint brush, which was broken in the effort, but he did not think the broken piece had entered the thigh. The sinuses were laid open and tented, and on the seventh day a black substance presented itself in the opening which was removed the next day, and found to be the point of a paint brush, an inch and an eighth in length.

Benzoin water.—In a paragraph in the *Medico-Chirurgical Review*, a formula is given for the preparation of a benzoin water as follows:—Fifteen grains of purified benzoate of potash, fifteen grains of bitartrate of soda, half a drachm of bicarbonate of potash, sixteen fluid ounces of distilled water; the solution to be prepared, under a pressure of two and a half atmospheres of carbonic acid gas. The water will be found to retain a large proportion of its gas long after exposure to the air. It is considered to unite the properties of an antacid, a diuretic, and a tonic: it will be found useful in an irritable state of the mucous membranes, whether manifesting itself in dyspepsia, or in chronic bronchitis; in all cases where there is a disposition to the formation of earthy deposits, in whatever part of the human frame, and particularly where such formations are the result of an excessive generation of lithic acid in the system. The benzoate of potash is used because it changes lithic acid into hippuric acid, the salts of which are more soluble than the lithates: the biborate of soda is supposed to possess considerable disintegrating power over urinary calculi, and the alcaline carbonates have been shown to possess solvent properties, by the effects of the alcaline waters of Vichy in dispersing the chalk stones of gout. The excess of carbonic acid is expected to gratify the palate, and invigorate the stomach.

Observations on scrophula.—Dr. Hocken has written a long paper in the *London and Edinburgh Medical Journal*, to prove that struma is a disease of the blood, and that the disease itself consists in the introduction of imperfectly assimilated albumino-gelatinous matter into the circulating mass, and its subsequent separation and expulsion from the system; and, in support of this view, avers that struma is invariably preceded and accompanied by a disordered condition of the chylo-poietic viscera—strumous dyspepsia—by which the albumino-gelatinous ingredients of the chyle are imperfectly elaborated, and when taken up by the lacteals, either accumulate in some of these vessels, or in the mesenteric glands, or find their way in this unassimilated condition, into the circulation. In the confirmed disease, secondary assimilation is equally disordered, both in the formation of the albuminous and gelatinous tissues, and in their re-absorption and re-conversion into blood. In

these ways more of this morbid matter is formed, and is either conveyed into the mass of circulating blood, or accumulated in the absorbent glands and vessels. The views maintained by Dr. Hocken are by no means original, but were promulgated by Mr. Gilbert, in a work which he published some time since on consumption.

Cure of pannus by inoculation. — In the *London and Edinburgh Medical Journal*, Dr. Dudgeon has detailed the particulars of a case of mixed pannus occurring after measles, in the person of a young woman, twenty-one years of age, who had been affected therewith for many years. When first seen by Dr. Dudgeon, the corneæ were highly vascular, and presented a dull irregular appearance: they were more vascular and opaque, superiorly than inferiorly, and there were some granulations on the upper part. The conjunctiva of the ball was very vascular. The upper eyelids were covered with a large mass of the flattened fleshy granulations, and the lower ones were very vascular, but destitute of granulations. The right eye was the worse. In this sad condition, Dr. Dudgeon determined to try the plan of treatment, which has been found so successful by Jaëger and Piringer, namely, inoculation with the matter of a mild case of purulent ophthalmia. The experiment was tried on the right eye, and a large amount of inflammation, attended with profuse muco-purulent discharge was induced, necessitating rather severe treatment. On the eleventh day after the inoculation was practised, the left eye became inflamed, either from absolute contact of the discharge, which the patient positively denied, or from sympathy. The right eye was at that time improving under the treatment that had been adopted. By the twenty-third day the report is, that she can open both eyes, freely before the window, which she was unable to do before the inoculation was performed: the sclerotica of each eye begins to appear of a beautiful white colour: the cornea of the right eye seems to have lost its vascularity completely, although it is still rough and irregular; that of the left remains vascular, but not so much so as before inoculation. After this, Dr. Dudgeon goes on to state, improvement continued to be very manifest; the eyes gained daily in strength, lost their vascularity, the granulations disappeared entirely, as also the vascularity of the cornea,—merely a slight haziness remaining at the upper part, which is ordinarily covered by the eyelid, and does not in the least interfere with vision, which is so thoroughly restored, that she can do the minutest needle-work. The case reflects the greatest credit on Dr. Dudgeon, and as far as one case can go, is a strong recommendation in favor of Piringer's practice.

Poisoning by corrosive sublimate.—Dr. Watson, of the Royal Infirmary, at Glasgow, records, in the *London and Edinburgh Medical Journal*, a case of poisoning by corrosive sublimate, which occurred in his practice, the principal features of which were that, although the patient lived seven days after having swallowed the poison, no real salivation took place. The gums were only slightly swollen; there was no mercurial fœtor; the teeth were firm; and the flow of saliva was confined to the first day after admission into the hospital, when it might be partly occasioned by nausea, but especially by the irritation of the fauces, and difficulty of swallowing. The effects of the poison were confined to the alimentary canal, or nearly so, but the whole track of the canal was not equally acted on: the œsophagus, the left half of the stomach, the lower part of the ileum, the colon, and especially the rectum, were chiefly affected; and those parts, although the seat of violent action, were free from abrasion. The urinary bladder, and the lining membrane of the larger bronchi, had also participated, although to a minor degree, in the general irritation of the mucous membrane. Chemical analysis did not detect any traces of the poison in the alimentary canal. The liver, in which Orfila has recently discovered indications of corrosive sublimate in cases where it has been administered internally, does not appear to have been examined chemically.

Nitrate of potash in spasmodic asthma.—Dr. Frisi states, in the *Filiatre Sebezio*, that having read of a proposal by an American physician to employ, in cases of spasmodic asthma, the vapour of nitrate of potash, obtained by burning in the chamber, or smoking in a pipe, porous paper twice soaked in a solution of that substance, he determined to give it a trial in an obstinate case of that disease, which had resisted every other means. The relief was instantaneous, and the remedy, whenever repeated, never failed to cut short the attack.

Use of chloride of sodium in diseases of the eye.—Dr. Tavignot (L'Experience) employs the chloride of sodium, as a topical application, with advantage, in the treatment of different forms of inflammation of the eye, and more particularly in ulcerations of the cornea, in the form of ointment or collyrium, and sometimes even in substance. He considers it to be more efficacious than nitrate of silver, and other substances which are commonly applied, in such cases, and less likely to produce permanent irritation, or to act as an escharotic. The ointment is prepared in the proportion of one to four drachms of common salt to the ounce of lard; the weakest preparation being used at the commencement of the treatment, and the collyrium is made with from one to three drachms to the ounce of water. One drachm to the ounce will be sufficiently strong for ordinary cases.

Death from potatoe-skin in the larynx. —Dr. Jackson was called to see a man, thirty-one years of age, who died while in a state of intoxication. On dissection, the lungs and heart presented all the appearances characteristic of asphyxia, the cause of which was made apparent on examining the larynx, where it was found that a piece of potatoe-skin, of an irregular triangular shape, little more than an inch long, thin as the finest paper, and perfectly transparent, lay entangled between the folds of the thyro-arytenoid ligaments, one of the ends being fastened over the posterior end of the rima glottidis, whilst the other two margins were free, forming a valve which would open with each act of expiration, but shut at each inspiration; thus causing speedy suffocation. The piece of potatoe-skin had probably been ejected from the stomach by vomiting, along with other matters.

Poisoning by sulphate of iron.—A case of considerable importance in a medico-legal point of view, is reported in the *London and Edinburgh Medical Journal*, as having occurred to Dr. Christison. A child, four years of age, having died in circumstances which excited strong suspicions of poisoning, an investigation was made by the law authorities nearly four months afterwards. The symptoms presented by the child were violent vomiting and purging coming on after breakfast, followed by death in the afternoon of the same day. The suspected person was proved to have purchased both sulphate of copper and sulphate of iron not long before, and was seen by other children to mix a blue liquid with the porridge, and to give a blue liquid for drink after the symptoms began. Copper was naturally suspected, but there was not any found, either by the Messrs. Dewar, who conducted the first analysis, nor afterwards by Dr. Christison; but there was obtained a large quantity of iron, partly in the soluble condition, but chiefly in the form of a compound insoluble in water. This appeared to be in a great measure sulphuret of iron, formed by the decomposition of the sulphate, through means of the sulphuretted hydrogen and ammonia, disengaged during the decay of the body, for water which had acted on the contents and textures of the alimentary canal, presented evidence of a much larger quantity of sulphuric acid than would have arisen from the ordinary contents; and the whole course of the mucous coat from the mouth to the anus, was thickly lined with a layer of jet-black mucus. The tissues of the stomach presented everywhere the same colour. Iron was also found largely in numerous brown stains on the child's clothes, and the apron worn by the person suspected to have administered the poison. Messrs. Dewar made some experiments with sulphate of iron, from which they came to the conclusion arrived at by Orfila and Smith, that two drachms retained in the stomach by a ligature on the œsophagus will cause death in a few hours. The process employed for detecting the iron, consisted in incinerating the contents and textures, acting on the residue with diluted nitric acid aided by heat, adding an excess of ammonia, and transmitting sulphuretted hydrogen. The ammonia separates a yellowish precipitate of sesqui-oxide of iron, and does not render the liquid blue, if there be not any copper. The sulphuretted hydrogen then produces black sulphuret of iron.

Extirpation of a tumour of the parotid gland.—Dr. Hosack, of New York, narrates in the *New York Journal of Medicine*, the case of a coloured woman, thirty-eight years of age, by whom he was consulted on account of a swelling directly under the ear, and behind the angle of the lower jaw, on the left side of the face. It was quite firm, and evidently contained a fluid, which could be readily discerned in one of the prominences, but not very distinctly detected throughout the mass of the tumour. The diseased growth commenced about six years previously, and its growth had been very gradual, until the last twelve months, when it became more rapid, but was still unattended with pain. There was no appearance of swelling in the fauces, nor was the motion of the jaw at all impeded. The point at which fluctuation was more discernible, when pressed upon, readily yielded to the finger, but upon increasing the pressure, a resisting substance was perceived, in which a small aperture existed; through this the fluid receded, but re-appeared immediately upon the discontinuance of the pressure. A valvular opening was practised by Dr. Hosack, by which about a tablespoonful of a thin, amber coloured fluid, of the consistence of the serum of the blood, was evacuated. During its flow, the colour was twice suddenly changed to that of dark black, darker than the darkest blood found in the veins of bodies lying in the dissecting room, and it as suddenly resumed its original hue. The two fluids remained separate and distinct in the cup in which they were received. The operation of extirpation was performed on the 15th of December last, in the following manner:—The patient being placed in a chair, an incision was commenced behind the conch of the ear, which was extended quite down over the tumour, terminating in the sound structure of the neck. A second incision was begun directly below the lobe of the ear, and carried over and below the tumour, where it joined the first. On detaching the integument on either side, and exposing the surface of the tumour the prominence before alluded to presented a very black appearance, in all respects resembling that of melanosis. The dissection being continued forwards, the anterior part of the parotid gland was exposed, and found to be so intimately blended with the tumour, as to leave no doubt that this gland was the seat of disease. The external carotid was next ascertained to enter into, or, at least, adhere to the diseased mass, and accordingly two ligatures were placed on it, and it was divided between them. The tumour was then grasped with a double hook, and pulled downwards and outwards, the dissection being carefully continued towards the extremity of the conical point of the inward extension of the parotid gland, where the carotid artery was imbedded. This part was the last cut across, and immediately on its division the vessel was secured by ligature. The amount of blood lost during the operation did not exceed twenty-five ounces, although there were many important vessels divided, such as the posterior auris and several branches of the temporal. Fifteen vessels required the ligature. The portio dura and its branches, were also divided, while separating the tumour from its anterior connection with that portion of the gland resting upon the face, which was not removed, as it appeared to be perfectly sound. The wound was dressed in the usual manner, the patient recovered, and now enjoys excellent health. Immediately after the operation, the mass was examined, and the sac in front was found quite firm and resisting, but of the ordinary thickness usually met with in encysted tumours about the neck. The posterior portion was very much enlarged; and, upon being cut into, it presented a dense white structure of a scirrhous hardness, to the thickness of about from one half to three

arters of an inch. This portion of the tumour d occupied the greatest depth of the wound, and was found to be firmly adherent to the external rotid artery to a considerable extent. The in- nal surface of the tumour presented an unusual pearance : the different cavities of the sac emed to be lined with a pseudo-membranous rmation of a very black colour, which appeared be distinct and unconnected with it, save by ntact, or very slight adhesion; it could be adily scraped off. This black matter Dr. Hosack gards as melanosis in a semi-fluid state, and he inclined to look upon the tumour as of a three- ld character, namely, encysted, scirrhous, and elanotic.

The operation of lithotomy.—Dr. Post, in communication published in the *New York Jour- l of Medicine*, describes a modification of the lateral operation for stone, and a new instru- ent which he has invented for incising the blad- er. He proposes to make an extensive cres- ntic incision through the perinæum on both des of the median line, the concavity looking wards the anus, according to the Celsian method. le then makes a free incision into the membranous art of the urethra, upon a grooved staff, after hich the staff is withdrawn, and the remaining art of the operation is performed with his new strument, which consists of a straight steel rod, leven inches in length, and of the size of a No. 1 ougie, having a flat ivory handle at one extremity, nd a small rounded button at the other. Over is rod slides a canula of the size of a No. 10 ougie, and half the length of the rod. The distal xtremity of the canula is tapered off to the extent f three-quarters of an inch, so as to form a beak hich projects beyonds the blades; immediately ehind this beak are two blades, which are inserted nto grooves on the sides of the canula, in such a nanner that they can be easily taken out and re- nserted. There are four sets of blades of differ- nt breadths; the largest make an incision into the eck of the bladder of about an inch and a half in vidth, and the smallest about three-quarters of an nch. The proximal extremity of the canula has a small iron handle adapted to it, by means of vhich the canula is made to slide upon the rod. The incision into the membranous part of the urethra having been made, as already described, he extremity of the rod is passed through it into he bladder, the canula being drawn back towards he handle of the rod; the beak of the canula is hen passed along the rod into the urethra, and is hus conducted into the bladder, the blades making an incision of a definite extent on each side of the prostate gland. Dr. Post considers that by the se of this instrument, a degree of certainty can e attained as to the situation and extent of the pening into the bladder, which cannot be acquired by the employment of any other instrument. He has found it make a very satisfactory incision into he neck of the bladder in the dead subject, and has since operated on a patient with it successfully.

Spina bifida.—Dr. Mitchell narrated the particulars of a case of spina bifida, to the Surgical Society of Ireland, of which the following is an abstract:—The spina bifida was exceedingly large, it extended from the third cervical to the fourth dorsal vertebra, the spinous processes of all the intermediate vertebræ being deficient. The bones of the head had been also arrested in their development, and their positions much altered,—the petrous portion of the temporal bone occupying the situation of the occipital. The brain was enclosed in a cyst, having a division down the centre, and communicating with the sac that covered the spine. The heart was of a disproportionate size. The monstrosity lived twenty minutes.

ON THE SESQUIOXIDE AND PROTOCARBONATE OF IRON.

By Mr. RICHARD PHILLIPS, Jun.

The protocarbonate of iron is, I believe, principally used for the preparation of the saccharine carbonate of iron, a formula for which is, however, given only in the 'Edinburgh Pharmacopœia.' Dr. Christison states, in his 'Dispensatory,' that Dr. Clark first introduced this excellent medicine, and that Klauer, a German chemist, discovered that the presence of the sugar prevented the further oxidation of the iron, its action in this respect being analogous in the syrup of the iodide of iron.

The directions of the Edinburgh College are, that the carbonate of soda, and protosulphate of iron are to be dissolved separately in cold water, the solutions mixed, and the precipitate to be washed, by decantation, with cold water: it is then to be squeezed in a linen cloth, mixed with the requisite quantity of powdered sugar, and dried at a temperature of about 120.°

In some experiments made by my father some years ago, which I have repeated, he found that if the precipitated protocarbonate was washed with cold water, on hot water being added to the clear liquor, a protocarbonate was again precipitated, and that the original precipitate contained but little carbonic acid; in fact, that the carbonic acid present had held in solution the protoxide of iron which the cold water had washed away. The hot water, to a certain extent, by expelling part of the carbonic acid destroying this power, the precipitate is best washed with it. I have also found that less oxidation and less of the protocarbonate takes place if, instead of its being squeezed in a cloth and the sugar then added, the sugar is first made into a thick syrup, and evaporated gently with the washed precipitate; by this plan, also, a more complete mixture of the two is formed.

For the preparation of the sesquioxide of iron, the London College order that a protoxide of iron be formed in the manner last described, which, during the operations of washing and drying, loses carbonic acid and gains oxygen. Now, although if this experiment be made on a small scale this effect takes place, still the manufactured article often contains carbonic acid and protoxide, on account of its not having been properly exposed to the air whilst washing and drying. It has been proposed to substitute for this process one of Professor Faraday's, namely, that of fusing together common salt and protosulphate of iron. I have found, however, that in order to make a perfect decomposition, it is necessary to keep the mixture at a great heat for a long time, and that the sesquioxide of iron remaining is in a state of aggregation similar to that in which it exists in the *micaceous* iron ore; and not being easily soluble in acids, it would be with difficulty acted upon in the stomach.

Neither of the processes, however, furnish us with a means of procuring hydrated sesquioxide of iron, and in this state it is now often required as an antidote for arsenic, and for the preparation of the citrates of iron, and for these purposes it is necessary to have an easily soluble sesquioxide. As in the case of the saccharine carbonate of iron, this preparation is only as yet introduced into the Edinburgh Pharmacopœia. It is there ordered to be formed with sulphate of iron, sulphuric and nitric acids, and liquid ammonia. Although by these means a good sesquioxide is obtained, the method is tedious and expensive. The 'Philosophical Magazine' for October last, contains a paper from the 'Journal de Pharmacie,' on the use of chlorate of potash as an oxidising substance; and having, in the course of some experiments, found that it most easily converted protoxide of iron into sesquioxide, it occurred to me that, on account of the number of atoms of oxygen it contained, it would furnish an easy and cheap method for the preparation of the hydrated sesquioxide. Twelve atoms, or 1668 parts of protosulphate of iron, and twelve atoms, or 1728 parts of crystallized carbonate of soda, were dissolved separately in boiling water; the solutions were mixed whilst warm, and the mixture boiled; whilst boiling, one atom, or 124 parts of chlorate of potash, previously dissolved, were added. The six atoms of oxygen it contained, united with the twelve atoms of protoxide precipitated, and a perfectly pure sesquioxide of iron remained, which I found, when washed, to be readily soluble in acids.

When dried at 212, the peroxide appears to form a definite hydrate of a brownish-orange colour, consisting of one atom or nine parts of water, combined with one atom or forty parts of peroxide; my experiments giving eighteen parts of water, and calculation 18.4 in 100.—*Pharm. Journal.*

GOSSIP OF THE WEEK.

Apothecaries' Hall.—Gentlemen admitted Members, 6th June, 1844.—Arthur Willoughby Owen, John Briscoe, Edward Petch, Thomas Bell Keetley, Junius Hardwicke, Geo. Edward Walsh, Frederick Manning, William Tredwen.

Royal College of Surgeons. — Gentlemen admitted Members on Friday and Monday, June 7th and 10th, 1844.—A. Roberts, G. J. Rose, R. C. Griffith, H. J. Domville, H. Buck, J. S. Cartner, A. Henfrey, F. W. Marshall, G. P. Hubbard, W. S. Kirkes, H. Semple, H. Holmes, T. Harrison, D. F. Waters, C. D. Arnots, H. L. Pomfret.

Hospital Staff.—Surgeon William William Bell, M.D., from the 26th foot, to be staff-surgeon of the first class, vice James French, M.D., who retires upon half pay.—Surgeons: Mr. Hampton in charge to Auckland convict ship; Mr. Lancaster in charge William Jardine convict ship; Mr. John Munro in charge to Emily convict ship.—Assistant-surgeons: A. A. Jack from Caledonia to Lucifer, vice Newman; Alexander Brown to Collingwood; William Crofton (addl.) to Royal Sovereign; J. G. Buchanan to Greenwich Hospital.

Dr. Cowan writes to the *Provincial Medical and Surgical Journal*, complaining (we think not without grounds) that having published a translation of the work of Louis, on phthisis, to the general satisfaction of the profession; a translation has been recently published by the Sydenham Society, in which not the slightest reference is made to the first translation—a circumstance the more remarkable by the fact that Dr. Cowan had been applied to by the society to prepare a second edition for it—had courteously offered to do so if a little delay were allowed him—and as courteously waved his claims in favour of another if haste were indispensable.

Mr. Borthwick, on Tuesday night, again brought forward in the House of Commons the subject of the Anatomy Act, and moved for a select committee to inquire into its working. He was supported by Mr. Hardy, Mr. Copeland, Mr. T. Duncombe, Mr. F. French, and General Johnson, and was opposed by Sir J. Graham, Mr. Warburton, and Lord John Russell. The motion was pressed to a division when there appeared for it 10, against it 49.

Hydrophobia. — (From a Correspondent).—What is the Bohemian remedy? This is an enquiry that would suggest itself to every one as it did to me on reading Dr. Foley's letter, published in your last, and important as it must be at any time, it is specially so at this season when such cases are usually of frequent occurrence. I presume neither of the noble earls alluded to, nor Dr. Foley, know of what it consists, or they would have made it known, but could it not be ascertained by chemical analysis, or has that been attempted? I remember reading some ten or twelve years ago in that excellent periodical "The Athenæum," of a remedy for this frightful disease, which, I think, is but little known to the profession in this country. It was contained in a paper read to the Royal Academy, at Paris, I believe by a celebrated physician, who was himself the patient. He had been attending a poor woman, who died of the disease, and in wiping away the saliva from her mouth, it came in contact with a cut or scratch upon his fingers, and it would appear inoculated him, for sometime after, the incipient symptoms of hydrophobia appeared in him. He concealed and repressed them as much as he could until they became ungovernable, and he then determined upon suicide, and, as an easy death, decided upon suffocation in a vapour bath. On making the attempt, however, he was astonished to find that as the *profuse perspiration increased* the symptoms gradually, and ultimately entirely disappeared. Finding himself completely cured, he naturally reflected upon the means to which he owed his escape, and after reflecting upon the fact that hydrophobia never appears spontaneously in any animal *but those which do not perspire*—that the common remedy for the venomous bite of the tarantula is immediate recourse to incessant dancing, singing, and wrestling producing *profuse perspiration*, and, I think, noticing some other analogous facts which I

do not now remember; he concluded, that if, in any case *profuse perspiration* could be induced *by any means* before the disease was too far advanced the patient might be saved. I think he records other cases in proof, and the following passage in Dr. Foley's letter appears strikingly corroborative:—"It (the Bohemian remedy) produced the *perceptible* effect that was expected; namely, COPIOUS PERSPIRATION *about the head, neck, &c.*" Surely this is, at least, deserving of serious attention and earnest trial.

EXTRACTS FROM ITALIAN JOURNALS.

To determine the Propriety of Bleeding.—*Dr. Polli proposes that attention should be paid to the rapidity with which the blood from different venesections, as well as the blood at different moments from the same venesection, coagulate. With slow coagulation further bleeding is safe; with quick, bleeding should be instantly stopped. The absence or presence of the buffy coat is equally a prudent guide, for its quick or slow formation depends on quick or slow coagulation.*

Arsenious Acid in Intermittent Fevers.—*This remedy so warmly adopted, and quickly abandoned, by the French Faculty, has been recently tried by Dr. Garboghetti, at Turin. In fourteen cases only one failed; though several of the patients had been ineffectually under treatment with the sulphate of quinine.*

Wound of the Heart.—*M. Marini publishes the case of a woman wounded by a knife in the left ventricle of the heart, and surviving sixty-five days. The patient having been freely leeched and bled, the exterior wound rapidly cicatrised, and she was dismissed from the hospital perfectly cured. About three weeks afterwards, she suddenly died at stool. A* post-mortem *examination took place, the thoracic cavity was found to contain about ten ounces of a light yellow, inodorous lymph; the pericardium was abnormally thickened in one point, shewed traces of former inflammation, and when removed and opened, was found full of clotted and liquid blood, to the amount of about two pounds. The heart was atrophied, thinned, and full of blood, and was pierced at its point by a round conical hole, which like a sphincter communicated with the left ventricle, and shewed on its surface a whitish callosity, corresponding to the cicatrix of the pericardium. Interesting questions arise from this case. Was the wound really healed, and again broken by an effort; or was the cavity merely obliterated temporarily by a clot of blood, which being displaced caused death? In either case it is singular, and suggests the necessity of careful attention in similar accidents,* after *the cure has been supposed to be effected.*

A SELECT PRACTICAL FORMULARY,

TRANSLATED FROM THE FRENCH OF M. FOY, PRINCIPAL PHARMACIEN OF THE HOSPITAL SAINT LOUIS, AT PARIS.

(Continued from p. 162.)

PHOSPHATE OF SODA (Journ. Irish): Dr. Sharley gives this salt in the dose of from one to four drachms daily, in the treatment of diabetes mellitus.

PHOSPHORUS: internally one-fifth of a grain to a grain daily, in bolus, pills, or emulsion. Phosphoretted ether, three to ten drops in julep, potion, &c. Phosphoretted oil, twenty to thirty drops in lotion, mixture, &c. Externally, see PHOSPHORETTED OINTMENT, &c. If the medicinal properties of phosphorus are incontestable, its deleterious properties are equally so. If administered without exceeding care, it acts as a most violent poison, burning and disorganising the parts with which it comes in contact; nevertheless practitioners have been found bold enough to introduce this substance into the materia medica. Successful results in the treatment of adynamic and ataxic fevers, in epilepsy, palsy, dartrous eruptions, varus, &c., seem to authorise the employment of so dangerous a remedy.

PINK, RED. infusion, half a drachm to a drachm to a quart of boiling water: syrup, one to two ounces to sweeten medicines. Stimulant and diaphoretic.

PILLS OF THE ACETATE OF MORPHIA: one grain of acetate of morphia, sixteen grains of extract of saffron or conserve of orange-flowers, mixed together, and made into sixteen pills. Mode of exhibition, one or two every six hours.

PILLS OF THE ACETATE OF LEAD (Fouquier): one drachm of the acetate of lead, and one drachm of marshmallow powder, triturated together, and made into thirty-pills, with a sufficient quantity of simple syrup. Mode of exhibition, four or five a-day, to lessen the night sweats in phthisical patients.

MERCURIAL PILLS WITH ACONITE (Double): twelve grains of the extract of aconitum napellus, one grain of corrosive sublimate, mixed together with great care, and made into ten pills. Mode of exhibition, one pill evening and morning, in inveterate dartrous eruptions, or when complicated with psoric or venereal affections; also, in inveterate syphilitic diseases, lymphatic enlargements, scrophula, &c.

PILLS OF ACONITINE: one grain of aconitine, sixteen grains of liquorice powder, mixed together, and made into fourteen pills, one of which to be given every three hours.

PILLS OF ACONITE: two grains of the alcoholic extract of the root of aconite, twelve grains of liquorice powder, mixed together, and divided into ten pills; one to be given every three hours.

PILLS OF ALUM OF HELVETIUS (Henry and Guibourt): two parts of powdered alum, one part of dragon's blood, mixed with a sufficient quantity of honey of roses, and made into pills, weighing six grains each. Mode of exhibition, from one to six daily, in hæmorrhages, hematemesis, &c.

ALUMINOUS PILLS (Hopital Lourcine): pills weighing six grains each, composed of equal parts of copaiba, powdered cubebs, powdered alum, and decarbonated magnesia. Five or six to be given daily in blenorrhagic discharges.

PILLS OF BITTER ALMONDS (Prussian formula): one drachm of prepared bitter almonds, half a drachm of sulphate of soda, two grains of powdered ipecacuanha, with a sufficient quantity of extract of madder, to make sixty pills. Mode of exhibition, three to be taken evening and morning, in the treatment of inveterate cutaneous diseases, which have occasioned a complete upset of the system, as shewn by emaciation, a yellow tint of the face, a cachectic condition, abdominal pains, insomnia, painful digestion, &c.

BITTER PILLS (Gall): thirty-six parts of extract of water-trefoil, thirty six parts of extract of rhubarb, and twenty-four parts of powdered aloes, mixed together, and made into pills weighing three grains each, with a sufficient quantity of powdered rhubarb. Mode of exhibition, three daily, in cases of intestinal disorder, accompanied with weight in the head, and numbness in the limbs.

ANDERSON'S PILLS: see Scotch Pills.

ANODYNE PILLS (Hotel Dieu): three grains of extract of opium, six grains of camphor, mixed with a sufficient quantity of syrup, and made into six pills. Mode of exhibition, from one to three daily.

DINNER PILLS (Pilules ante-cibum, Codex): six parts of powdered aloes, three parts of extract of cinchona, one part of powdered cinnamon, mixed together, and made into four grain pills, with a sufficient quantity of syrup of wormwood. Used as tonic and digestive pills.

ANTHELMINTIC PILLS (Bremser): half a drachm of powdered socotrine aloes, half a drachm of powdered tansy, and twelve drops of the essential oil of rue, mixed together, and made into twelve pills. Mode of exhibition, the twelve pills to be taken in two or three days.

ANTI-BLENORRHAGIC PILLS (Gall): one ounce of the resin of copaiba, rendered solid by magnesia, two drachms of powdered rhubarb, mixed together, and made into four grain pills. Mode of exhibition, six to be taken evening, morning, and noon. The dose is to be gradually augmented to ten and twelve pills, three times a-day.

ANTI-CATARRHAL AND SEDATIVE PILLS (Petit): forty-eight grains of scraped cacao butter, forty-eight grains of powdered gum arabic, twelve grains of the watery extract of opium, mixed together, and made into five grain pills, with a sufficient quantity of syrup of ipecacuanha. Mode of exhibition, one every evening at bed-time.

ANTI-CHLOROTIC PILLS: see Blaud's pills.

ANTI-DYSENTERIC PILLS (Willis): four drachms of yellow wax, one drachm of cetine, melted at a gentle heat, and one drachm of powdered catechu, with a few drops of the essential oil of cinnamon incorporated. To be divided into six grain pills. Mode of exhibition, three or four daily in chronic dysentery.

ANTI-ICTERIC PILLS (Buchan): one drachm of powdered socotrine aloes, one drachm of powdered rhubarb, one drachm of scraped medicinal soap, mixed together, and made into six grain pills, with a sufficient quantity of simple syrup. Mode of exhibition, from five to six daily.

ANTIPSORIC PILLS: one drachm of washed sublimed sulphur, half a drachm of powdered guaiacum, made into six grain pills, with a sufficient quantity of syrup of borage. Mode of exhibition, three or four daily.

ANTI-SCROFULOUS PILLS (Baudelocque, Hopital des Enfans): two drachms of the black sulphuret of mercury, one drachm of magnesia, two drachms of powdered conium: mixed together, and made into five grain pills. Mode of exhibition, one to be taken evening and morning, the dose being gradually increased until ten pills are taken in the course of the day.

ANTISEPTIC PILLS (Dupuytren): twenty-four grains of powdered camphor, eight grains of powdered musk, two grains of extract of opium: mixed together, and made into six grain pills, with a sufficient quantity of simple syrup. Five or six to be taken daily. Used in hospital gangrene.

ANTI-SPASMODIC PILLS: one drachm of powdered assafœtida, one drachm of powdered castor; mixed together, with twenty drops of the animal oil of Dippel, made into five grain pills, with a sufficient quantity of tincture of myrrh. Mode of exhibition, five or six daily, in nervous affections, hysteria, convulsions, and neuralgia.

ANTI-SPASMODIC PILLS (Lombard of Geneva): one grain of the sub-nitrate of bismuth, half a drachm of magnesia, ten grains of Dover's powder; mixed together, and made into sixteen pills. Mode of exhibition, one to be taken every two hours. Used in gastralgia, and intermittent neuroses.

ANTI-SYPHILITIC PILLS (Dzondi): twelve grains of corrosive sublimate, dissolved in a sufficient quantity of distilled water, and a sufficient quantity of crumb of bread and sugar added, to make two hundred and forty pills, weighing one grain each. Mode of exhibition, four to be taken every two days the dose being increased by two pills each time until it reaches thirty. Used in old syphilitic affections.

ANTI-SYPHILITIC PILLS (Dupuytren): one grain of corrosive sublimate, five grains of pure opium, and thirty-six grains of extract of guaiacum, made into fifteen pills. Mode of exhibition, three daily.

PILLS OF THE ARSENIATE OF IRON (Biett): three grains of arseniate of iron, one hundred and forty-four grains of extract of hop, made into forty-eight pills, with a sufficient quantity of marsh-mallow powder. Mode of exhibition, one daily, in the treatment of cancerous affections, and ulcerated dartrous eruptions.

ASIATIC PILLS: one grain of porphyrized arsenious acid, twelve grains of powdered black pepper, rubbed together for a very long time in an iron mortar, and two grains of gum arabic afterwards added, with a sufficient quantity of water to make twelve pills. Mode of exhibition, one daily, in the treatment of pustular lepra. The dose may be slowly and successively increased.

ASTRINGENT PILLS: twelve drachms of powdered catechu, six drachms of alum, two drachms of opium, and a sufficient quantity of honey of roses; made into pills weighing five grains each.

ASTRINGENT PILLS: one drachm of powdered kino, two drachms of Canada balsam, with a sufficient quantity of powdered tormentilla; made into pills weighing five grains each. Mode of exhibition, with either of these formulæ, one, two, or four daily, in certain cases of hæmorrhage, blenorhagia, &c.

ASTRINGENT AND SEDATIVE PILLS (Dupuytren): two grains of extract of opium, four grains of sulphate of zinc, mixed together, and made into two pills. Mode of exhibition, two daily, in the treatment of painful mucous discharges from the canal of the urethra or vagina, in diarrhœa, &c.

ASTRINGENT AND SEDATIVE PILLS (Cullerier): four drachms of powdered cubebs, four drachms of powdered catechu, four drachms of powdered dragon's blood, four drachms of powdered alum, six drachms of carbonate of iron, with a sufficient quantity of powdered gum arabic, and syrup of diacodium, to make one hundred and ninety-eight pills. Mode of exhibition, seven or eight daily, in chronic blenorrhagia.

AURIFEROUS PILLS (Chrestien): one grain of the chloruret or cyanuret of gold, or of the chloruret of gold and sodium, or of the oxide of gold, with fifteen to twenty grains of the extract of mezereon, and a sufficient quantity of simple syrup, to make fifteen pills. Mode of exhibition, one, two, three, and more daily. Used in scrofulous and syphilitic affections.

PILLS OF ALBUMINOUS MERCURY: a drachm and a half of albuminous mercury, ten grains of gummy extract of opium, ten grains of powdered aloes, half a drachm of extract of sarsaparilla, mixed together, and made into forty pills. Mode of exhibition, one every morning for eight days, then two evening and morning. *** Anti-syphilitic.

PILLS OF BACHER (Codex): two parts of extract of black hellebore, two parts of extract of myrrh, one part of carduus benedictus powder, made into pills weighing one grain each. Mode of exhibition, one or two daily, as a tonic.

MORTON'S BALSAMIC PILLS: these pills are composed of benzoic acid, sulphuretted oil of aniseed, gum ammoniacum, saffron, balsam of Peru, and wood-lice. Mode of exhibition, from one to six pills, weighing one grain each, daily, in the treatment of pulmonary catarrh, asthma, &c. *** Bacher and Morton's pills are often either gilded or silvered.

BARTON'S PILLS: two grains of porphyrized white arsenic, eight grains of crude opium, twenty-two grains of medicinal soap; mixed together, and made into pills weighing one grain each. Used in obstinate intermittent fevers.

PILLS OF BELLOSTE (Codex): pills prepared with mercury, honey, powdered aloes, powdered rhubarb, powdered scammony, powdered black pepper, and containing each about a grain of mercury and aloes, half a grain of rhubarb, and a third of a grain of scammony. *** This formula is the same as that of Renaudot.

FULLER'S BLESSED PILLS: these pills are composed of socotrine aloes, picked senna, assafœtida, galbanum, myrrh, saffron, mace, sulphate of iron, rectified oil of amber, and compound syrup of wormwood. Mode of exhibition, three or four pills, weighing four grains each, daily, as an hysteric, and slightly purgative.

BLAUD'S PILLS: half an ounce of the sulphate of iron, half an ounce of subcarbonate of potash, reduced separately to a very fine powder, and made afterwards into forty-eight boluses, weighing twelve grains each, with mucilage of gum tragacanth. Mode of exhibition, for the first three days, one pill to be taken in the morning fasting, in the afternoon, and at bed-time. The next three days, two pills to be taken morning and evening; the next three days, two pills, evening, morning, and noon; and afterwards, until a cure is effected, three pills, evening, morning, and noon. *** In for the convenience of patients, the boluses are divided into six grain pills, the dose must be doubled throughout the treatment. *** Used in chlorotic affections.

BLUE PILL (English Pharmacopœia). two drachms of quicksilver, and two drachms of manna, rubbed together until the metal is extinguished, after which a sufficient quantity of marsh-mallow powder is added, to make one hundred and forty-four pills. Mode of exhibition, two, four, and six daily, as laxative and alterative.

PILLS OF BONTIUS: pills made with gum ammoniacum, socotrine aloes, and gamboge. Mode of exhibition, from three to six pills, weighing four grains each, daily, as a purgative in the treatment of dropsy.

(To be continued.)

A COURSE OF CLINICAL LECTURES ON SOME IMPORTANT POINTS OF SURGERY,

Delivered at St. George's Hospital, by Sir Benjamin C. Brodie, Bart.

Lecture XI.

Diseases of the Male Urethra. — I concluded our last lecture by speaking of contractions of the anterior part of the urethra, and you will recollect I said they were similar in character to strictures, which occur in the œsophagus and rectum, differing very much from those which occur in the membranous part of the urethra. I then went on to explain how the canal may become dilated behind the stricture. In all these cases the stream of water gradually diminishes in size, and, after some months, or it may be years, it is like a mere thread, or only drops, being evacuated with great difficulty, and, at last, there is complete retention. The method of treatment in these cases is by the introduction of small bougies; small, because, under these circumstances, the urethra will not bear dilating to its full size. You go on, then, gradually increasing the size of the instrument, so long as its introduction is unattended with pain; but, as soon as this occurs, you must desist, as, by continuing, you will aggravate, instead of relieving the symptoms. It has been proposed to cut down upon, and divide the stricture, an operation which I saw performed by another surgeon; but the relief afforded was only temporary, the symptoms soon returning as bad as ever. The most common seat of stricture is at the commencement of the membranous part of the canal, but these differ widely from those which occur at the anterior part, a little distance from the orifice of the canal. The patient, perhaps, generally makes water in a good-sized stream, and without difficulty; but then he goes out and drinks a quantity of punch or champagne, or commits some excess in diet, and the stimulus occasioned by it acts like so much vinegar, irritating the part, and preventing the patient from making a drop of water. You endeavour to pass a bougie, but find it is stopped at the membranous part of the urethra, and you can get it no further. You give him a dose of opium, which will afford him temporary relief; this is to be followed by a dose of calomel, and a common saline purge, and, in a few days, he makes water as freely as ever; and then a bougie may be passed without any difficulty. Perhaps he commits the same excess again, the result being similar, and giving way to the same treatment. No one could suppose, in such a case as this, that there would be permanent contraction of the urethra; and, besides this, having had abundant opportunities of examining these cases, I have never seen anything like permanent contraction of the canal. Observe, also, that it occurs at the anterior part of the membranous portion of the canal, where there are muscular fibres passing from the prostate, which fibres are capable of spasmodic contraction, when stimulated by acid urine. Persons who suffer from piles, or who are taking cantharides for any other disease, are not unfrequently troubled with attacks of this kind, no permanent contraction whatever existing. This, then, is spasmodic stricture. Its existence has been denied by some surgeons, but I don't know on what grounds, as there is no other way of accounting for such circumstances. But, although purely spasmodic stricture exists in the membranous part, still you will find it, at times, in other parts, and the patient always makes water in a small stream, gradually diminishing; and, on a *post mortem* examination of such cases, the urethra is found contracted greatly anteriorly, but gradually diminishing, both forwards and backwards, so as to look like a double funnel, joined by the small extremities: the lining membrane of the canal is found thickened, looking like ligament, and is sometimes as hard as cartilage. When stricture occurs in this part, it is for the most part of the character I have just been describing; but, when in the membranous portion, it is frequently entirely spasmodic from beginning to end. The patient, in these cases, makes water in a small stream one day, smaller the next, or, perhaps, not at all. A patient, with a permanent stricture always makes water in a small stream, but still you will be able to pass a catheter of a small size readily; another day you may pass one a little bigger; but if it be in the membranous portion, perhaps, on the third day the instrument cannot be got through the stricture at all, but you employ the remedies which I shall presently mention to you, and then the instrument passes as readily as ever. I will give you more decided proofs of the spasmodic nature of the stricture, as it occurs in the membranous part of the canal, to answer the prevailing opinion that inflammation comes on, and produces a temporary thickening of the part. A patient has stricture of the membranous portion of the urethra, and some day, when he cannot make water at all, you are sent for to him; you introduce a catheter or bougie, armed with nitrate of silver, touch the constricted part, withdraw the instrument, and out comes the urine in a full stream. I do not recommend this practice, but merely mention the fact. The patient, from the instantaneous relief afforded him, cannot understand it, and thinks it is from the magic touch of the instrument employed. The only mode of explaining this, is by supposing it exhausts the morbid irritability of the part, just as tooth-ache is relieved by the application of the nitric or any powerful acid. But, perhaps, instead of pursuing this plan, you endeavour to pass the smallest size cat-gut bougie, but cannot get it in; then you introduce a larger one, press upon the stricture, then withdraw it, and the urine flows out freely as before. Now, if there were inflammation, the bougie certainly would not relieve it, but it is easy to see that it might, from the pressure exerted, exhaust morbid irritability. When permanent stricture is produced, by thickening of the part, it may still be liable to spasm from beginning to end, even though the disease originated in a change of structure in the part. Long continued spasmodic stricture may also produce thickening, and thus become permanent.

Stricture is a disease which seldom occurs before the age of puberty; but I saw it once in a lad at school. It is frequently produced by local injuries; in one case I saw, it arose from a cut in the perinæum, and in another from a blow; but these varieties differ materially from those I have been describing, even though they are attended with similar changes of structure. In violent cases of gonorrhœa we sometimes have stricture produced, especially if the inflammation traverses the whole length of the canal; but this, I should say, is not a common cause of stricture, for how many persons have gonorrhœa who have never anything approaching to stricture. Sir E. Home thought strong injections produced stricture, and I dare say they may be employed so strong as to produce it; but I cannot say I ever saw any ill effects result from their employment; it is the abuse and not the use of these which is productive of bad results. I think a long continued gonorrhœal discharge much more likely to produce it. Patients are liable to have stricture whose urine is secreted of an improper quality; for example, if it contains red sand, (lithate of ammonia); alkaline urine is still more likely to produce the disease, and persons secreting the triple phosphate are almost sure to have stricture sooner or later. You must never expect to cure any of these cases till the urine is restored to a healthy condition. In many cases this disease occurs without any evident reason; the patient will tell you he has never had gonorrhœa, and the urine will be found to contain neither acid nor alkaline matter. But I should have told you that *spasmodic* stricture may be produced by disease in any part of the urinary organs, as from diseased prostate or kidney. I have just seen a patient with stricture in whom, if I attempt to pass the instrument with a light hand, I get it in very well; but, if I omit this precaution, I cannot get beyond the membranous portion; hence enlargement of the prostate is not unfrequently mistaken for disease of the urethra. A patient may have retention of urine, produced by excess in diet; and from this cause, if the attacks are repeated several times, the stream will diminish in size, and the disease will return at intervals; in these cases, that, which in the outset is spasmodic, becomes, by its repetition, a permanent stricture. If, from any cause, there is a trickling or itching sensation produced in the urethra, accompanied by discharge, the stream will be small and flattened, sometimes dividing into two; this latter, however, may be occasioned by some congenital malformation of the part, totally independent of disease. An enlarged mucous gland may also be the cause; but if none of these exist, then the diminution in size and flattened appearance are symptoms of permanent change in the form of the urethra. Strictures originally spasmodic will, if neglected, become permanent, and permanent strictures are always liable to attacks of spasm.

I have said these symptoms may be produced by excess; and you will find in persons subject to attacks from such causes, that so long as they live moderately, they are entirely free from them, or, at least, their occurrence is very seldom. Let us now suppose another case;—a gentleman goes out to dinner, wants to make water, but finds he is unable; thinks he will, bye and bye, and after a while tries again, but still cannot make any; comes home, and sends for his surgeon, who, on examination, finds the bladder so much distended, that it can be distinctly felt above the pubes; he has a fit of shivering which, perhaps, in a short time, returns again with increased violence; the pulse become hard and frequent, and the tongue furred. If nothing is done to relieve the symptoms, they will, in all probability, get worse; but, perhaps, after a time, the spasm ceases, and he is able to make water; but, if this does not happen, as is far more likely, the patient must not be left, because the greatest possible mischief may ensue. The first year I was a pupil at this Hospital, a man was brought in, who said, that in straining, he had burst his bladder; this was thought nonsense; but peritoneal inflammation was set up, and the man died, and sure enough this accident had happened; this case you will find mentioned by Sir E. Home, but it is of rare occurrence. In cases where this does happen, it is most frequently at the fundus of the bladder. Rupture occurs equally often at the posterior part of the membranous portion of the urethra, from the patient constantly straining and forcing the water into this part. I cannot tell whether or no ulceration precedes the giving way of the part, but certainly it is of common occurrence. When this occurs, the urine is forced into the cellular membrane as from a syringe; it is not like a mere dribbling, but the muscular fibres of the bladder contracting with considerable force, urine is diffused through the whole of the surrounding texture, into the perinæum, the skin of the penis, and also the serotum; in the former, the numerous cells become filled, and the yielding texture of the latter admits of its being easily distended. The pressure being removed from the bladder, instant cessation of the spasm follows, and the patient, feeling relieved, thinks himself much better; but here is the urine in the cellular membrane. The limpid urine, of an hysterical girl, would doubtless be bad enough; but the urine, which is long in being secreted, is not limpid; on the contrary, part of its watery portion has probably become absorbed, and it is red and highly stimulating like vinegar to the parts; it brings on inflammation and sloughing, both of the cellular membrane, and the skin enclosing it. If you were called to such a case, and did nothing, you would find, on your next visit, the parts black and mortifying. Soon after the effusion has taken place, the patient gets hot, and his pulse frequent; but after a time, he is exhausted of all his bodily powers, and is distressed by a continual hiccough. I saw one patient in whom this continued, without intermission, for 5 or 6 days, yet he was fortunate enough to recover. But more frequently the pulse increases in frequency, perhaps is intermitting, and the skin becomes cold and clammy; low delirium supervenes, and the patient dies. In some of these cases, the skin gives way behind the deep fascia, and the urine gets effused through the cellular membrane surrounding the neck of the bladder; this is of rare occurrence, but it always terminates fatally. Some persons have constant difficulty of making water; and when this is the case, the irritation kept up by the stimulus of the retained urine may produce a small ulcer behind the stricture, still

however, allowing the urine to flow through the natural passage; but, perhaps, a drop or two escapes through the small opening in the ulcer, and even this cannot be absorbed without producing mischief. Even a drop of vinegar getting into this part, would be productive of ill consequences. The small portion of urine, escaping in this way, excites inflammation, swelling and abscess in the perinæum.

Suppose you were called to such a case (a case unattended by any constitutional derangement), and you do nothing for it; the swelling increases, and then bursts, or may be you open it. At first nothing but matter escapes from it, but after a time you find urine escaping also, every time the patient makes water; still, the greater part coming the proper way. The urine prevents the abscess healing, and its sides and edges become inflamed, hard, thickened, and gristly; a sort of projecting fungus is formed, and this constitutes fistula in perinæo, having two openings, the one externally, the other in the membranous part of the urethra. This exactly coincides with what I said on a former occasion, when speaking of fistula in ano (vide page 104), in which disease I told you the mucous membrane ulcerated, and fæces escaped into the cellular membrane. I cannot help thinking these are formed in the same way. I have called this fistula in perinæo, but the opening may be in the groin or scrotum, or, in fact, any of the adjacent parts. Several of these may occur, and break at different times, so that there may be more than one opening at the same time. I have supposed a small quantity of urine to have escaped; but the quantity may be large, and when it is let out, may be mixed up with a quantity of matter; not healthy, but putrid, from the admixture of urine. You are called to such a case, and find the patient cannot make a drop of water, the pressure of the abscess having stopped the canal. The patient will have a hot skin, brown tongue, with sordes about the teeth, and great prostration of strength: these symptoms ushered in by rigor; you look at the perinæum, and find a large tumour there; perhaps the abscess is near the skin, in other cases it may lie deep in the substance of the part; in either case you lay it open, and a quantity of putrid, offensive matter escapes, which you cannot bear the smell of; and no sooner is this done, than all the symptoms subside; the heat of skin diminishes, the tongue becomes moist, and in a few days he is comparatively well, only with fistula in perinæo remaining. If you had not opened such an abscess, the patient would have

COURSE OF LECTURES ON THE THEORY AND PRACTICE OF MEDICINE.

Delivered by C. J. B. WILLIAMS, M.D., F.R.S., Professor of the Practice of Medicine, and of Clinical Medicine, at University College.

Diseases of the Valves of the Heart—(continued.)—I endeavoured, in yesterday's lecture, to give, as far as I could, a view of the pathologieal anatomy of valvular disease. These diseases comprehend a considerable variety of lesions, to which the valves and orifices of the heart are subject; which modify the functions of these parts, and, in many cases, eventually lead to organic disease of the heart. We most commonly find valvular diseases conjoined with hypertrophy, or dilatation of the muscular substance. Now, in taking a view of these lesions, we find that the greater number of them seem to be connected with inflammation, or, at least, with a modification of the nutritive processes. In some instances, it is undoubtedly inflammation of the lining membrane, or endo-carditis, and apparently of the fibrous texture: particularly where it occurs in connection with pleurisy. This is rare in the acute kind, but it occurs more generally in the chronic form. It is rare that disease of the structure of the valves is produced to any amount, by a single attack of inflammation; it is rather by a succession of attacks; and the reason why these attacks become chronic, is, that when the structure of the heart once takes on disease, it furnishes a disposition to its recurrence; generally speaking, then, those valvular lesions, which produce serious mischief in the heart, are the result of repeated attacks. This will explain, in some degree, what may be called the chronic character of the product; that, instead of there being simple membranous effusions, such as result from simple inflammation, there is a thickening, and a deposition of denser matter than usual, interspersed with a matter perfectly opaque, or *atheromatous* matter as it is called, in the heart and arteries; which, on examination, you find has a strong approximation to tuberculous matter, or is very much allied to it. An osseous, or cretaceous deposit, is found, in numerous instances, where the disease has been going on long. All these lesions are liable to be produced by inflammation, some of them more readily than others; although, as a general result, you find a tendency to the same thing, as life advances,—a gradual disposition to a thickening of the valves and orifices, and to the deposit of an opaque and osseous matter in these thickened parts; and this seems to be a natural tendency which can scarcely be called morbid. I have seen a very old person, 80 years of age, with a considerable ossification, while there were no previous signs of disease existing. Now, I believe this to be nothing more than a proof of degradation; for, as inflammation, where it is of a low character, and frequently repeated, produces a tendency to degeneration of the texture, or rather of the nutritive function, such also we find to be the result of age. Atrophy of the valves, however, is a lesion which seems to arise independently of inflammation, and is frequently found in cases, more or less of an anemic character, in which the whole body is suffering from depression, cachexia, or a state of inanition. Sometimes these conditions are combined together.

We now have to consider the *physical signs of these lesions*: they are highly characteristic. I have stated, that what are called murmurs, or abnormal sounds produced in the region of the heart, are most generally caused by some modification of the current passing through the orifices of the heart; and it is by these sounds mainly that we distinguish the character of the lesion, and its seat. But we must observe, that it is not every modification of the orifices of the heart, that will produce a murmur; it is only those that fulfil or complete the elements of sound, and give a vibrating resistance to the current as it passes. Hence, you will understand, that where the obstacle in the orifice is very small, it does not interfere materially with the current of the blood, and it may give no vibratory resistance. With some pulsations, there is no murmur, but during strong pulsations, there will be a murmur produced. Sometimes, the aortic valves may be closely pressed together, so that the blood is forced out through a small orifice; in this case, the vibrating resistance may not be enough to produce a murmur. Again, the thin state of the blood in anæmia may produce a murmur, though rich blood may not. It may happen, if the valvular disease is considerable, that the murmur is not heard in the weak pulsations, but it will be heard when the heart beats more strongly. In the *tricuspid* orifice, there is frequent regurgitation, so as to produce pulsation, not only in the auricles, but in the great veins, as the jugular. This is not accompanied, in most instances, by any murmur; and the reason of this is, because the laminæ of the tricuspid valve are placed flat against the direction of the current, and being rather light and yielding, they do not afford enough resistance for perfect vibration.

The murmur is then, generally speaking, a *certain rule and indication* of some *valvular disease*. But the amount and degree of the murmur is far from being proportioned to the amount of the lesion. You may have a very loud murmur indeed produced by a very slight lesion; this is more particularly the case with those lesions that are called regurgitant. The loudest murmurs are what are called the musical murmurs, where the vibrations, produced by the current, are not only noisy, but so regular in utterance, as to constitute a prolonged musical tone, the vibrations being equi-distant. The quality of the murmur is the best guide to the amount of the lesion, though even this is not a sure one. Those which are uniform, whether of the blowing, or the whistling character, generally announce slighter lesions than the murmurs that are grating, or more deep-toned. This is a general rule. The musical sounds, when of a simply blowing, or uniform character, are mostly caused by regurgitation through the smaller channels; on the other hand, the deep-toned murmurs mark the larger currents, and a harder kind of obstruction. Laënnec, Drs. Hope, Wilson, and others, have thought the rough murmurs indicative of a rigid state of the orifices. Now, the contrary is the case; for, where this state exists, there is a great amount of looseness in the sound; and one of the harshest murmurs I ever heard, was in a case where there was no ossification at all. The breaking down of one of the valves caused a vibrating obstacle in the direction of the current. The intensity of the sound is not at all in proportion to the loudness, but it depends rather on the capacity of the obstacle for vibrating. There are, as I have mentioned, some obstacles which do not vibrate at all.

Natural Sounds superseded by the Murmur.—There is another character about the murmur, and that is the degree in which it supplants or supersedes the natural sounds, whether the first or the second. Whenever you have a murmur so intense and loud that you hear nothing at all of the first sound, you may be pretty sure that the lesion which produces it is very considerable, not merely as to the anatomical condition, but as to its effect on the constitution. On the other hand, when you have a murmur added to the natural sounds, there is a certain degree of proof that the natural actions are going on well; accordingly, when there is extreme disease of the mitral orifice, you find, towards the apex, that you can scarcely hear the first sound at all, but merely a prolonged blowing, not only obscuring by its loudness the first sound, but actually overpowering it. But if you apply the stethoscope over the right ventricle, you hear the sound. It modifies the suddenness and the character of the tension on which the first sound depends, and converts it into one which takes its character from the murmur itself. And it would appear in these cases, as if the vibrations naturally produced in the walls of the heart were converted into vibrations of the murmur—a conversion of one into the other. We find these sounds arrested under various circumstances. If we throw a string into vibration and while it is vibrating, bring it near to another string also in vibration, and hitherto incapable of vibrating an octave, the octave sound will be very loud indeed; and you find that the second string instead of responding a lower note, responds an octave;—one vibration therefore supersedes other vibrations previously existing; and it appears that the murmur, to a great extent, not only muffles but entirely destroys the natural sound of the heart, and converts the simple obtuse sound that naturally arises, into a prolonged blowing. Again with regard to the second sound: the same thing is particularly observed. There is a sufficient reason for this; for where the disease is considerable, you have not only the second sound superseded, but the tension of the valves, on which the second sound depends, may be entirely destroyed. In the musical murmur I mentioned just now, the natural sound was not entirely superseded, showing that the amount of disease was limited. The patient did not die of disease of the heart, though there was a certain amount of hypertrophy of its walls, but he died of a fever.

Now, with regard to *certain indications of sound*. I have noticed the method of distinguishing the seat of the lesions by the seat of the sounds, and you will find this more fully stated in my work on diseases of the chest. Much is to be learned on this subject at the bedside of the patient. The obstructive disease of the aortic orifice is accompanied by a murmur, which is heard pretty distinctly at the left side of the heart, from the apex to the base of the organ. But its most distinctive feature is, that it is heard loud and plain above the upper half of the sternum, or in the carotid arteries. The point at which the sound is heard loudest, will vary very much in different cases, so that it is impossible to lay down any fixed rule. It will vary according

to the condition of the heart: either hypertrophy, dilatation, or enlargement of the cavities, or the condition of the superincumbent lung, will cause a variance, so that it is impossible to say where it will always be loudest. The most distinguishing feature of the aortic murmur is, where the obstructions are heard over the great arteries, that the sound seems to be carried along the current of the blood: partaking of the character of the systolic sound, swelling out with the force of the current, and then dying away. Sometimes, however, it only lasts during part of the systole. It may be either at the commencement, or at the termination; but more commonly it is at the commencement. The second sound is much impaired, where the valvular disease is extensive, and causes projections at the orifices. This lesion, then, not only impairs the first sound, but destroys the second sound also; for the valves, loaded with deposition, obviously cannot produce the second sound at all. Obstruction of the aortic orifice is not unfrequently accompanied with dilatation of the aorta; the sound becomes loud, and the orifice narrow and projecting. Regurgitant disease of the aortic orifice causes a murmur, in some states, with the second sound. This is more of a musical sound, and is owing to a sudden gush of blood taking place, back from the aortic valve into the ventricle. The situation of this regurgitant murmur will also vary, according to the position in which the heart lies in contact with the chest; but, generally speaking, this regurgitant aortic sound is heard best about the middle of the sternum, or a little below that, and is thence propagated in the direction of the current backwards towards the ventricle; and you hear it very loud at the point where the apex beats, as the current goes backwards into the ventricle. Usually, it is heard in the middle third of the sternum. Sometimes, also, it is heard very loud in the arteries; the current is here in another direction; but, where the arteries are not very loose and dilated, the regurgitant murmur may be heard in the arteries at the top of the sternum. This constitutes a remarkable feature. In ninety-nine cases out of a hundred, it is a murmur that takes place at the diastole, and supersedes the second sound, where the disease is great. In some instances, you do hear the second sound at the commencement of the loud murmur, but in other cases it is altogether absent. Sometimes there is a degree of congestion, which takes place in the lungs and the pulmonary arteries, thus preventing any considerable regurgitation through them. This lesion of the aortic valves, whether obstructive alone, or obstructive and regurgitant, which is the more common form, is often attended by hypertrophy of the heart—dilated hypertrophy. The reason of this is obvious; for, each time that the ventricle contracts, the blood is but partially forced out, and some rushes back again. The heart is thus distended, not only by the pressure of the blood from the auricles, but also by that regurgitating from the arteries, and under the influence of this continued distention, the heart is dilated. If the heart has to struggle much, a thickening of the walls takes place, and with the dilatation, hypertrophy is thus super-added. This leads us to other symptoms of this affection. The pulse is usually hard and sharp, the more so from the increased strength of the walls of the heart. The walls gradually increase in thickness after this lesion is produced, and the blood is sent out at each systole with great force. There is this remarkable character about it: at the moment of the systole, the pulse is strong and jerking, but is immediately followed by a state of collapse. This is one of the most destinctive characters of disease of the aortic valves. It is imitated to a great degree by the pulse of anæmia, or during the reaction in this state. It renders the pulse forcible, jerking the blood into the artery at the moment of the systole, and giving the artery a momentary tension, which is followed by a state of relaxation, on the cessation of the systolic action, throughout the whole of the arterial system. The suddenness of this change, from tense to loose, produces a visible motion, like the movement of worms. This motion of the pulse is sometimes seen in anæmia.

The *general symptoms* of *aortic lesions* vary according to their degree. When only moderate, they are accompanied merely with a shortness of breath, some palpitation, and a feeling of tightness or slight pain at the sternum. When the disease is very extensive, and particularly if it has taken place suddenly, this lesion is a very formidable one, and may prove fatal in a short time. It has more immediate relation to the circulation than other lesions. You may easily understand how the breaking down of the valvular apparatus interferes with the motion of the blood, and how it must produce a disturbance of the whole system, as well as excite the heart to such violent exertion as must exhaust its efforts. I have seen this disease prove fatal in five or six weeks from its apparent commencement. Perhaps, if there is any distinction in the character of these aortic affections, it is, that there is a greater disposition to disorder of the arterial circulation than of the venous. The symptoms accompanying these affections are: a tendency of blood to the head, a liability to giddiness and apoplexy, and sometimes palsy may ensue. The other organs, likewise, are apt to suffer. The patient may become dropsical. In many cases, asthma occurs, in this as in other forms of heart-disease. I have a case now under my care, in which, with extensive disease of the aortic valves, the attack seems chiefly confined to the lungs. The peculiar position of the heart in regard to the lungs, and the mechanism of the organs, is such that, when the action of the heart is impaired or the impulse destroyed, the circulation of the whole system suffers. All its strength is insufficient to make up the defects in the circulation. I have often seen pulmonary apoplexy co-exist, to a certain degree, with this disease of the aortic valves. Obstruction of the left ventricle will also be productive of further mischief, by causing the blood to regurgitate from the pulmonary artery with increased force on the right side. This disease of the aortic valves is, more commonly than any other, accompanied by *angina* and severe pain at the heart, producing irregularity of breathing, or a feeling of faintness. Obstructive disease of the mitral orifice most commonly depends on contraction of the auriculo-ventricular ring, combined with a cohesion of the valves or of their laminæ, one with another. So small do the valves in this case become, that they will not even admit the little finger. Now, does this produce a distinctive murmur? If it does so, the murmur ought to occur at the moment of the diastole of the ventricle, or the contraction of the auricle; and I believe that I have, in a few cases, met with what would be regarded as a characteristic murmur; yet if it occur as a part only of this second sound, it must, practically speaking, be of little use, for its existence will be very slight, if at all. The current is not strong enough at that point to produce a marked murmur; and, therefore, we infer the existence of this disease rather from indirect means—by there being to a certain extent the signs of obstructive circulation through the heart and in the lungs.

With this contraction of the mitral orifice, especially in cases of great obstruction, there is always sure to be regurgitation through the opening; and I do not know that I have met with a case of this kind, where this symptom was not present. The valve, in fact, ceases to perform its function. It is in these cases that the murmur is so prolonged, and becomes so loud as to supersede the natural vibration or sounds of the heart. Regurgitant disease of the mitral valves may exist independently of obstructive disease: that is to say, without a narrowing of the orifice; and then the murmur is either loud and short—not very much prolonged—or else, if it is prolonged, it does not supersede the natural sound. In very extreme regurgitant disease of the aortic orifice, as, for instance, in case of rupture of the valves, and where there is great regurgitation backwards, there is a loud deep-toned murmur produced, which is heard at the apex of the heart when it beats; but this is obviously not continued during the whole of the systolic action, but rather accompanies the first portion of it; nor does it supersede the natural sound. This is a point we sometimes avail ourselves of, in distinguishing between mere regurgitant diseases, and such diseases when accompanied by obstruction. Perhaps, these minute distinctions may be carried somewhat too far. When the mitral orifice is contracted, and there is hypertrophy of the heart, the sound is loud and blowing; but, if the ventricle is merely dilated, we often hear the natural double sound of the heart, while the first alone is accompanied by a short blowing murmur. The state of the pulse is uncertain in these cases; it is generally frequent and irregular; especially with obstructive disease of the valves.—[During this lecture, as during others, Dr. Williams frequently elucidated his observations by reference to diagrams. From the impossibility of re-producing these in our columns, combined with the fact that the lectures themselves are extemporaneous, our readers will at once see that our reports, with whatever care and ability drawn up, must fail occasionally in giving that full lucidity and force which distinguishes the learned Professor's observations, as given orally to his class. This explanation is necessary, to relieve Dr. Williams from a responsibility not his.—Ed.]

CLINICAL LECTURES ON MEDICINE;

Delivered at the Great Charity Hospital, Berlin, by Dr. Schonlein, first Physician to the King of Prussia, founder of the Natural System of Medicine in Germany, and Professor of Pathology and Therapeutics in the University of Berlin.

Prepared from the German expressly for "The Medical Times."

LECTURE XIV.

Peritonitis and Phlebitis Uterina in the Puerperal State.—Contusion and Excoriation of the Vagina.—Strict Antiphlogistic Treatment.—Repeated Copious Abstractions of Blood.—Pus in the Urine.—Dysenteric Phenomena.—Slow Progress of Convalescence.—Perfect Cure.

March 5th, 1841.—Frederica Reperwitz, servant girl, 26 years of age. This female, of a strong constitution, became *enceinte* for the first time; she felt perfectly well during the pregnancy, and entered this hospital towards her confinement. The delivery, which took place on the 2nd of March, was somewhat tedious, and we were obliged eventually to employ the forceps, as well as to take away some blood from the arm, on account of a tendency to convulsions. The abstraction of the child's head, which was large, was no easy matter—a circumstance which deserves notice, since we know what an effect mechanical influences have in the production of diseases of lying-in women;—a rather copious hæmorrhage took place after the birth. The patient was seized with a violent attack of shivering on the following night, succeeded by heat, intense sensation of pain in the abdomen, first on the left, then on the right side, but principally in the situation of the uterus. The pain occasionally subsided; it was of a tearing nature, frequently extending itself to the upper region of the thigh. Soon after, it spread over the whole abdomen, which was very much distended; owing to which, two venesections, of eight ounces each, were practised, while she was yet in the lying-in ward. As the pain did not disappear, she was subsequently brought to this division of the hospital. We now observe the following symptoms:—1st. Local Phenomena: the abdomen is distended, though somewhat soft; it is painful on pressure, throughout its whole extent, particularly so over the uterus, which is rather contracted, and firm. The lochial discharge is normal and abundant. It will be necessary to make a vaginal examination, in order to ascertain whether any laceration has taken place, in consequence of the birth. 2ndly. General Phenomena: pulse strong, but not hard, 120 per minute; skin moderately moist; thirst intense; no vomiting.

The patient, from the symptoms enumerated, seems to labour under peritonitis, with which phlebitis uterina is apparently combined; this conjecture is particularly strengthened by the pain on pressure, at the sides of the uterus.*

* In corroboration of the above case, I may mention that of a tailoress, named Wilhelmina Hartmann, 27 years of age, who was attacked by a violent peritonitis, twenty-four hours after her delivery. This was successfully opposed by two venesections; but considerable pain was still felt on pessure, over the right side of the uterus,

We shall again institute a venesection of sixteen ounces; apply forty leeches to the abdomen; rub in grey mercurial ointment; employ warm fomentations; and, internally, we shall order an emulsion of Aq. Laurocerasi.

March 6th.—Last night we were obliged to repeat the general and topical abstraction of blood. A considerable diminution of the local phenomena, as well as of the fever, has taken place; the patient passed a tolerably calm night, in which she slept for several successive hours. Sensation of pain, however, was again experienced this morning, at the left side of the uterus. Twenty leeches were immediately applied, and the pain has now entirely disappeared. The abdomen, which was yesterday so much distended, is now contracted, and nowhere painful. The tongue is clean and moist; thirst moderate; two feculent stools have taken place since yesterday. On examination, we find that considerable mischief has been occasioned by the use of the forceps, and the great size of the child's head; contusions and excoriations are found in the vagina, as well as a partial laceration of its walls. The healing of the latter is always retarded, in these cases, from the irritating nature of the lochial discharge. Hence, a favourable prognosis can hardly be pronounced, before perfect cicatrization has taken place. The mechanical lesions in the vagina, until they are perfectly healed, are always apt to cause renewed irritation, which may produce inflammation of the veins. The patient was seized with a gentle attack of shivering, during the time that her bed was being made, which is a circumstance of greater signification than the whole series of favourable symptoms. The fever still continues; pulse 100 per minute. We cannot entertain sanguine hopes, so long as this state exists. The phenomena of the peritonitis have, certainly, entirely disappeared, and those of the phlebitis uterina are very much ameliorated; but the morbid state of the generative passages still continues; finally, the secretion of milk has not yet taken place, a fact which must tend to keep up the excitement in the parts primarily affected. Sufficient motives, therefore, exist to create a doubt as to the final result; the state of the patient is to-day evidently better than yesterday, but we are very far yet from the desired termination.

Prescription.—Continue the remedies ordered yesterday. Goulard water to be applied to the sores of the vagina.

March 8th.—I remarked, the day before yesterday, that the abdomen being free from pain, in consequence of the strict antiphlogistic treatment which had been adopted, formed no criterion that the morbid process had entirely terminated, since the pain might soon re-appear, and rapidly extend itself. The patient, yesterday morning, again complained of an intense pain at the left side of the uterus, not only on pressure externally, but also of a spontaneous character. A general and local abstraction of blood has, however, once more dissipated this symptom. The phenomena of the peritonitis have not made their re-appearance; the pain at the left side of the uterus has vanished; the gangrenous spots in the vagina are beginning to heal, and pure pus is now found, mixed along with the lochial discharge.

But, as I have already stated, a renewal of the inflammation in the veins is to be apprehended, so long as these ulcers exist. The fever is moderate; pulse strong, 96 per minute; tongue moist; thirst not very intense; skin perspiring; urine forms a copious sediment. The pain, of which the patient complains when making water, probably originates in the excoriations around the urethra.—The same treatment continued.

March 9th.—The amelioration has maintained itself at pretty much the same degree, notwithstanding a general and local abstraction of blood again became necessary, owing to an increase of the febrile symptoms, and the pain in the left side of the uterus. We now find the following state. With regard to the local symptoms: a trace of inflammation still exhibits itself at the left side of the uterus, consisting in slight distention, and susceptibility to pain. The symptoms of the local affection of the vagina are as favourable as can possibly be expected: simple suppurating sores. Respecting the fever: the pulse is soft, 110 per minute—a frequency which is perhaps chiefly to be attributed to the great loss of blood: nine venesections having been instituted since the delivery of the patient, and 225 leeches having been applied; the skin is moist; the urine forming a sediment. *Eczema mercuriale* has exhibited itself on the skin of the abdomen, in consequence of the frictions; this, however, is not of much consequence. Three watery stools have taken place since yesterday.

Prescription.—Injections of an infusion of chamomile, with addition of acetum saturninum and tinctura opii, into the vagina. For internal use: emulsion of aq. laurocerasi, extract. opii aquos. (gr. ss.) and syrup. diacodii.

March 10th.—The patient is going on favourably; the symptoms of the uterine phlebitis have not made their re-appearance; the vaginal sores secrete a genuine pus; sleep is good; the skin moist; the pulse has become rather more quiet and soft; the diarrhœa has ceased. But a remarkable change in the urine has taken place since yesterday; for some days, it was much clouded, and formed a yellow sediment; the sediment, since yesterday, has all the distinctive features of pus; the colour, consistency, microscopic, as well as chemical, characters of the sediment prove such to be the case. We can have no doubt respecting this phenomenon, since the urine has been removed by the catheter, and therefore cannot have taken up the pus from the vagina. The absorption of the pus into the blood seems thus to be confirmed. We frequently find excretion of pus through the urine, when morbid products have accumulated in different parts of the body; and, in this way, the pus disappears at the locality originally affected; the manner in which this is done is certainly not yet understood. Many do not believe this; but the fact has been so often observed that scepticism is here really carried too far. This point ought to form a consideration in our therapeutics; it is the principal task of art to aid in producing the same process which nature so often effects.

March 15th.—Although the healing process in the vaginal passage is going on satisfactorily, yet

---

which had contracted pretty firmly. The lochia were offensive; the posterior wall of the vagina was somewhat excoriated. The fever considerable. Blood was again drawn from the arm; leeches applied to the painful locality; fomentations, embrocations of grey mercurial ointment, and an emulsion of aq. laurocerasi, with injections of aq. oxymuriat., were ordered. The apprehension that phlebitis uterina would develop itself in this instance, was but too soon confirmed, as a violent attack of shivering took place, followed by heat, and copious perspiration. The pain now occupied both sides of the uterus, whilst the fundus and the anterior surface remained pretty free; it radiated to the symphysis pubis, as also to the thighs. The attacks of shivering were repeated several times, at irregular intervals, and the patient sunk on the 8th day after delivery.

I shall limit myself, says Schönlein, to the consideration of two series of phenomena, which appear to be important, with regard to the illustration of the anatomical facts:—1stly. Pain was existing, at the period of the reception of the patient into the hospital, along the sides of the uterus, a locality which is of importance; inasmuch as it enables us to judge whether we have to deal with metritis, or phlebitis uterina: this being the course of the spermatic plexus of vessels, which is particularly affected in the latter disease. The conjecture of the appearance of phlebitis is always well-founded, when a permanent pain occurs along the sides of the uterus. This phenomenon frequently precedes delivery, and premature birth (which occurred in this instance) is often the consequence. We, therefore, pronounced the patient to be labouring under phlebitis uterina. In favour of this diagnosis, we had the attacks of shivering, which are, generally speaking, very decisive in these cases; these attacks were repeated several times in a day. Symptoms of peritonitis made their re-appearance, two days previous to death: first on the fundus uteri, and subsequently extending further.

On the post-mortem examination, we found, in the cavity of the abdomen, from two to three pounds of a dirty-looking fluid, mixed with flocculi of albumen, and effusion of lymph, binding together the intestinal folds. The right ovarian tube was enlarged to three or four times its volume, and filled with pus. The veins of the right spermatic plexus were injected with pus, as far as the right ovary, and the intervening cellular tissue infiltrated with a purulent liquid. The left tube and ovary were normal. All the veins of the uterus were injected with pus. A hard, dark-looking, tumour was found at the posterior part of the vagina; this, however, was not the only one, for several others were found scattered throughout the vagina, and in the cavity of the uterus. The anatomical facts, therefore, confirmed the diagnosis.

Having thus given you an account of this case, I will add something respecting the ætiology and treatment of this form of disease. It is well known that phlebitis uterina only occurs in certain conditions of the uterus; that is to say, when the veins are in a state of dilatation, in consequence of some physiological alteration in this organ; as, for instance, in pregnant and lying-in women. I have, however, observed phlebitis uterina in morbid states which produce a similar change in the uterus; for example, in young girls, in whom the hymen was imperforate, and in whom, consequently, the menstrual flux was kept back in the uterus, thus causing dilatation and disease of this organ. I recollect perfectly two young girls, one of 17 and the other 18 years of age, in whom Textor undertook the operation; but, subsequently, symptoms of phlebitis uterina developed themselves. Inflammation of the veins of the uterus also may occur, when these vessels have become varicose; likewise, in steatomatous and scirrhous degenerations of this organ.

Phlebitis uterina seldom takes place in pregnant or lying-in women, as a primary malady, without other changes having existed previously. In the case before us, we had a callous, diseased state of the whole of the uterus, as well as of some parts of the mucous membrane of the vagina. These were the first symptoms that exhibited themselves, and the phlebitis developed itself from them. A striking example of this kind is afforded in a case, which we shall give in a subsequent lecture, and in which the patient was affected with inflammation of the portal vein, preceded by peritonitis; and where the latter had gone on to suppuration. On the *post mortem* examination, we found the circumscribed abscess, from which the inflammation of the portal vein had developed itself. Superficial exulcerations in the uterus, at localities where the placenta has been attached, are also, according to Boer, capable of causing phlebitis uterina. With regard to the prognosis of this form of inflammation, we have but little hope, when once the attacks of shivering, which indicate the transposition of the inflammation into suppuration, have taken place. I have never yet witnessed a case, in which a cure was effected after these attacks of shivering; death frequently takes place in twelve or twenty-four hours from this period; sometimes, however, not for seven, eight, or twelve days. Yet I do not mean to assert that every hope of a successful termination should be given up in these cases. I merely state what is actually the result of our present experience. The principal thing is to discover the first commencement of the affection, and then, immediately to adopt energetic measures. The preference ought to be given to the antiphlogistic mode of treatment; but the local and predisposing cause should, at the same time, receive our attention. On this account, topical remedies may be employed:—Injections of decoctum cicutæ, with preparations of chlorine, have been recommended; but Boer asserts that frequent injection alone does not suffice, but that the remedies adopted ought to have a continued effect; for which reason, ointments are to be preferred. Besides this local treatment, a strictly antiphlogistic one should be adopted: venesections; application of leeches to the hypogastrium; and, internally, calomel, digitalis, &c.

some intestinal symptoms have very much alarmed us, during the last few days. Violent diarrhœa, combined with tenesmus and pain along the colon descendens, has occurred, and gelatinous masses of mucus were evacuated with the fæces. These phenomena were calculated to create some apprehension, on comparing them with a case which recently came under our care, and where changes took place in the mucous membrane of the colon, having great similarity to those which are presented in dysentery. We first ordered mucilaginous drinks; embrocations on the abdomen of linim. ammon. with tincture of opium; decoction of salep with extr. opii and alum.; and, as these remedies were unsuccessful, we yesterday prescribed plumbi. acet. (gr. ij.) with pulv. opii. (gr. ¼); at the same time, clysters of argent. nit. (gr. ij. dissolved in aq. distill. ℥iij, with addition of tincture of opium), and application of a blister on the painful side of the abdomen. The diarrhœa ceased upon this treatment. With regard to the fever: the skin is moist; pulse still powerful and soft, 96 per minute; a flocculent, reddish, sediment of uric salts exhibits itself in the urine, instead of pus. Finally, symptoms of salivation have taken place, in consequence of the mercurial inunction, which, however, under the local use of borax with honey of roses, have already diminished.

Continue the remedies ordered last.

March 16th.—The only disagreeable symptom, now, is the affection of the colon, which has not yet been quite removed; some watery stools still take place, although more rarely; they, however, contain fewer jelly-like masses, and begin to be more fæculent: the pains along the course of the colon, and the tenesmus, have not yet disappeared. The danger is not at an end, so long as these phenomena last. We shall continue the employment of the clysters and the medicines, but shall not administer them so often (only one clyster and two powders per diem).

March 19th.—Diarrhœa occurred in the case of a patient in this hospital, a short time ago, which did not yield to the remedies employed; collapse and death soon took place. Pus was found in the veins of the uterus, on the *post mortem* examination, and similar changes to those which take place in dysentery were found on the mucous membrane of the rectum and the sigmoid flexure of the colon; yet, no affection of the uterus was perceptible during life. As diarrhœa likewise persisted in this instance, we were apprehensive that similar changes might also develop themselves on the mucous membrane of the intestines; and we therefore administered appropriate means, among which the clysters of a solution of nitrate of silver, and the powders of acetate of lead, are particularly deserving of notice; they have produced changes, from which we may infer a happy termination. The existing tenesmus, the evacuated masses which were similar to coagulated albumen, and the pain along the course of the colon descendens, proved that we had not to deal with a simple diarrhœa. To-day, we find in the stool of the patient completely organized membranes; these fragments seem to be formed of fibrine, and to be coloured dark by hæmatin: similar fragments may be observed during dysentery. The colic-like pains have disappeared; the tenesmus is no longer so violent; the fever has diminished very much; the symptoms of salivation are decreasing. Phlebitis uterina being succeeded by this affection of the mucous membrane of the colon is at all events a new and interesting fact; it generally terminates before it has gained this point.

The Clinical Institution closed this day. The diarrhœa was completely removed towards the end of the month. The progress of convalescence was, as might be expected, very slow. The patient was once more exhibited before the commencement of the summer lectures.

May 6th.—You will recollect the patient under treatment for phlebitis uterina, and peritonitis. The removal of these affections took place in consequence of enormous abstractions of blood, and the employment of the ungt. mercuriale; two remarkable phenomena, however, exhibited themselves subsequently: 1stly. Excretion of genuine pus by the urine,—a fact, which induced the question, whether it was the product of a new formation, or whether it depended on re-absorption from the veins of the uterus? 2ndly. Affection of the lower part of the colon, and of the rectum; gelatinous and polypoid masses were evacuated, whilst suffering from tenesmus. We had here, then, an extension of the morbid process to the kidneys and the mucous membrane of the rectum, as you have already seen in another case. The phenomena of the rectum have entirely disappeared; but a slight blennorrhagia still continues in the urinary system. No other morbid symptom is existing.

THE TRUTHS AND FALSEHOODS OF THE THEORIES OF LIEBIG,

WITH NEW VIEWS ON SOME IMPORTANT PARTS OF ORGANIC CHEMISTRY AND PHYSIOLOGY.

(Prepared expressly for the "Medical Times.")

Are the constituents of the animal textures constantly undergoing removal, and do these removed particles normally become the elements o bile?

Our ignorance of the fundamental fact, in physiology, that the human body is an electro-motive machine, and that, like other machines, it possesses two grand requirements—matter to compose, and a power to move—has been the cause of much complicated confusion in physiological science.

It is to be regretted that this confusion is to be found in the works of the most lucid authors; as, for example, Liebig; and is traceable to the fact that even he appears unable, at all times, to divest himself of opinions and inferences inconsistent with the true and great principles which he has done so much to establish. An opinion has long prevailed that the particles of the human body are in a state of continual change. Some have even ventured to determine the time (seven years), as the period in which all the old parts are taken away, and replaced by new parts derived from the food. This opinion, *per se*, might escape disproof and correction, were it not one of those fundamental principles in which mistake is always dangerous, as tending to ramify error through a whole superstructure of speculation and practice. We can easily understand why this belief in the change of all the matter in the animal body should be generally entertained; because food has been, and unfortunately still is, generally looked upon for one purpose, namely,—for composing the animal textures: entirely overlooking the end of the greater portion of our food, namely, to produce moving power.

Now, as an adult was observed to eat more than could be accounted for by fæcal, urinary, and cutaneous excretion; and as the fact, that the greater portion of our food is destined, in the fulfilment of its end, to escape by the nostrils, has been comparatively neglected, some use or purpose was to be devised, which this surplus portion of the food could accomplish. This was assumed to be, the making of new particles of the body, which were continually replacing the old particles as these were carried away. But the discovery of the true function of the lungs dispels the necessity for such hypothetical use of food, by shewing us that that portion of the food not employed in making the machine, is expended in working it; and, further, by leading us to examine the proofs on which the opinion is founded, to detect their illogical and fallacious character. In order to understand this clearly, in accordance with the preceding papers, the human body is to be viewed as moved or wrought by one portion of our food, and composed by the other. That the digestive tract of the motor food begins at the mouth and terminates at the nostrils: that, to understand the digestion of motor food, the changes which it undergoes, from its ingestion by the mouth till its egestion by the nostrils, must be constantly kept in view in all their varieties. One variety that the motor food assumes is that of fat, which, under certain conditions of air and hepatic function, is deposited in small spherical bags, giving *embonpoint*, and apparent organic increase. This fat, however, is now well understood to be no part of the body, as such, but merely a deposition of digested food; which, instead of *constituting* the organism, is only deposited in it, to be used as exigencies may require. Changes in the weight of the body—which are continually taking place, must, in the minds of those who do not distinguish fat (food in a state of semi-digestion) from parts of organs, countenance the idea that those organs are undergoing continual change or transformation; because the change in weight is not definitively attributed to the included fat, but to the organism itself. Whereas, the correct view of fat,—viz.: a concentrated extract of food stored up in the body, for the purpose of moving or working the machine, under circumstances where common food cannot be obtained for the stomach,—shews us that the body consist of a variable, transforming portion, and of a fixed, determinate, organic part, which, according to this physiology, is seen neither to change, nor have any necessity for changing. Hence, the argument for the hypothesis that the whole organism is continually altering, derived from transmutations of fat, and of the resulting variations of weight, are of no more force than arguments drawn from changes of weight resulting in an empty or a full stomach; because food in the form of fat, in small cellules in the matter in hand, in no way differs from food in the stomach, and is no more part of the organism,

It would be waste of time to refute all the arguments by which an opinion so absurd has been supported, as every mind that apprehends the true physiology of the lungs, sees at once that their force is only apparent; yet, lest it should appear to the reader, that the due weight of some of them has not been estimated, it may be stated, that if all the particles of the skin were to be removed every seven years, then the names of sailors and others, imprinted in coloured characters, ought to be removed also, a conclusion which is contrary to fact. This, according to the hypothesis, would inevitably follow; unless it were assumed as a saving hypothesis, that nature, in removing the particles, only took hold of those of organic forms, and rejected the particles of colouring matter, which took possession of, and tinctured their successors. But this would also be contrary to a law in physiology; that there is a greater tendency to reduce foreign particles than those which are natural; which physiological law ought to have answered the fallacious argument drawn from animals fed on madder; because the disappearing of colouring matter from the texture of such animals, is no proof of the removal of the textures themselves, since we know that Nature exerts herself to get rid of what is foreign. This argument could have no weight, unless it be assumed, that the colouring matter, and the particles are inseparable, and that the removal of the one would imply the removal of the other. But this is an argument which, for the transmutationists, *would prove too much*, as it would prove, in the imprinted name of the sailors, that if the particles of skin were removed, the particles of colour would be removed also. In this way it may be said, that the adoption of one of these arguments refutes the other. It is very strange that neither Prout, nor Müller, nor Liebig, who assent to this transforming doctrine, feel it incumbent upon them to present us with some proof of its reality, beyond what might be supposed to weigh with any but the veriest tyro. Prout assumes its existence; and designates it a secondary destructive assimilation. Müller advances in proof of it, that an animal fed on food containing no nitrogen, nevertheless excretes nitrogen in the form of urea, and this, he says, is a proof that the nitrogenised texture (muscle for example), must be always decomposing and incessantly renewing. We confess it surprises us, that an authority so good as Müller, should look upon what takes place in an animal in the exigency of starvation, as conclusive with regard to what takes place, when the animal is regularly fed, and the organism in a normal state. As soon as Müller understands the true physiology of the lungs, namely: that of generating the electro-nervous energy, he will be able to see, that an animal deprived of food, first uses (as an oxydizable base—the zinc plate of the galvanic battery), his deposit of concentrated food, that is, his fat; and when this is expended, the organism has no alternative but either to cease

action, or break up the textures of the body, in order to get out of them those elements which can support respiration. Those parts of the broken-up textures of the body which cannot support respiration, escape in the form of urea, &c. But their presence, from the transformed textures in this instance, is evidently due to the animal's deprivation of food. As well might it be argued, that it was the normal employment of a ship-carpenter to cut up sails, with which to caulk breaches; because in an exigency, from want of wood and iron, the proper materials, he may be found to pursue that particular course. Let us now turn to Liebig, and estimate the weight of his philosophy, which he calls, "metamorphosis of the tissues."

"In the preceding it has been assumed, that the elements of the food are converted by the oxygen, absorbed by the lungs, into oxydized products; the carbon into carbonic acid, and the hydrogen into water, and the nitrogen into a compound, containing the same elements as carbonate of ammonia.

"This is only true in appearance; the body no doubt, after a certain time, acquires its original weight. The amount of carbon, and of the other elements, is not found to be increased;—exactly as much carbon, hydrogen, and nitrogen, is given out, as was supplied in the food; but nothing is more certain than that the carbon, hydrogen, and nitrogen given out, although equal in amount to what is supplied in that form, do not directly proceed from the food.

"*It would be utterly irrational to suppose that the necessity of taking food, or the satisfying the appetite, had no other object than the production of urea, uric acid, carbonic acid, and other excrementitious matters —of substances which the system expels, and consequently applies to no useful purpose in the economy.*

"In the adult animal, the food serves to restore the *waste of matter;* certain parts of its organs have lost the state of vitality, have been expelled from the substance of the organs, and have been metamorphosed into new combinations, which are amorphous and unorganised.

"The food of the carnivora is at once converted into blood; out of the newly-formed blood, those parts of organs which have undergone metamorphoses, are reproduced. The carbon and nitrogen of the food thus become constituent parts of organs.

"Exactly as much carbon and nitrogen is supplied to the organs by the blood—that is, ultimately, by the food, as they have lost by the transformations attending the exercise of their functions."

Now, what is the argument here advanced, to shew this transformation, or metamorphosing of the tissues (the secondary-destructive-assimilation of Prout.) It is simply this: that if food is not used to renovate the organs which have been wasted, then there is no other assignable end which it can answer, except "the production of urea, uric acid, carbonic acid, and other excrementitious matters." But since this is absurd, then it must be for the former purpose, namely: that of renovating the transformed tissues. It is really melancholy to find a mind like Liebig's descending so far below itself, under the pressure of commonly received error. Even the advanced step that he himself has taken, ought to have saved him from such a conclusion. His own belief that respiratory food was for the purpose of producing animal heat, should have brought it to his mind in the shape of a *trilemma*, instead of the *dilemma* he has adopted. He then would have reasoned thus:—the end of food, which satisfies the appetite, must be either for the purpose of forming excrementitious matter, which the organism expels, as not being good for any useful purpose; or it is for the purpose of refitting disintegrated organs; or for the purpose of producing animal heat. But since one of its ends is for the production of animal heat, it does not follow that it is for the purpose of re-forming disintegrated tissues. Liebig's adoption of *two* supposable ends is the more remarkable, as at page 53, we find him write thus:—"Hardly a doubt can be entertained that this excess of carbon alone, or of carbon and hydrogen, is expended in the production of animal heat, and serves to protect the organism from the action of the atmospheric oxygen." It is evident from this, that his own opinion that the hydrocarburets contained in the food are for the purpose of producing animal heat, could not have been present in his mind, when he wrote the above paragraph, marked in italics.

This unproved hypothesis of the "disintegration of the tissues," "change of matter," pervades and vitiates the really valuable truths which Liebig's great work has been so instrumental in establishing; I say establishing, for, with every disposition to honour this great man, it would be unfair to others to say that he was the first, or the sole expounder of the great principles which are to be found in his writings. Liebig everywhere reasons upon, but nowhere proves, this disintegration of tissues; and, as instances of this, we find him stating, at page 58: "It is obvious, therefore, that by the favourable entrance of arterial blood into the capillary vessels, the fluids contained in these,—in other words, the soluble compounds formed by the *transformation of organized parts*—must be compelled to move towards the heart;" and, "those new compounds which contain the nitrogen of the *transformed* organs are collected in the urinary bladder, and being utterly incapable of any further application in the system, are expelled from the body" He further states: "thus, we know with certainty that the nitrogenized compounds, produced by the *metamorphoses of organized* tissues, after being separated from the arterial blood, by means of the kidneys, are expelled from the body as utterly incapable of further alteration; while the compounds rich in carbon, derived from the same source, return into the system of carnivorous animals." Again, at page 60, he states: "but previously to these final changes, the dead flesh and blood become living flesh and blood, and it is, strictly speaking, the carbon of the compounds formed in the *metamorphoses of living tissues* that *serves for the production of heat.*" A little further on, he continues: "here the current of oxygen meets with the compounds produced by the *transformation of the tissues*, and combines with their carbon to form carbonic acid, with their hydrogen to form water. Every portion of these substances which escapes this process of oxidation is sent back to the circulation in the form of bile, which, by degrees, completely disappears. In the carnivora, the bile contains the carbon of the *metamorphosed tissues*; this carbon disappears in the animal body, and the bile likewise disappears in the vital process. Its carbon and hydrogen are given out through the skin and lungs, as carbonic acid and water; and hence it is obvious that the elements of the bile serve for respiration and for the production of animal heat." Again, page 66, he continues by observing, "but this carbon was ultimately from the substance of the *metamorphosed* tissues; and this being admitted, the question of the necessity of substances containing much carbon and no nitrogen, in the food of the young of the carnivora, and in that of the graminivora, is resolved in a strikingly simple manner." "In the young of the carnivora, the weight does not remain unchanged; on the contrary, increases from day to day by an appreciable quantity. This fact presupposes, that the assimilative process in the young animal is more energetic, more intense, than the process of *transformation* in the existing tissues. If both processes were equally active, the weight of the body could not increase, and were the waste by transformation greater, the weight of the body would decrease." "The carbon and hydrogen of butter, and the carbon of the sugar of milk, no part of either of which can yield blood fibrine, or albumen, are destined for the support of the respiratory process at an age when a greater resistance is opposed to the *metamorphosis* of existing organisms; or, in other words, to the production of compounds, which in the adult state are produced in quantity amply sufficient for the purposes of respiration." Liebig concludes by remarking that "the preceding considerations leave no doubt as to the purpose for which Nature has added to the food of the young of carnivorous mammalia, substances devoid of nitrogen, which their organism cannot employ for nutrition, strictly so called; that is, for the production of blood; substances which may be entirely dispensed with in their nourishment in the adult state. In the young of carnivorous birds, the want of all motion is an obvious cause of diminished waste in the organized part; hence, milk is not provided for them."

The object of these quotations, is to turn the mind of the reader to the origin of bile in butter, farinaceous food, &c.; and, if possible, to convince him that there is no just reason for fixing its origin in the transformation of tissues, as no *valid* proof is contained in these lengthened quotations, that such transformation takes place; and further, to shew what is the true origin of bile, by pointing out that, notwithstanding Liebig's mind is so deeply imbued with the existence of this transformation, he is himself compelled to admit that butter and sugar of milk are destined for the support of the respiratory process, and that bile is also for the same purpose; and further, since the greater part of the food of man and graminivorous animals is, in so far as respects the matter in hand, identical with butter and the sugar of milk, there is no necessity for seeking circuitously for the origin of bile in disintegrated tissues.

Since the greater part of the food of man is respiratory food, (it ought to be motor food) and since the end of bile is for respiratory purposes, there are ample sources for its production in that species of food; so that to attribute its origin to matters which had constituted parts of the body, is transgressing the great rule in philosophizing: that more causes are not to be assigned, than what are sufficient to produce the effect.

Liebig further admits that alcohol can take no share in the formation of the body; and pathology shews the very intimate manner in which it is connected with the biliary organs. Since a man secretes daily from 17 to 24 oz. of bile, a large dog 36 oz., a horse 37 lbs.; and since the greater part of the food, at least of the man and horse, is such as cannot compose the body, being respiratory food, is it not absurd to suppose that this respiratory food is not of itself sufficient for the production of bile, but that a substance so abundant, and which, confessedly, does produce some bile, does not produce the whole of it? It is allowed that oats, &c., eaten by a horse, are of a nature suited to the production of bile, and that, in point of fact, they do produce some. How then without positive experiment, can we allege anything so anomalous, as that part of the oats eaten by the horse to-day, goes at once to the production of bile; that a second part composes his body, and that that second part is subsequently removed from his body, and then used for the production of bile! What in the name either of common sense or science could make one part of the food go at once to the production of bile, and another be elected by the organs for their renovation? There certainly is no sufficient reason to be found in any of the known sciences. Farther, since the production of bile is in its end connected with the respiratory process, it belongs to a distinct division of the two great functions of the animal machine, namely, making and moving, the latter of which is provided for abundantly in respiratory food, leaving no necessity to make a demand on the materials for nutrition or formation. Besides, it is a general, if not an universal law, that matters having performed their function in the body are excreted from it as mischievous, and therefore are never re-applied. Indeed, the great merit of Liebig's work is the recognition and establishment of the invaluable and fundamental fact, that all vital activity arises from the mutual action of air on the elements of the food; and since bile is admitted to be destined for oxidisement, why seek to derive bile from organised parts, since the elements of these parts never could have been organised, had thay not refused oxidisement in the blood, where they were as fully exposed to the action of oxygen as they could be, after having made parts of organs, and their subsequent reabsorption? There is something so circuitous, and so much out of harmony with the simplicity of arrangement in the Creator's works, as to give the impression, even through common sense, that this origin of bile is incorrect. To suppose that a mouthful of food, capable of making bile, is ingested; that one part makes that bile directly, that another part becomes a constitutent of an organ, and then subsequently goes to make bile, is a view to which the argument of "no sufficient reason," is at

once opposed. This confusion could not but have arisen, when Liebig so far mistakes the use of *motor* food as to call it a "foreign substance," and maintains that it has "no other function" in the body of the young animal "than to protect the newly formed organs from the action of the oxygen," a function not only fanciful, but absurd, for it pre-supposes that the animal machine must not only generate the matter to make, and to move itself when made, but must also supply a product to enable it to carry on a continual conflict with that very air which is destined by an all-wise Providence to assist in supporting, instead of trying, as Liebig, and some of his learned commentators, would have us believe, to annihilate our very existence by destroying our internal organism.

Our author's misconceptions on the origin of bile, as being derived from transformed tissues, and his explanations founded on this unproved, nay, untenable supposition, namely, that the human frame is, in the usual acceptation of the phrase, continually undergoing removal and replacement, arises from the fact that the two great functions of nutrition and respiration do not, even now, stand clearly distinct in his mind; that is to say, he does not clearly perceive that the human body is an electro-motive machine, and that breathing is the process of generating the electro-momentum. That part of the food (the most oxidizable portion) replaces in the human machine, the zinc plate in the galvanic battery, and the amalgam of the electrifying machine, and has nothing to do with nutrition. *That another portion of the food serves the purpose of composing the machine, and is* NEVER *employed for its propulsion;* and that heat, though existing necessarily as a condition of the generation and application of strength, is not a leading or primary function.

Though this, in its various parts and bearings, is not always clear in Professor Liebig's mind, yet, his labours have been more conducive to its establishment than those, perhaps, of any other man living: and it is only because that medicine and physiology have often had their errors perpetuated by those who have done most in furthering the advancement of their truths, and not any spirit of cavil, or fruitless attempts at rivalry, that prompts the undertaking of fixing attention on those opinions and conclusions, which are sometimes interwoven with his beautiful and important experiments. The young student may, perhaps, see little advantage in the discussion of principles so abstract; but he must recollect, that with the rational practitioner fundamental principles lead to direct practice. He must recollect, that as in an arithmetical calculation a small fractional error, in the beginning, must produce a grave error in the result, so apparently indifferent views in the very foundations of physiology and medicine will, in their issue, in the practical treatment of a case, lead to modes of practice opposite and conflicting, and according as they commenced in truth or error, they must end in the benefit or injury of the patient.

PARISIAN INTELLIGENCE.

(FROM OUR OWN CORRESPONDENT.)

Paris, June 13, 1844.

On Diseases of the Eye. By Professor Velpeau. *On Cataracta.*—As I mentioned in my last (*vide Medical Times*, p. 196), I intend devoting a few lectures to the description of cataract, because the season of the year is favourable for operating, and also because there is a great number of persons with this disorder now in my wards. Thus, in the woman's ward, at No. 2, is a patient, aged 71, of a deteriorated constitution, affected with a right capsulo-lenticular cataract, which began in the capsule, and was seated in that membrane, rather than in the lens itself. At No. 21, a cataract, complicated with amaurosis. At No. 31, an imperfect cataract of the right eye; a capsulo-lenticular of the left, the latter has been operated upon. In the men's ward—at No. 5, a patient aged 50, affected with a capsulo-lenticular cataract, which began in the capsule. At No. 25, a capsular cataract of the right eye, and a lenticular of the left. *Definition*—It is not an easy matter to define precisely what is meant by the term cataract. Formerly, the following description was given:—A cataract consists in an opacity of the eye, seated in the crystalline lens, its capsule, or the liquor Morgagni; but evidently there are a great many species which cannot be included in this definition. One much less limited—and though not perfect, still as it includes all the various species, must be considered better—is that in which cataract is defined as an opacity, situated behind the camera anterior. *Divisions*—Cataracts may be divided into—1° *Genuine:*—That which comes on spontaneously, without any appreciable cause,—without any external accident, and is seated in the crystalline lens, or its capsule. They are sub-divided into lenticular, capsular, capsulo-lenticular, or that of Morgagni. 2° *Spurious:*—Under this head is included every species of opacity, which is not seated in the crystalline lens, or its envelope, but which is before or behind it. 3° *Secondary, Genuine or Spurious.—Causes*—The spurious is produced by inflammations of the different parts of the eye, viz:—of the iris, of the camera anterior, of the capsule, of the camera posterior; by the accumulation of pus in the organ, by which an opaque body is formed; in other cases, it is the result of a blow, followed by an effusion of blood, where, after a certain time, the red globules being absorbed, it may form a white spot, sufficiently opaque to prove an obstacle to sight. In the vitreous humour, the same causes produce the same effects; thus, the opacity may be the result of phlegmasia of the membrana hyaloidea, of a blow by which the vessels of the membrana choroides are ruptured, and an hæmophthalmia is produced. The secondary or consecutive species is produced by a wound penetrating as far as the pupil or capsule of the crystalline lens, as in the operation by extraction; in these last cases, sometimes the capsule becomes opaque; at others, the disease is produced by bits of the crystalline, which were diffluent around the nucleus: finally, facts prove that the inflammation of the lips of the divided membrane may produce the opacity. It may here be added, that the German oculists have divided the genuine and spurious cataracts into 50 or 60 different species; but really, in a practical point of view, they constitute varieties of but very little moment, being founded on the aspect of the disease, and make no difference in the diagnosis, prognosis or treatment. To resume, therefore: cataracts may be divided into *genuine*, or *spurious*; *accidental*, or *spontaneous*; *primitive*, or *consecutive*; *simple*, *compound*, or *complicated*. The *simple* is that which affects the crystalline lens, or its membrane; so also the genuine;—the *compound* comprises several varieties, but I will confine it to those which affect the crystalline and its capsule at the same time. The *complicated* is that in which another disease of the eye exists at the same time: such as amaurosis, an affection of the iris, glaucoma, staphyloma, the various species of ophthalmia, &c.—*Symptoms.* I will briefly enumerate the different symptoms common to all species of cataract. Thus, it may be distinguished by an opaque spot, otherwise than on the cornea, and the camera anterior, sometimes of an ashy brown, of a milky white, or of a pearly white colour; at others, of a yellowish grey, or a reddish colour; finally, of all the intermediate tints. But this is easily established, and is known to every practitioner; what is far more difficult, is to distinguish the real seat of the disease. Lenticular cataracts are known by the opacity being situated behind the pupil, and before the vitreous humour. It may be here remarked, that it is sometimes very difficult to recognise the spot affected with opacity, and it is this which, in many cases, has caused albugo, leucoma, and spots on the cornea, to be taken for cataract; with a little attention, however, this error is easily avoided. Again, opacities of the vitreous humour may be taken for lenticular cataract: to avoid making this mistake, you must examine the eye on the side, and you will then perceive between the pupil and the back of the globe of the eye, a transparent space, which is the crystalline in its normal state. In general, genuine cataracts are easily distinguished from spurious ones. These last, when situated anteriorly, are complicated with various lesions of the pupil, caused by the presence of particles of the crystalline lens, or of the pseudo-membrane of the net-work which constitutes the cataract. When posterior, or deep-seated, the opacity is in the back part of the eye: is unequal, and consecutive on some other affection of the organ; it may, therefore, easily be recognized. But it is not so easy to diagnosticate whether both kinds do not exist at the same time. I may here state, that the spurious is far less frequent than the genuine, the former constituting the exception; and that very rarely a patient requests to be operated on, when affected with the spurious form.

As I have already stated, genuine cataracts may be divided into—1° Those affecting the crystalline lens alone, or *lenticular*—2° The capsule alone, or *capsular*—3° The crystalline and its capsule at the same time, or *capsulo-lenticular*. These different species may be distinguished from each other by the following signs:—1° *Lenticular cataract:* tint homogeneous, generally of a reddish brown, or ash-grey colour, sometimes of a greyish yellow, but darker and darker towards the centre; the opacity seems to be behind the pupil, without extending beyond it anteriorly; sight diminishes in a gradual manner; at a certain stage of the disease, it is abolished in a strong and vivid light, whereas objects are still perceptible in a dull light. This is easily explained, however extraordinary it may seem; because from lenticular cataract commencing in the centre of the crystalline, this part is completely opaque, whilst its circumference is sufficiently transparent to permit the passage of the rays of light; thus, the patient is blind in a powerful light, because the pupil, being contracted, intercepts the passage of the luminous rays on the transparent part of the crystalline; on the contrary, in a dull light, the pupil being no longer excited, dilates and permits the rays to reach the lens, and vision, though imperfect, takes place. The same fact explains why the patient sees best on one side, rather than directly before him. Other symptoms might be enumerated, but being in my opinion accessory, they need not be mentioned.—2° *Capsular cataract.* Colour between the grey and the dull white, with intermediate tints; it is in this variety that so many different species were admitted; spotted, pearly, reticular, and numerous other cataracts; it is not so homogeneous as the preceding; is not deeper in the centre than at the circumference; on the contrary, the reverse sometimes occurs; in others, the opacity is deeper in a part of the periphery than anywhere else; the iris appears convex anteriorly, and often is really so; the distance between the opacity and the iris is very slightly perceptible; it presents itself under a striped, radiated, or spotted form; an opaque spot appearing thicker than the surrounding parts; none of the phenomena, relative to sight, as mentioned in the preceding variety, exist; on the contrary, the patients become blind much sooner; this is attributable to the pupil being prevented from dilating itself, on account of the pressure exercised by the cataract on the iris.—3° *Capsulo-lenticular cataract* is, in general, white; more voluminous than the preceding, and offers some characteristic signs. Of late, the question as to whether it originated in the lens, or its capsule, has been the subject of much debate; but I think it has been viewed erroneously, and, in a future lecture, I will state the grounds on which I found my opinion.

Before I describe the complications and treatment of this affection, I will briefly enumerate the phenomena presented by three of the four patients now in my wards, and on whom this operation was performed. In the woman's ward, No. 2, both eyes were operated on; the right soon got well, without presenting any consecutive accidents, but the left was affected by an intense conjunctivitis. She experienced, likewise, insomnia, agitated dreams, and was somewhat delirious; this disappeared all at once, and was followed the next day by convulsions; these nervous symptoms are not uncommon in persons who inhabit crowded cities, but are seldom seen in those who live, as this woman, in the country. Finally, the inflammatory symptoms have yielded to the treatment employed, and the patient, in all probability, will soon be quite well. Another woman, at No.

31, is affected with intense conjunctivitis; besides which, the cataract being soft, it became necessary to crush or lacerate it, ere it could be made to pass into the camera anterior; consequently, some whitish particles have remained, and if they become concrete from inflammation, in all probability, a second operation will become needed. In the men's ward, the patient operated on seemed to be affected with a capsulo-lenticular cataract, but the opacity was rather applied to the surface of the tissue, than seated in the tissue itself. The operation was performed by extraction, which is unfortunate; because the patient, though robust and courageous in appearance, was as unruly as a child; and as you, perhaps, are aware, there is no operation in which greater docility of the patient is requisite, than in that of the removal of cataract by extraction. The least movement, the least shock, may be the cause of the loss of the eye, and it is on this account that it is never done on children. But not only was it impossible to keep him steady during the operation, but likewise; ever since, by constantly moving about in bed, he seems to do every thing he can to render the result unsuccessful. As yet there is merely a slight discharge from the edges of the wound; but to a certainty, if he continues to act as he has hitherto done, he will inevitably lose his eye.

On the Medical Treatment of Cancer.—Dr. Tanchou, who, as physician to the *Dispensaire Sainte Genevieve*, under the patronage of her Majesty the Queen, has had repeated opportunities of observing this disease, has just published a work, in which upwards of three hundred cases are united, to prove that the cure of this affection may be obtained without having recourse to the knife or the cautery. *Antiphlogistics:* 112 cases cured or ameliorated; 1° *Venesection* must be employed in the first stage, more or less copiously and frequently, according to the strength of the patient; the opening made in the vein must be very small; it is especially useful, when the *engorgement* of the breast is preceded by a disease of the uterus.—2° *Leeches* ought never to be applied unless when the swelling is recent and inflamed.—3° *Emollients*, in general, if not injurious, are, at least, of no great utility.—4° *Cold applications* must be in a direct ratio with the intensity of the inflammation, but ought never to be carried so far as to prevent re-action taking place.—5° *Diet* must be modified according to the constitution, the idiosyncrasy, &c., of the patient.—*Pressure* must only be employed in *engorgements*, not in confirmed *scirrhus*, as in these cases it causes inflammation and ulceration: moreover, it is impossible to obtain complete absorption, because, when very small, pressure can no longer be exercised on the tumor, as it slips between the ribs. The apparatus recommended differs according to the practitioner; the author makes use of a gum elastic ball, filled with air and kept in place by appropriate bands. *Conium maculatum* evidently possesses a certain efficacy in this disease; it ought to be given at first in small doses, gr. j. or grs. ij. of the extract, and grs. ij. or grs. iv. of the powder, increased gradually until the patient takes ℥iiss. of the extract, and even more. To prevent constipation, magnesia and other gentle purgatives may be prescribed. Externally, the best mode of employing it is in the form of an ointment, or plaister—the power being too irritating. When *sphacelus* takes place:—*muriate of barytes*, grs. ij. morning and evening; *daucus carota*, internally and externally; *sedum acre* (a remark made by the author is, that this substance dissipates the cephalalgia caused by the administration of arsenic); *belladonna, hyosciamus, and morella; ammonia; preparations of steel.—Pissier's remedy*, composed of:—℞ Ol. lini usitatissim. lb. ij., oxyd. plumb. rubr., plumb. subcarbonat., ceræ flavæ., aa. ℥viij., terebinthin. ℥iij., opii grm. i., M. ft. unguentum. *Syrup of vitalbe:*—℞ Succi folior. clematid. vitalb., vini hispanic, aa. lb. j., sacchar. alb. q. s.; dose from one to three tablespoonsful daily, an hour or two before dinner. Preparations of *iodine, digitalis, arsenic, mercury, copper, gold, cinchona, &c.* After quoting cases in support of the efficacy of these remedies, the author recommends employing powders, which he calls *pulvero-topiques*, applied to the part by means of an apparatus composed of a bit of oil cloth, a cotton pad on which the powder is spread, and finally over the latter a bit of muslin, to prevent its falling off. The powders employed are: iodine, lime, tartar emetic, calomel, sub-carbonate of iron, belladonna, camphor, conium maculatum, digitalis, pure, or when the part is inflamed, mixed with three-fourths or five-sixths of an inert substance, such as starch, flour, &c. Compression may be useful as an adjuvant. Finally, the work is terminated by a statistical table of the frequency and causes of cancer, and a *resumé* of the discussion which took place at the Academy of Medicine, on fibrous tumours of the breast, and which was inserted at length in the *Medical Times*.

Parisian Medical Society.—The annual dinner of this Society took place at Lemardelay's Grand Saloon, on the 6th inst. The chair was taken at 7 p.m., by the president, Dr. Ricord; and the vice chair was filled by Dr. M'Carthy. Amongst the gentlemen present were, Baron P. Dubois, Drs. Amussat, Brewster, Olliffe, Packman, &c. The cloth removed, the following toasts were given from the chair:—"The King of the French,"—"The Queen of England,"—"The President of the United States,"—"The French Faculty of Medicine, and Professor Baron P. Dubois,"—"Prosperity to the Parisian Medical Society."—This last was responded to by the vice-president, Dr. M'Carthy, who proposed Dr. Ricord's health. The learned president, in returning thanks, dilated on the advantages afforded by the *Parisian Medical Society*, to English physicians who visit Paris, and to those who permanently reside in the French metropolis. He said that this Institution was peculiarly deserving of the support, not only of medical men, but likewise of the scientific public at large; that it was the only Medical Society on the Continent, in which the debates were carried on in the English language. He adverted to the considerable number of British, American, and French periodicals received by the Society, and concluded an eloquent address, amidst loud applause, by proposing the healths of the former presidents,—Drs. Bennett, Sir R. Chermside, Mott, M'Loughlin, Baron Dubois, and Olliffe. Dr. Olliffe replied; after which, Dr. M'Carthy's health was drunk, followed by several other toasts, and the company separated at 11 p.m.

On the External Use of Belladonna as a Discutient, in Ganglionitis, Adenitis, and Epididymitis: by M. Philippe, D.M.P., *Chirurgien aide-major de première classe.*—An ointment containing belladonna may be employed advantageously in acute orchitis, when the inflammation has yielded to antiphlogistics, or when the phlegmasia is not very intense. In the latter case, it may be employed in the first stage, whereas, in the former, only after four, six, or eight days;—in induration of the epididymis: here, its action is very prompt, but often it appears less efficacious towards the close of the treatment, and a small nucleus remains, which disappears spontaneously in the course of time. In twenty cases of orchitis, the average duration of treatment was fifteen days; some took place in five, six, or nine days, by belladonna employed alone, or associated with antiphlogistics; one-fifth of these were produced by a traumatic cause. It must be employed as follows: ℞. extract. belladonnæ ʒij., adipis ʒvj. M.; half-a-drachm to be rubbed in morning and evening, each friction lasting about five minutes. If the inflammation is intense, the ointment may be added at first to an emollient poultice, and, if needful, the quantity of extract may be raised to ʒiv., ʒvi., and even more; but, in general, the first is sufficient. Should it produce inflammatory symptoms, emollient, and even antiphlogistic remedies, must be had recourse to; but, in the hands of the author, it produced no local symptoms, nor any signs of narcotism, or dilatation of the pupil. It has likewise been employed in bubos, adenitis, ganglionitis, certain œdematous painful *engorgements*, parotitis, phlegmon of the axilla, &c. The author, therefore, concludes:—that it is preferable to *mercury*, because it is less irritating, and because it does not produce salivation; to the *ioduret of potassium*, because it is less irritating; to *sticking plaster*, because it is not accompanied with pain when placed on the swelling;—that, in epididymitis, it soothes the pain, is easily applied, is not so heavy as poultices, may be, contrary to other discutients, employed in the first stage;—finally, by its action on the nervous and sanguineous systems, it prevents the tendency to disorganization, and, consequently, the development of sarcocele and hydrocele—the ordinary terminations of chronic epididymitis. That the result is analogous in *bubos* and acute *engorgements* in general; but this question needs further proofs ere it can be admitted as conclusive.

On Acute Arthrodynia.—M. Legrand published two cases to prove how efficacious tartar emetic is in acute arthrodynia. The first is that of a lady, ætat 40, who, after experiencing a slight bronchitis, was taken with pains in the wrists, the knees, and the ancles; lb. 1 of blood was drawn from the arm without effect; M. L., therefore, prescribed ℞. antimon. tartarizat. grs.vi.,increased gradually, to grs. xij. in four draughts. Eight days after, the patient was convalescent.—The second, a man, ætat 58, was taken with pain in the foot, which soon extended itself to the other articulations. The same draught was administered, and, five days after, the patient was convalescent.

On Strangulated Hernia.—A man, ætat 28, was affected with strangulated hernia; during three days, various remedies were employed to facilitate reduction, but without effect, and the characteristic vomiting had already appeared. In this dilemma, Dr. Schulze, of Spandau, prescribed: pulv. ipecacuanhæ grs. v., to be taken every half-hour; after the administration of a few doses, the hernia was easily reduced.

On Podagra.—Dr. Henrotay, of Antwerp, recommends the following method of treatment in this disease: ℞. Pulv. gummi Arab. ʒij., aquæ puræ lb. ss., tinct. colchici ʒij., syrup. rhei ℥ij. ft. mist.: a tablespoonful to be taken every second hour, until the whole is administered; after which the patient may take a bowl of *soupe aux herbes*. The third and subsequent days, one of these pills: ℞. Sulphur. aurat. antimon. ʒj., opii purif. grs. v., pulv. glycyrrhyz. glab. ʒj., mucilag. gumm. arab. q.s. M. ft. pilulæ No. xxx. Whilst the patient takes these pills, he must abstain from wine, liqueurs, in short, from all fermented liquors, and take aliments of easy digestion, and in small quantities at a time.

Academy of Sciences; Sitting of the 10th June.—Baron Ch. Dupin in the chair.—M. Pelouze, M.A.S. presented two memoirs:—*On several New Salts, formed by the Union of Sulphurous and Nitrous (Azotous) Acids with Alcalis*, by M. E. Fremy. When a current of sulphurous or azotous acid is made to pass through a solution of potass, a salt is deposited in long needle-like crystals; almost insoluble in cold water; contains an acid composed of oxygen, sulphur, and nitrogen; is decomposed by heat into sulphate of potass, and ammonia (a characteristic sign). The salts of soda and ammonia may be prepared in the same way; they are soluble in cold water, and crystallize easily; the cold aqueous solution is neutral, precipitated neither by the salts of baryta, nor of lead; when heated, it becomes acid, and offers all the reactions of sulphurous acid. From these characters, they may be placed in the same category as the nitro-sulphites of M. Pelouze.

On the Combinations of Two New Alcaline Bases containing Platina, by M. Jules Reiset.—In my preceding communication, I proved that the protochloruret of platina and ammonia gives rise to a crystalline compound, of which the formula is—$Az^2\ H^6\ Pt.\ Cl.+H\ O.$, and which offers great resemblance with a series of compounds of platina, discovered by M. Gros. With a salt of silver, the chloruret $Az^2\ H^6\ Pt.\ Cl.$ produces a precipitate of a chloruret of silver; and the filtered liquid, when evaporated, furnished a crystallized salt, containing more chlorine; formula—$Az^2\ H^6\ Pt\ Cl+Ag\ O\ A=Cl\ Ag+Az^2\ H^6\ Pt\ O\ A.$ The sulphate, $Az^2\ H^6\ Pt\ O,\ S\ O^3$, and the nitrate, $Az^2\ H^6\ Pt\ O\ A^2\ O^3$, are both neutral, crystallize easily, and are decomposed by baryta water. The sulphate gives rise to a precipitate of sulphate of barytes, and the solution remains neutral; by evaporating the latter, *in vacuo*, a great quantity of needle-like crys-

tals are obtained, of a dull white colour, when dry; in this state, it contains an equivalent of water, of which it cannot be deprived, but by uniting it with an acid; is very alcaline and caustic, and may, in this respect, be compared to soda and potass; deliquescent; combines readily with the carbonic acid of the atmosphere, and forms a carbonate, $Az^2 H^6 Pt O, C O, H O$, and a bi-carbonate, $Az^2 H^6 Pt O, 2 (C O^2) H O$; this latter, not so soluble as the former. The action of heat on the isolated base is remarkable; at 262° F. it swells up considerably, and losing an equivalent of oxide of ammonium ($Az H^3 H O$), becomes $Az H^3 Pt O$, a greyish mass insoluble in water and ammonia, and produces, with acids, insoluble, detonating, compounds; heated to about 424° F., if exposed to the air, it becomes incandescent, and burns with a crepitating noise, similar to that of nitre, when thrown on live coals; if *in vacuo*, it does not become incandescent, but is decomposed into water, ammonia, and platina, pure nitrogen being disengaged. The ioduret and bromuret are obtained by the double decomposition of the sulphate, and the iodurct or bromuret of barytes. The ioduret, $Az^2 H^6 Pt I$, crystallizes in cubes; its solution, at the boiling point, disengages an equivalent of ammonia, $Az H^3$ and a yellow powder is deposited, $Az H^3 Pt I$. The bromuret, $Az^2 H^6 Pt Br$, crystallizes in cubes, and undergoes the same transformations as the ioduret. With cyanhydric acid, a cyanhydrate of ammonia, and a white crystallized precipitate, $Az H^3 Pt Cy$, are constantly obtained. The sulphate and nitrate of the second series are obtained by boiling a salt of silver with the ioduret; the re-action is, $Az H^3 Pt I + Ag O A = I Ag + Az H^3 Pt O A$; they crystallize with greater difficulty; the nitrate, $Az H^3 Pt O, Az O^3$, contains no water; the sulphate, $Az H^3 Pt O, S O^3 H O$, contains an equivalent of which it cannot be deprived. A few drops of chlorhydric acid, or a chloruret poured into a solution of a salt of this series, produce a crystallized precipitate, of a bright yellow colour, isomeric with the *sal de Magnus* ($Az H^3 Pt Cl$), and which, like it, when dissolved in ammonia, furnishes crystals, $Az^2 H^6 Pt Cl$. The formulæ, according to the author, are—

1st Series.

Isolated base.....	$Az^2 H^6 Pt O, H O$
Sulphate	$Az^2 H^6 Pt O, S O^3$
Nitrate	$Az^2 H^6 Pt O, Az O^3$
Carbonate	$Az^2 H^6 Pt O, C O^2 H O$
Bi-carbonate	$Az^2 H^6 Pt O, 2(C O^2) H O$
Chloruret	$Az^2 H^6 Pt Cl + H O$
Ioduret	$Az^2 H^6 Pt I$
Red double salt....	$Az^2 H^6 Pt Cl + Pt Cl^2$
Green	$2(Az^2 H^6 Pt Cl) + Pt Cl^2$

2nd Series.

Base obtained by heating $Az^2 H^6 Pt O, H O$....	$Az H^3 Pt O$
Nitrate	$Az H^3 Pt O, Az O^3$
Sulphate	$Az H^3 Pt O, S O^3 H O$
Ioduret	$Az H^3 Pt I$
Cyanuret	$Az H^3 Pt Cy$
Chloruret, green salt of Magnus, and its isomeric compound	$Az H^3 Pt Cl$

On a Lusus Naturæ.—M. Purquin, of Issondun, addressed the following description of a monstruosity in his possession. The fœtus, of the female sex, was five inches long; the mother, in general, enjoyed good health; had experienced nothing extraordinary while pregnant, and was delivered, at the usual time, without accident; the placenta was carcinomatous, and consequently the fœtus was but slightly developed; from the upper edge of the parietal region, two cutaneous folds descended as low as the loins, could be distended as a balloon with air, and gave to the fœtus the appearance of a bat; the ears and arms were placed in front of these folds. The author of the letter proposes calling it *lumbo-cephaloptèræa*.

On the Climate of France.—M. de Gasparin read a report on a memoir of Dr. Fuster. Conclusions: to return thanks to the author, and engage him to continue the task he has imposed on himself, viz., that of accumulating the meteorological facts contained in the authors who have written on the climate of France.

On the Nervous Fluid, by Messrs. Thilorier and Lafontaine.—From a series of experiments, these authors conclude: that there exists an imponderous fluid, which may be placed between the electric and the magnetic. Like the latter, a piece of glass does not prevent its transmission; and like the galvanic, it may be felt at a distance through the medium of copper wire.

Academy of Medicine.—Sitting of the 11th June.—M. Ferrus in the Chair.—Dr, C. Broussais informed the Academy, that the body of his father would be taken from the cemetery of *Pere La Chaise*, where it was deposited temporarily, to the Hospital of Val de Grace, on the 13th inst.—The following members were named to represent the Academy at the ceremony; Messrs. Ferrus, Nacquart, Devilliers, Roche, Bouillaud, and Gaultier de Claubry.—M. Villermé requests that the Bulletin should be sent in return for that received from the Academy of Medicine, Brussels.—M. Merat, in reply, stated that this is difficult on account of the small number of *bulletins* at the disposal of the Academy; however, if possible, it should be done.

Incidents relative to Dr. Malgaigne's memoir on the dangers attendant on myotomy in deviations of the Spine.—In my last, I mentioned that at the demand of Professor Roux, two new members were to be added to the commission, composed of Drs. Roux, Velpeau, Baudelocque, (majority), Amussat, and J. Cloquet (minority). But it was not the fate of this proposition to receive so prompt, and especially so peaceable a solution, as will be seen by the following animated and somewhat tumultuous discussion, where the question more than once from scientific became personal.—Professor Roux: Before proceeding any further, I wish to know if M. Guerin persists in the opinion announced in the former sitting; and if, instead of aiding the commission, he intends throwing obstacles in its way, by preventing his patients from presenting themselves before the commission; if so, it is almost impossible for us to come to any conclusion as to the utility of the method, and the exactitude of the facts announced. This refusal appears to me the more extraordinary, as M. Guerin himself requested, some time ago, the nomination of a commission to examine his patients. Finally, as to the attack made against me in the last number of the *Gazette Medicale*, I consider myself honoured by it.—M. Barthelemy remarked that these personalities were foreign to the subject.—Dr. Louis: Doubtless it is highly desirable that all doubts on this question should be cleared up, but is this possible by the mode adopted? I think not. The Academy has committed two faults; 1st. in naming a commission to examine Dr. Guerin's patients without his consent, without knowing in what category he placed them, and without being able to ascertain their previous state. What should we say, if an examination was asked for and accorded, on our patients? 2nd. The nomination of a decided opponent and enemy to Dr. Guerin, as member of the commission, was unnecessary; since a commission named by the *Conseil des Hopitaux* is now occupied with the question, and will publish the result of their researches. To resume, therefore: I say that the commission will do nothing of importance, and that the Academy has no right to scrutinize the practice of a physician, and still less of one of its members.—Dr. Guerin: I am astonished at the question made by Professor Roux, after what I said in the last sitting, viz.: that I remained neutral, and did nothing either for or against the commission, and I really do not think that more could be expected. It is true that, ten months ago, I solicited the nomination of a commission, because I supposed that the question would remain, as it ought, purely scientific; but, since then, certain debates have taken place; a practitioner has read a memoir controverting the result of my practice, and a commission has been named; the question, thus, instead of being scientific, has become personal; and in consequence, I refused all co-operation in the subject, considering it contrary to my position as physician, *savant*, and Academician, to act otherwise after such an attack. As to the reasons why the patients did not present themselves, all I can say is, that some are not in Paris, some have not received letters, and some refuse so doing; and I here declare, anew, that I will do nothing to facilitate or retard the researches of the commission.—Professor Gerdy: certainly it is neither proper nor right to scrutinize the practice of any physician; and if this were the duty of the commission, I would not have given my assent; but, if a surgeon were to publish, not only in the medical, but likewise political papers, that he cured where his colleagues failed; and still more so, if his position be such as to give weight to his opinion, I say an examination ought to be made, in order to ascertain if the facts announced are exact or not. And as to the subject now debated, I request M. G. to make known his cures, for the benefit of mankind and of science; in so doing, if he convinces me, I here declare that I will publish them; but if he refuses, I must conclude that he considers himself incapable.—Professor Royer-Collard considered it unworthy of an assembly, such as the Academy of Medicine, to occupy its time in discussing a subject, which, to all intents and purposes, is more a personal than a scientific one; consequently he proposed annulling all that has been done.—Dr. Pariset: In spite of all the precautions taken to appear to act with impartiality, the public will consider the question as personal, setting aside the individuals engaged. I consider that the Academy ought to annul the whole, and go no further.—M. Barthelemy thinks that the commission ought to continue its researches.—Dr. Lond: Dr. Guerin has read nothing; consequently no report can be made concerning him. Now, as to the memoir of Dr. Malgaigne. In this memoir, Dr. G. is attacked, and the Academy has no right to constitute itself the judge of one of its members. I therefore second Dr. Pariset's proposition.—Professor Gerdy states, that a commission having been named, a minority has never caused the Academy to annul their decision; such a result would be a proof of weakness. (The close of the discussion was here asked for by several members, but the Academy decided that it should continue.)—Professor Velpeau: Several assertions have been made by the different orators, who have been heard. It is said that we have no right to scrutinize the practice of a colleague; but this is not the subject; on the contrary, we are dealing with a scientific question, viz.: whether myotomy is as useful as has been stated, and whether deviations of the spine can be cured by its means. That I am hostile to Dr. Guerin, I defy any one to show me a line in any of my works, or to point out an act of mine, which may be so construed, unless my combating his opinions be considered as such. That the commission named by the *Conseil des Hopitaux* is sufficient to elucidate the question; but it is named, not to examine such or such a question, but tenotomy and myotomy in general; and, if report says true, to decide whether the mission confided to Dr. G. shall be continued. That it is beneath the dignity of a physician and Academician to go to patients with the risk of having the door shut in our faces; I here declare that such is not my opinion, and the fear of such an event will not prevent my going. To conclude: I consider the subject worthy of the attention of the Academy, and that the commission will be of use.—Dr. Castel thinks the whole ought to be annulled; the more so, as if really the method proposed be as dangerous as stated, it will soon meet with the fate it deserves.—Professor Orfila:—The commission named by the *Conseil des Hopitaux* was not instituted with the intent of examining whether the mission confided to Dr. Guerin should be continued, but only to examine the patients produced.—Dr. Cornac:—It is impossible to annul the commission; should, however, the Academy refuse proceeding any further, name two new members of the opinion of the minority, which will thus become a majority, and decide that nothing more ought to be done.—Dr. Desportes is of the opinion expressed by Professor Orfila; but the nomination of the commission took place in such a manner that its examination is considered beforehand null and void. The Academy has begun to investigate the question and ought to persist.—Professor Blandin. It was not my intention to speak in this discussion, but an assertion, made by the preceding orator, obliges me. The commission named, of which I have the honour of forming part, is composed of honourable and eminent practitioners, who

are enabled to do, what the members of the commission of the Academy cannot, viz.: see the patients before, during, and after the treatment, and who are thus able to form a correct judgment of the efficacy of the method. As far as I am concerned, I here publicly declare that I will not cease the investigation, until I have a decided opinion on the subject; and this done, I will publish it, let it be what it may.—M. Barthelemy: When the memoir was read, instead of naming a commission to examine it, the author ought simply to have been thanked; the more so as it raised doubts on the scientific probity of a colleague. This, however, was not done; a commission was named, who requested the author to bring forward his proofs, which he was unable to do; letters were then written, which produced no better result. The proposition was then made to call on the patients, but two members refused so doing; and, indeed, were I part of the commission, I would have voted with the minority. In conclusion: I think the commission should not be modified, and continue its examination.—Professor Adelon: It is high time to close this discussion. Three propositions have been made; 1° to name two new members; 2° to annul the whole; 3° to request the commission to continue as if nothing had happened.—After some further remarks from Messrs. Roux, Dubois d'Amiens, Barthelemy, and Gerdy, the three propositions were put to the vote: for the first, twenty ayes, twenty-five noes; for the second, twenty-three ayes, twenty-five noes; the third, consequently, was adopted.—The meeting then separated, still greatly excited.

GARLAND DE BEAUMONT, D.M.P, B.L.. & S., &c
Honorary Physician to the Spanish Embassy.

NOTICE TO CORRESPONDENTS.

The communication of Dr. Waters, on the character and history of Duchatelet, will appear in our next number.

Dr. Carter, to illustrate the wisdom of treating inflammation without bleeding, gives the following brief cases occurring in his practice:—

"C. Gray, æt. 30 years; bricklayers' labourer; pleuritis; pulse 120; fever; flushed countenance; acute pain in the side; incapable of speaking from the pain which it occasioned him; saw him first in the morning of the

23rd May.—Ordered Pulv. Ipecac. ʒss. to be taken directly; mustard poultice to the side, and the following

Mixture.—R. Acid. Pruss. (Sch.) mxii.
Quiuinæ gr. ix. Tinct. Opii ʒij.
Mist.—Camph. ad ℥vi. M. Cap. Cochl. j. Mag. teria gr. j. hora ex aquæ.

24. Much better; less pain; pulse 95; has had a good night's rest; can lie on his right side; continue medicine.

25. Found him up! in little or no pain; pulse 80; has had a good night's rest.

26. Continues well and free from pain.

27. Continues well; discontinue medicine.

28. Well!—out.

The other cure was one of enteritis, in a female, ætat 29, and I never saw a more severe case. Ordered an emetic, to be followed up with quinine and prussic acid, and in eight days, she was well."

A Surgeon *may give medicines in his own proper cases.*

Sigmas' *statement is wholly unauthenticated, and therefore cannot be used.*

M. R. C. L.—*Any bookseller will take the order, and procure the numbers monthly as published. The next Pharmaceutical number will be ready June* 30, *and so on monthly. If there be difficulty in procuring the work, an order to Mr. Carfrae, containing* 6*s., will secure the transmission of the Pharmaceutical number for twelve months.*

A Subscriber.—*We think he may be both* legally, *though the different functions of guardian and medical officer, clash rather ungracefully.*

B.—*The party obtaining a license by false certificates, and prosecuted, to conviction, by the Apothecaries' Society, is to all intents and purposes, an illegal practitioner. The case will be acceptable.*

Mr Dix.—*Indexes are published with each volume. They are separated by the booksellers for convenience sake.*

A Constant Reader.—*The Apothecaries' Company will make no difficulty, provided the full apprenticeship be proved to their satisfaction.*

A Provincial Subscriber *will find the bibliographical record two numbers back. We shall not cease to publish it from time to time.*

A Surgeon, *believing in many of the phenomena of mesmerism, animadverts with some severity on the experiments of Mr. Vernon, at the Adelaide Gallery, repudiating from medical men the aspersions cast on them by Dr. Storer, as men "objecting in proportion to their ignorance." "A Surgeon" mentions one or two cases of very equivocal good faith in the experiments, announces opinions and facts in disproof of the pretensions of Mr. Vernon's pupils, similar to those which have been already expressed in our reports of the lectures, and insists that fair enquirers were justified in their incredulity by the scenes that occurred.*

Mr. Burton.—*Gerber's Elements of the General and Minute Anatomy of Man, and the Mammalia, translated by Gulliver,* 25*s.*

Mr. H. R. *sends us a case of hereditary predisposition to a plurality of children. A patient and sister were twins, both had given birth to twins; and two sisters of theirs* not *twins had nevertheless given birth to twins, one of them* twice.

A Looker-on *was never further wrong in his surmises. No "disappointed Lecturer on Anatomy," nor any other kind of Lecturer on Anatomy, ever wrote a leading article for the* Medical Times *during the present management: and we believe it is the boast of the gentleman, no doubt referred to by our correspondent, that he never writes anything without publicly appending his name. Our opinion on the College Council derives all its asperity from their acts, not our "prepossessions." They commit absurdities: all we do is to name them, or give them a description.*

Gentlemen whose communications are unnoticed, will have the goodness to think them declined. We suggest their being inserted in the other periodicals, when we shall have great pleasure in noticing them in our periscopic department.

R. Thomas. — *Mr. Payen's process for forming Chloride of Soda, of uniform strength, is as follows:—*

	Parts by weight.
Chloride of Lime at 98° *(by Gay Lussac's Chlorometer)*	100
Crystallized Carbonate of Soda	138
Water	1800

The chloride of lime is to be dissolved, and the sediment well washed;—Carbonate of soda, dissolved by heat, is to be poured into the solution, the precipitate allowed to subside, the clear fluid decanted, and the solid matter washed on a filter. The collected solutions are neutral chloride of soda: 62 *parts of the carbonate of soda are then to be dissolved in the remainder of the water, and added to the preparation; the whole being then filtered, a limpid solution is obtained, indicating* 5° *by the areometer of Baumé. It is the pure chloride of soda.—The first formula is not intelligible to us; the second, our correspondent will of course understand, as it states the component parts in clear symbols.*

THE MEDICAL TIMES.

SATURDAY, JUNE 22, 1844.

Labitur et labetur in omne volubilis ævum.

AND so Sir James Graham has flung us overboard for another session! Another year of delay for another measure of legislative promise! Never, surely, were *wills* of the wisp—the most roving and roguish poet ever painted—more fantastically seductive, or more certainly delusive, than our Parliamentary medical *bills!* Through a period equalling the far-famed siege of Troy, our grave Profession has been annually the subject of a legislative befooling. As each Parliamentary session spread its dark influence around us, into what morasses of purposeless excitement, into what ditches of useless expenditure, were we sprawlingly hurried, or chin-deep plunged! Tracing the last few years in their zig-zag course, how often have we sighed o'er the oft-raised, and as oft-depressed, expectations of *reformers*—how often have we smiled o'er the oft-aroused, and as often sweetly disappointed terrors of *deformers!* Warbled into deceived hope by the shallow profundity of Warburton, hipped into very reasonable despair by the elegant vulgarity of Hawes, cheated into action by the cautious imprudences of Graham, bullied into disgusted quietude by the mercenary self-immolation of ———, our Profession must by this time doubt the use of any future Diogenes directing his lamp towards St. Stephens in his search for an honest man; and be tempted to look on that famous assembly-room as differing very little, in the character of its pavement, from an even more celebrated locality, except, perhaps, in having the materials for the Macadamizing process of a less unexceptionable kind. For the last few years, we have had, Heaven knows, lots of Parliamentary "intentions:" but, as a lower place doubtless knows, the poorness of the quality has been quite equal to the superabundance of the quantity.

The cajoling certitude that the Minister's project would be discussed before August, has made this last month unusually fertile in literary demonstrations. We have had a pamphlet, headed "*Vox Clamantis,*" (we fear, *in deserto*) crying strongly for something Sir James will not give; and in this instance, therefore, the voice rises to the elevation of being "*Vox et præterea nihil:*" we have had the Apothecaries' Society dolefully commending themselves to the pity of the charitable—the "old hags," as they were once gracefully called, wailing with prospective grief, and refusing, like the childless mothers of Bethlehem, to be comforted, because the objects of their regard shall have ceased to be: then, the College of Surgeons, in a pitiable state of alarm, affliction, or *hallucination* difficult to conceive in the hypothesis of their possessing common sense or common honesty, have, at length, felt that they wanted defence, and, in the lack of other aid, have emphatically given themselves the suicidal help of their own advocacy: and, finally, we have before us a manifesto from the Provincial Medical and Surgical Association, (in the Association's Journal) a long report of a meeting of the Irish Medical Association, (in the *Dublin Medical Press*) and last, though far from least, the very temperate and able suggestions of our distinguished correspondent, Dr. Hodgkin. We have here, surely, plenty of shots aimed at Sir James Graham's bill, and though the retirement of that measure has withdrawn it from the range of their fire, our readers, perhaps, will think the paper pellets not the less worthy of a few passing remarks.

Agreeing partially with the poet, that the form of Government best administered is best, we shall, in reference to Dr. Hodgkin's important letter, address ourselves, less to his general scheme of medical polity, than to the results likely to arise from his constitution of the Councils of the two corporate bodies of Physicians and Surgeons. Dr. Hodgkin would have all members or consulting physicians Fellows, and from them would take a fixed number, according to seniority, to form two-thirds of a Council; and these two-thirds, thus appointed, would choose the remaining third. As this Council would go out every fourth or fifth year, the governing power—if we understand Dr. Hodgkin completely—would thus be transmitted in course of time through the whole body of Fellows. The arrangement is ingenious and clever, and—not unworthy of a disciple of Penn—improves in our liking the more we think on it. No one can doubt that, in point of both wisdom and fairness, it is a great improvement on anything resembling the present system. The country members might thus be members of the Council, and the best men in London might be selected by them to form the active ruling portion (the third part) of the Council. But though we should thus escape some of the turmoil of professional agitation, while securing the Profession against any *permanently* lodged rulers of small-minded views, or indifferent public wisdom, we yet prefer general election of the Council by the whole body of members. Dr. Hodgkin's rotative Council would give the Profession probably a rotation of government systems: and would give many men power ill qualified to use it well. If the *whole* body elect periodically, their choice will most probably be founded on *public* motives; will, thence, be more judicious, and confer greater honour on those selected; and, if injudicious, they can rail but at themselves. The very power of election is a guarantee that they will study the important points connected with its exercise: the Profession, in its high public aspect, is made that matter of observation and study which at once improves intellect and stimulates ambition; and as the process of election can be made the mere transmission of a note by post, it cannot be truly affirmed that the great moral, intellectual, and social advantages we have named, will be out-balanced by the consequent excitement and turmoil of election-agitation.

The statement of the Provincial Association is temperate, philosophic, and in excellent taste. It shews, lucidly and *most* forcibly, the vast importance of the high service of medical men to the State's general welfare, and the consequent necessity for insisting from candidates for professional inclusion, undoubted qualifications: it logically infers the propriety of punishing unauthorized pretenders to medical skill: and then triumphantly exhibits the grounds on which there is a unanimous call for medical men's share in their own government. It then sums up with the following exposition of opinions:—

Uniform and efficient qualification in every branch of medical science;

Equal right for all so qualified to practice throughout the whole extent of her Majesty's dominions;

The adoption of the representative system in the formation of the councils or governing bodies.

A Medical Board to be established in the capital of the three divisions of the kingdom, for regulating medical education and examinations, and licensing and registering all practitioners in medicine.

The license of these Boards to be the only legal qualification to practice medicine in all its branches throughout the British dominions.

The Boards to be constituted in the same manner, the only difference being that the London or Central Board should form the medium of communication with the Government.

The three Boards might thus be considered as constituting branches of one "General Board" rather than three separate Boards.

In drawing up the regulations in the first instance, a deputation of Members from the other Boards would require to meet the London Board, and similar meetings would no doubt be necessary from time to time to propose and discuss any changes respecting education, or other general medical questions, which might be deemed necessary; but such meetings would be of rare occurrence. No regulations would of course be adopted by one Board without the concurrence of the whole, and the final approval of the Secretary of State.

The two Colleges of Physicians and Surgeons to remain at the head of their respective departments of the profession.

The titles granted by the Colleges to be honorary, and the connexion with the Colleges optional, the power of licensing all medical practitioners being vested in the Medical Boards.

Sir James Graham's Bill is, certainly, not fashioned on the model recommended by this Association. Mr. Carmichael tells us, that Sir James Graham perpetuates to our "nineteen or twenty colleges or corporations" their present medical licensing power, though he places them under a central board, formed, among others, of some of the Members of the Councils of the Colleges of Physicians and Surgeons to the three capitals. He will strip the Apothecaries' Society of its anomalous power of licensing the medical man, but will not interfere to protect him or the public from illicit and ignorant medical practice.

The bold and consistent propositions of the Association, and the intentions of the Minister, both invite comments which our space to-day can ill afford; they may be postponed with the less difficulty, as a nine months' parturition must run out before the question can again shew itself in practical vitality.

DEATH FROM DELAYED MEDICAL AID.

An inquest was held on Monday last, in Manchester, on a woman and child, whose deaths have caused no small sensation, and while throwing no little discredit on the rules of the Manchester Lying-in Hospital, have brought the character for promptitude and charity of its medical officers, under some little suspicion. From the evidence, we learn, that Ann Campbell, 35 years of age, and the mother of nine children, was taken in labour, about 5 o'clock, on the 10th instant. The midwife of the Institution named, found her patient flooding, yet free from exhaustion; the child living, but with an arm presentation. A card was immediately sent, first to one of the hospital surgeons, (Mr. Daniel,) in whose district the labour was taking place; but Mr. Daniel was not in: secondly, after an hour's loss of time, to Mr. Dorrington, another of the hospital surgeons, who was, however, "gone from home, being unwell;" thirdly, to Mr. Gollard, another surgeon of the hospital; fourthly, to two other of its officers, the Messrs. Stevens; fifthly, to Mr. Runcorn, the resident hospital surgeon; and finally, to Mr. Kenworthy, another surgeon. As all these errands turned profitless, Mr. Peter Royle, a gentleman unconnected with the hospital, was sent for, at 20 minutes past 8, and at once arriving, he had the sad office of lending what, after three hours' incessant flooding, had now become useless assistance. He delivered the woman of a well-developed, but now dead child, and in a quarter of an hour, the mother died from sheer exhaustion.

A curious circumstance, connected with this most unfortunate case, is, that according to the evidence of Michael Campbell, deceased's husband, the servants of Mr. Daniel, of Mr. Runcorn, at the Hospital, and of Mr. Gollard, *each* answered for her master, that he had gone out to a labour, and would not return before nine o'clock.

Evidence was adduced, exonerating from blame, in the jury's estimation, Mr. Gollard, and Mr. James Stevens; as Mr. Dorrington had named a deputy to act in his absence, the jury also gave his conduct their approval. But whatever the misunderstandings, or misadventures of the medical officers, the misfortune which made this poor man a widower, and his children orphans, was, partially, at least, owing to a regulation of the Hospital, by which no surgeon, in any emergency, is allowed to be called in by the midwife, unless he be attached as officer to the institution. This is an infamons regulation, if the attendance of the officers be so ill provided for as shewn in this case. Our readers will be good enough to take this as a brief abstract of the evidence, as presented to us in the *Manchester Guardian*. We are disinclined for comment, unless more fully informed on many of the circumstances we have touched.

THE PHYSIOLOGY OF MATERIA MEDICA.

AS ESTABLISHED BY THE LATEST RESEARCHES IN ORGANIC CHEMISTRY, PHYSIOLOGY, PATHOLOGY, &c.

By the celebrated Professor T. F. SOBERNHEIM.
(Translated and prepared for the 'MEDICAL TIMES,' by SIGISMUND SUTRO, M.D.

(Continued from Page 204.)

The blood's independent life is incontestably proved by the active part, which the blood cells take, both in their own nutrition, and in their free communication of nutritive matter to the elementary cells of the tissues and organs; and is further shewn, by the tissues and organs spontaneously appropriating to themselves the globular nutritive matter, delivered to them through the cells of the intestinal pituitous membrane: by the organic assimilation of air in the lungs, and by the elimination of those substances which have become unfit for the preservation of the body. All the above-mentioned processes are solely performed by the energy of the living molecules of the blood. Formerly, the *liquor sanguinis* was supposed to nourish the body by penetrating the tissues through endosmosis, whilst the useless matter was thought to be eliminated by exosmosis; and, with such a theory, of course, the activity of the blood-cells and their independent vitality could not be demonstrated.

Self-preservation.—Whatever feels and moves,

endeavours to preserve its being and maintain its individuality, as long as possible ; and thus self-preservation arises out of automatic feeling. Every cell is a monad, with an independent life, nourishing itself, and forming the substances which are useful to its organisation. The important processes of growth and nutrition have only lately (by the ingenious researches of Schleiden and Schwann) been proved to arise from the same principle of development, both in the *animal* and *vegetable* organism. Though it had been known for a long time, that several structures, particularly the crystalline lens, the epidermis, the tendons, nails, &c., grow without the direct mediation of blood-vessels, analogously to the growth of plants, still the proper conclusion had not been drawn from this phenomenon. For it was not concluded, that nutrition and growth are performed by the force and energy of the individualized cell without secretion from the blood; and that, in general, secretion, absorption, and excretion, are all accomplished by the vital power of the living cell. It was formerly assumed, that increase of bulk (growth), took place in inorganic bodies by *juxta-position*, and in organic by *intussusception;* but Schleiden has disproved this, by showing that both forms of growth take place in plants alone. The self-preservation of the cell, its nutrition and growth, can be distinctly seen in the primitive cells of the yolk, long before the system of the blood has been established. All parts of the egg grow, in the earlier stages of the embryo's development, by the force of the individualized cell. Every one of these cells contains its globular nutritive matter, by means of which the young cellular generation is formed. In the developed organism, blood, and especially the blood-cell, undertakes the function of mediatory nutrition,—of conducting to the elementary cells of the tissues the universal nutritive material, which these cells, by means of their individual power, appropriate to themselves, and transform into their proper substance. Self-preservation occasions the independent assimilation of the nutritive substance furnished by the cells, and the elimination of unfit matter out of the sphere of life. Both functions are performed in all parts of our organism, by the differently modified cells without any intervention: by the nervous cell, by the muscular cell, by the fibrous cell, by the blood cell. The chief law of the whole vegetable and animal kingdom is—that the cell once formed grows, by individual power, to such a form, however, as is required by the general arrangement. Thus, the three principal phenomena of life are,—automatic feeling, automatic movement, and self-preservation. Whatever lives, liberates itself from the bondage of objective, *i.e.* from external, dependance. Thus, the organism is a system of free beings, for, in every point, the law of liberty reigns, represented by individuality of the cell. But, with this individual liberty, exists the *necessity* of conforming to the idea of the whole. For it is only by the preservation of the whole, that the liberty of the individual part can be maintained. Thus, every organ, though possessing an independent life, is still subservient to the other organs. Therefore, the organism represents the harmonious concord of several articulated, free relations, guided and united by the idea of life. *Health* is thus the harmony, more or less complete, between the individual life of the organs, and the idea of the whole,—a free concurrence of the functions of all the individuals forming the organism. *Disease*, on the contrary, is a disagreement between the parts and the whole—a "selfishness" of an individual organ, which lives, as it were, for a *separate* purpose, and refuses to contribute to the welfare of the system. The process of healing consists in the conciliation of the individual and the general life, brought about by the mediation of artificial aid supporting the healing power of nature *(conamen naturæ medicatricis.)* A *remedy* is thus every agent which is the medium of conciliation between the diseased organic individuality and the general organism. Air, light, galvanism, magnetism, water, fire, will, self-control, confidence in God, &c., may consequently be considered as *general* remedies. But remedies, *in particular*, are peculiar chemical objects, included in the study of materia medica.

On the Difference between Food, Remedies and Poisons.—Food may become a remedy (water, eggs, meat); a remedy may become a poison (hydrocyanic acid, arsenious acid, opium); poison may become a remedy, and the remedy a nutritive substance, (quinquina, extractive substances, iron.) The difference, then, only exists in *relation* to the vital process. Food means those solid, liquid, or elastic substances, which, after being digested, and transformed by the assimilating power of the pituitous membrane and of the blood cell, furnish a general nutritive substance, containing the elements of all further organic formations (albumine, fibrine, fat, &c.) *Remedies*, on the contrary, do not contain materials answering the general formation of structures, but such combinations as form a more or less striking difference from the organic composition; by which means a lively reaction is caused in the organism, which continues to be active, till the individual cells have succeeded, by means of their transforming power, in conciliating the foreign elements, and then in excreting them from the sphere of the organism. We call *poison* all that can destroy the conditions of life, or prevent the development of organic reaction, and so exclude every organic mediation. Food, remedy, and poison, may be considered as *equality, opposition, and contradiction.* Equality supposes a peaceful mediation; opposition, an ultimate conciliation; but contradiction admits no mediation, and leads to destruction. As opposition can rise to contradiction, remedies can be changed into poison, by not carefully observing a certain medium.

Let us consider the process of absorption, and ask by what means do dissolved substances and fluids enter the circulation? The answer is, *first:* through the lymphatic vessels, being the natural way for all substances, similar to the composition of the organism, and serving as food; *secondly*, through the veins, the unusual way, used only when such substances are received into the body, as are dissimilar to its composition, and unfit for nourishment. This has been shewn by the experiments of Tiedemann, Gmelin, Westrumb, Mayer, Wedemeyer, Schnell, Magendie, Delisle, Fodera, Segalas, Brodie, and others; *thirdly*, by imbibition, which means penetration of the animal structures, in consequence of their invisible porosity or permeability. This process is called the inorganic process of absorption, corresponding to the phenomenon of endosmosis. By this act of penetration, dissolved substances are immediately conducted into the stream of the blood. For the above unsatisfactory explanation, we are enabled to substitute, now, the vital self-independence of the individual cell.

The processes of assimilation, absorption, nutrition, secretion, and excretion, are solely performed by the vitality of individualized cells. Even the lymphatic and venous re-absorption arises from the activity of the lymphatic and venous cells. The second question we propose, is: the *real relation of blood to the nutrition and secretions.* Until lately, an exclusively active part was ascribed to the blood in these physiological processes, and the secretory organs were supposed to separate all those specific secretions previously formed in the blood. The plastic blood was thought to enter from the nets of the capillary vessels, which surround the organic structures, according to the physical law of exosmosis, into the penetrable tissues, becoming solid in the last act of reproduction, and serving as an integral part of the different organic substances. Since the law of primary formation of the organism has been proved to proceed from the simple cell,*

* By this name Mulder designates a peculiar azotic radical, discovered by him in the component parts of organic structures, viz.: in albumine and fibrine. Thus, according to Berzelius, albumine consists of 10 atoms of proteine, 2 atoms of sulphur, and 1 atom of phosphorus ($Pr.^{10} + S^2 P$); fibrine, on the contrary, is composed of twenty atoms of proteine, one atom of phosphorus, and one atom of sulphur. This radical is also found in the globuline of blood, hematine, flesh, caseine, and other animal substances; as also in vegetable albumine. On account of its forming the base of these substances dissolved in blood, Mulder designates it as *prima materia,—proteine*, from *protos*. The pure proteine forms a gelatinous, gray substance, which can be triturated to a yellow powder; it is hygroscopic, tasteless, and inodorous; insoluble in water (slowly soluble in boiling water), alcohol, and ether; easily soluble in very dilute acids, from which it is readily precipitated by cyanuret of iron, and potassium; it forms peculiar combinations with acids and alcalies, and consists, according to Mulder, of $C^{40}\ H^{60}\ N^{10}\ O^{12}$. Besides the proteine, Mulder discovered another organic substance, the oxyproteine, which consists of $C^{40}\ H^{62}\ N^{10}\ O^{15} + H^2\ O$, and which may, therefore, be considered as the hydrate of a body composed of $C^{40}\ H^{62}\ N^{10}\ O^{12} + O^3$

the processes of nutrition and secretion were shewn to be performed by the mediation of the blood, which serves as a bearer of the general nutritive matter; and this matter is differently transformed, according to the energy and the primary contents of the individual cell. Thus, blood furnishes the general nutritive matter, used to renew the internal generative substance; but, by the energy of the cell, such a transformation of the constituent takes place, as is required by the specific character of the peculiar cells. Every cell transforms but certain constituents of the blood; so that the most different secretions are formed through the metamorphosis of the cell from the blood, which only offers the chief component parts of all organic formations, viz.: the different combinations of proteine with fat. This transforming power of the cell is connected with certain conditions indispensable to its exercise. Loosely combined oxygen and carbonic acid, on the one side, and a temperature between 10° and 32°, Reaumer, on the other, are the necessary requisites. Under 0°, and above 80°, Reaumur, it has no effect; nay, boiling heat, and a small quantity of arsenious acid, destroy the cellular power entirely. It may, therefore, happen that, in spite of the perfectly normal composition of the general nutritive substance, false secretions and abnormal assimilations are formed, in consequence of the diseased transforming influence of the cell (as in Bright's disease of the kidneys, in icterus and dropsy). Whilst the processes of secretion and absorption were attempted to be explained by means of a mechanical endosmosis, exosmosis, imbibition, capillary attraction, &c., many difficulties lay in our way; the indefatigable John Müller honestly confessed that the act of re-absorption was perfectly enigmatical to him. As long as the communication of organic liquids (as the liquor sanguinis, and other similar substances) through the capillary vessels was alone thought of, vague physical explanations of physiological processes were considered satisfactory. But, when this inorganic explanation was to be applied to explain the absorption of solid molecules, as the globules of lymph and chyle, it was found that the organic absorption of lymphatic vessels was infinitely different from the inorganic imbibition of capillary vessels. Now we know certainly, that as the vessels, as well as all organic structures, consist of cells: even the so called secretory glands are composed, in their finest ramifications, of cells, destined to form a substance necessary for the preservation of the organism, and to separate the substances which have become partially or totally unfit for that purpose. Thus, the real act of secretion is based on the independent assimilation of the general nutritive substance furnished by the cells of the blood.

The colourless liquid of the blood, which also contains dissolved fibrine, may, according to Müller, be considered as the lymph of the blood; whilst the lymph may be called blood, without red molecules, the blood, on the contrary, is lymph with red globules. Secretion, nutrition, and the formation of blood, being so intimately connected with the assimilation of nutritive substances, it is important to ascertain how this assimilation is performed. The intestinal canal consists: 1° of a muscular apparatus, forming a support to the whole, and destined for a gradual progressing movement; 2° of a glandular apparatus, which furnishes the digesting secretion (pepsine); of a villous or plaited membrane, lined with nets of blood-vessels, and serving as an assimilating organ of the mucous membrane. The physiological relation of the nerves to the secretions and excretions is next to be considered. We

know, from the history of development, that the assimilation and secretion of the little yolk cell proceed after a very lively manner, before the nervous system has been constituted. The individualized primary cell is created by its proper force, before the existence of a trace of nerves; the globular nutritive contents of every globular cell visibly disappear; the cellular nuclei disappear again; and at last, the membranous cellular enclosures disappear, without any nervous influence. The central assimilating (the intestinal) membrane performs a function, indispensable to the existence of the whole organism, without nerves, nay without blood-vessels. The crystalline lens, the elastic tissues and tendons, the epithelia, and the epidermis, assimilate the nutritive substances furnished to them, and excrete those unfit, without any influence of innervation. These are facts which must put a stop to the overruling influence of the nervous system.

(To be continued.)

ON VARICOCELE;

WITH THE DESCRIPTION OF A NEW MODE OF OPERATING IN THIS DISEASE, WHEREBY A RADICAL CURE IS OBTAINED.

By M. VIDAL, (DE CASSIS,) M.D.,
Surgeon of the Hopital du Midi, Chevalier of the Legion of Honour, &c.

(M. Vidal, in succeeding to M. Cullerier, his predecessor, in the post of surgeon of the Hopital du Midi, determined to accomplish a double task: firstly, to submit to the test of observation the various questions of doctrine recently agitated concerning syphilis; and secondly, to continue the study he had already commenced on the surgical diseases of the genito-urinary organs. The following memoir, read before the Academy of Medicine, at the Sitting of the 7th May, which we owe to the kindness of the author, is a continuation of the second portion of his task, which he pursues with laudable zeal, inspired by his desire of advancing a science of which he is so distinguished an interpreter.)

In this memoir, I purpose submitting, to the appreciation of the Academy, a new method, by which the radical cure of varicocele may be obtained. As these varicose veins, in the opinion of several eminent surgeons, form rather an inconvenience than a real disease, it may be necessary, ere I examine the value of the method I propose, to enquire if it be really necessary, or if it be not better to make use simply of palliative remedies, than to perform an operation of this nature. The question as to the fit time for operating will, thus, become subservient to that of the pathology of the disease; or what is still better, these points ought both to be studied with equal attention, to enable us to form an accurate conclusion, for they are evidently intimately connected, and are equally important. In order to attain this end, the following divisions may be established:—I. *Pathology of Varicocele*, considered especially with respect to the gravity of the disease, and the prognosis;—II. *Operations recommended for the Cure of Varicocele.*—Under this head: first, the harmlessness of the various modern methods will be examined, and secondly, the efficacy of the new one. III. This division contains six observations in support of the plan proposed by the author, or the rolling (*enroulement*) of the veins of the spermatic chord.

Part I.

Pathology of Varicocele.

It is evident that Boyer, Cooper, and other eminent surgeons, did not rely on the mere prognosis of varicocele, in forming their dislike for all the operations by which the radical cure of this disorder might be obtained; for, if we see, daily, individuals affected with the largest varicoceles, without their complaining, or experiencing any inconvenience; if we find that, as in the case mentioned by J. L. Petit, a patient may ride post with a voluminous varicocele, for the space of twenty-five years, without experiencing any accident; and if it be true, as a man now in my wards proves, that an enormous double varicocele may exist, without producing the least inconvenience, without obliging him to wear a suspensory bandage, and without inducing in him the wish, though he had witnessed several cures, of being freed from the swelling; it is still not less certain that, from the presence of varicose veins in the scrotum, some persons suffer acutely. Thus, in a pamphlet published by M. Landouzy, we find related the case of a patient, operated on by Professor Breschet, who affirmed his usual state of suffering to equal the pain caused by the application of the pincers, employed by the above surgeon, for the radical cure of varicocele; now this must have been considerable, since that application alone has, in some cases, been sufficient to produce syncope.

I operated successfully on a patient, whom the mode adopted by Professor Breschet, and the ligature of the veins, as recommended by M. Ricord, failed in curing. This case is a proof of the intense pain the disease may produce; for nothing else could have induced a man to have recourse to three different surgeons, and three different methods. It is equally certain, that varicocele may last many years without giving rise to any inconvenience, and eventually cause serious accidents, if not attended to. Thus, in the case of the post-boy, related by J. L. Petit, who performed his daily arduous avocations, notwithstanding the existence of a voluminous tumour in the scrotum, the man was at length obliged to lay up, and submit himself to a dangerous operation. There is now in my wards a man, in whom the veins of the testis, affected with varices, inflamed spontaneously, and produced alarming symptoms, which nearly proved fatal. Surely, these reflections are sufficient to decide the most cautious surgeons, not to remain inactive spectators, when varicocele is attended with such intense pain, and when consequences of such a nature may occur; especially if they reflect, that they have frequently performed operations in affections less dangerous than this disease.

But varicocele may be so slight, as in no way to endanger the existence of the patient, and still present a certain degree of gravity. Thus, it may become a cause of anaphrodisia, from the pressure, exercised on the parenchyma of the testis, by the veins in immediate contact with it, causing the organ to be gradually atrophied, and to become unfit for performing its fecundating functions. But it may be said that atrophy is not produced in the manner here described; now be this as it may, it is constantly the result of varicocele at an advanced stage. In certain classes of society, anaphrodisia may be considered of little moment; but in other cases, it is a real family misfortune. These considerations may consequently influence surgeons in their decisions as to the necessity of operating, especially if they reflect that when one side is affected, the other is generally more or less so. The operator will be still further fortified in the opinion, that the radical cure of varicocele may be attempted, when I shall have pointed out how little danger attends the method I purpose describing.

Similar to all other diseases of the genital organs, varicocele exercises a pernicious influence over the mental constitution and, as in other species of varix, the strength is found to be more or less diminished. The pressure made progressively by the dilated veins on the organ, brings on the characteristic faintness, observed when the gland is struck accidentally. But here the danger is greater, as the cause, instead of being transient, is permanent. Thus, persons affected with varicocele, dread the least fatigue, and a mere walk is to them a real task. I saw a labourer lately, who perspired profusely, and panted from having gone up one pair of stairs; and cases are recorded in which the patient, on rising in the morning, could not move about the bed-room without a suspensory bandage. It is essential to establish the difference between this weakness and that which exists in the generality of *varices*, for instance: in that met with in old persons affected with varicose dilatations in various parts of the body. In the latter, loss of strength,—the effect of old age, is anterior to, and often one of the principal causes of varix; on the contrary, in persons affected with varicocele, it is to the presence of this malady that the *depressio virium* must be attributed. Weakness is here the effect, not the cause. The simple enunciation of this fact is sufficient to indicate its importance in the treatment.

And, then, the mental state of the patient is so changed, that some fear to undertake the slightest task. Like the body, the mind becomes sluggish; there is nothing manly in their ideas, or in anything they undertake. There is a gloom, an *ennui*, which renders life a burthen; and, therefore, it is not extraordinary that a propensity to commit suicide should frequently be observed in individuals affected with this disease. It is not because he has seen and verified, and constantly meditates on the affection, that he is taken with hypochondriasis. The mind is sometimes diseased, without the individual having the remotest idea of being affected with varicocele, or any other disorder. Thus, while attending a distinguished artist affected with melancholia, I discovered that the cause was a very small varicocele, of whose existence he was not aware, and which caused no pain whatever. The operation performed, his mind became quite calm, and his character completely changed. From these remarks it is evident that in respect to the effects produced on the mind, varicocele presents a certain danger, for it renders life troublesome, and then insupportable; and, hence, a surgical operation is useful, especially if not dangerous.

The history of the disease affords us reasons in favour of attempting a radical cure. In reading the works of our predecessors, we learn that sometimes very dangerous operations were performed, in order to cure varicocele. Thus, varicose veins were extirpated, cauterized with the actual cautery; incisions were made on the scrotum, and even emasculation has been had recourse to. It is possible that in some of these cases there was no varicocele. Our predecessors were not infallible; but their diagnosis was not so constantly erroneous that we should say, that, performing so many serious operations for the radical cure of varicocele, they did not come to their decision for good reasons.

Finally, varicocele excludes a man from military service; it is important in this aspect, and I have already operated on two men, who wished to be received in the army as substitutes; their cure obtained, they were admitted. That it might not be supposed that I make so dark a picture of varicocele, just to prove that it ought always to be operated for, and that, therefore, my methods ought to be adopted in every case, I should have suppressed this part of my memoir, were it not that several eminent surgeons were of Boyer's and Cooper's opinions, (opinions which I maintained formerly,) which exclude all operations in the treatment of varicocele.

Part II.—Operation proposed for the Cure of Varicocele.—If the rejection of every species of operation, in treatment, be founded on the fact that the disease is not dangerous, I must repeat that I have already proved that varicocele may sometimes produce serious accidents. To the arguments drawn from the prognosis, the partisans of palliative means add others deduced from the insufficiency and danger of the operations. These two errors arise, like many others in medicine, from an erroneous analogy. The former, by which the operation is considered as insufficient, arises principally from our having confounded the *varices* of the scrotum with the other species of *varices*, and from a defect in the operation itself. The latter, relative to the dangers attendant on the operation, came from a forced analogy: because sufficient distinction is not made between the different operations, and perhaps, also, because the recent progress surgery has made is considered unworthy of our attention.

(To be continued.)

REVIEWS.

Scrofula, its Nature, Causes, and Treatment; and on the Prevention and Eradication of the Strumous Diathesis. By W. Tyler Smith, M.B. London, 1844. 8vo. pp. 172.

If it be true, as stated by our Author, "that scarcely a family in any station or circumstance, from the Throne to the poor-house,

can be found, in which an observant physician cannot discover some trace of the scrofulous temperament;" he who chooses to indite a work upon the subject, can complain of no want of material or opportunity for his selected inquiry. From the title, we had expected that Dr. Smith's treatise embraced a consideration of this all important subject, in its widest, though, at the same time, we believe its most common acceptation; although, from the rather thin dimension of his volume, we judged he might have thought proper but cursorily to have noticed some portions of the history of this wide-spread disease. But this is by no means the case; the term *Scrofula* is understood by the Author to imply "external tubercular disease," and the nature, causes, and treatment of which he alone attempts to elucidate; whilst the term *Struma* is considered to be the better generic term, including all forms which the affection in question may represent. Notwithstanding this distinction of terms is so definitely pointed out by the Author, we find him now and then using the latter so loosely, that we are at a loss to know what he exactly implies; in fact, in many instances, we believe he entirely loses sight of his own definitions. From the very limited portion of the history of struma, which is treated of, it follows that some of the most interesting relationships of the general affection are passed over altogether, whilst others, most undoubtedly falling within the scope of the Author's enquiry, receive but passing notices. Those forms of the disease which affect the lungs, intestines, serous membranes, nervous centres, secreting and mesenteric glands, &c., are, of course, placed beyond the circuit of Dr. Smith's investigations, and hence we looked for in vain, as we at least expected, when we opened the volume, some new light upon the connexion between struma and hydrocephalus, other brain affections of children, infantile remittent fever, &c. &c.; and many other points, decidedly, in our opinion, more interesting to the Physician than most of those to which our Author has thought it fit to limit his enquiry. As every person, however, has the right and privilege of writing about what he chooses, and confining his attention to any particular thing in preference to another, it would be unjust on our part to complain that the writer has failed in doing that which he never intended to do, and which he candidly confesses he has passed over in silence. Equally just is it on our part, however, to warn the public that a vessel sailing under particular colours does not bear that freight on board which such colours, in our opinion, are intended generally to indicate, and which the title of Dr. Smith's book would imply. We feel ourselves called upon, then, explicitly to state, that the work before us has no pretensions to a pathological or therapeutical history of scrofula, in the sense in which the Profession at large, if we are not greatly mistaken, will receive that term, and we hold it to be a great pity that the contents of the volume have not been more truly indicated than is, by its title page, certainly done. On the other hand, so far as a *very general* enquiry into the nature of struma, as it appears in the lymphatic glands, cellular tissue, bones, and joints, has been attempted, we willingly admit the Author has done his task well; but well as he has canvassed the pathology of this part of the history of the affection, we must own he has still better elucidated the therapeutics of it, and has added one or two chapters on correlative subjects, for which we proffer him our thanks. We shall now proceed to make a few observations on details, which arose in our minds, as we perused Dr. Smith's treatise.

In the chapter on the nature and causes of scrofula, the connexion between it and rachitis is canvassed; and, although it is admitted there is a superficial resemblance between them, yet it is stated that, the more minutely we examine their essential natures, the further must we remove the one from the other. We admit that, in rickets, there is the want of one of the constituents of the healthy body, namely, the earthy matter of the bones; while, in scrofula, a morbid element, tubercle, is superadded to the natural organised element; but, at the same time, we must affirm that the above only represents *one* of the morbid conditions of rachitic osseous structure. With respect to the texture of the latter, it may present that form of the complaint called *osteoporosis*, accompanied with increase of volume, in which case, a pale yellow, reddish jelly is effused into the dilated canals and cells, the vascular bone being somewhat red and dark coloured; this state may attain such a degree, that the cells of the spongy bone, and those in the interior of the medullary tubes, run together into a larger cavity, in consequence of the excessive distension of their parietes, and entirely disappear.

The observations on the signs of the strumous diathesis are good and well arranged, and placed before the reader in a lucid manner, and this is the most that can be said upon the subject.

We most fully agree in the opinion that there has been with some, and still is too great a tendency to localise the fault in the stomach and other organs of assimilation. Several writers have specially treated of chronic derangement of the digestive organs (accompanied by that which has been the *fons et origino* of others, *strumous cachexy*,) as the primary fault. Dr. Todd, in particular, has laid stress on this "*strumous dyspepsia*," and maintains that such a form of indigestion is more truly and invariably physiognomonic of the scrofulous habit than any other sign whatever. We entirely coincide with Dr. Smith, that this affection has not the important share in the development of the disease which that author imagines it has. There is one sign stated by Van Overloop, which has escaped the notice of our author, namely, the sour and nauseous odour which the transpiration of the individual acquires after violent exercise.

The chapter on the exciting causes of scrofula is a very good one, and the powerful operation of cold, humidity, poor diet, and want of exercise, &c., in bringing about the disease is well represented. The New Poor-Law system is spoken of with considerable severity, and although there is much truth in some of the remarks, we cannot wholly coincide with all that is said about it.

"I look upon the New Poor-Law as little better than a vast scheme for scrofulising the whole pauper population of Great Britain.

If poverty must perforce be treated as a crime, it would be wiser in a commonwealth point of view to resort to corporal punishment, than to scourge the unfortunate and unoffending stomach in such a way that it shall be felt in the bones and sinews of succeeding generations."

Dr. Smith should remember that, although the food obtained in the Unions be not of that quality, variety, and quantity, best adapted to preserve the most vigorous and healthy state of body, yet such as it is, they who visit the poor at their own homes, and are in the habit of observing what their meals are composed of as often as they get them, will not be disposed to vent much sorrow for those who may choose to resort to the workhouse. UNLESS THE LABOURING POOR'S POSITION IS MUCH AMELIORATED, THE POOR-LAW HOUSES MUST BE EITHER VAST SCROFULISING ESTABLISHMENTS, OR TOO TEMPTING ABODES OF HAPPINESS AND ENJOYMENT. Dr. Smith himself admits that there are but too many parishes in England, in which the poor population seldom have in *their houses* any other animal food than salted pork or bacon, and are thus living on a description of food most likely in our climate to debase their physical condition, and produce scrofula and other diseases which take their rise in the strumous constitution. That this is the case, there is not the least doubt, and therefore it requires just as much alteration as the dietaries of the New Poor-Law. To begin with the most general hygienic principles relative to scrofula, we must go far beyond the kitchens of the Union workhouses. The progress of scrofulous disease, from simple enlargement of the glands to actual suppuration, is divided into two stages. In the first, the glands become indurated till they acquire almost a stony hardness; in the second, they gradually soften till the centre of the swelling contains fluid pus, and the whole enlargement becomes to a greater or less extent infiltrated with purulent matter. Much discussion has been raised as to which tissue is primarily affected when the joints become the seat of scrofulous disease: whether it be the cartilage, synovial membrane, cancellous structure of the bone, &c.? Our author's observations lead him to the conclusion that it may commence in either one of these structures separately, or that they may be all affected simultaneously. It is stated to be very questionable, indeed, which of them is most frequently attacked; but with regard to that very common form of the affection, called "diseased hip," we believe, the remark of Brodie, that the cartilage is, first of all, ulcerated, and that the other parts in and near the joint become affected only in a secondary manner, in the greater number of cases, is true; though, at the same time, we admit the existence of a form of the complaint, having its origin in the cancellous structure of the bone itself.

Fistulous sores in the perinæum, and true *fistula in ano*, are of frequent occurrence in the strumous habit; but blind fistulous openings, unconnected with the rectum, but confined to the cellular tissue of the perinæum, are said to be more frequent than true fistula. The transformation of other sores into those having a decidedly scrofulous character, is noticed by the author, who believes syphilitic ones are the most readily changed after this manner. We now pass with satisfaction to what we may denominate the second division of the work, viz: that which relates to the treatment, &c., of external tubercular affections. The value, under proper guidance, of the various tonic remedies, accompanied by moderate exercise, "living in the open air," a good but regulated diet, and the occasional recourse to aperients, is well pointed out in the general treatment of these scrofulous affections. The double action of the last class of medicaments receives particular and well directed attention. In the opinion of our author, the mineral, or as they might be termed from their action, the organic tonics, are more alterative in their powers than the stomachic ones; and of these the more important—iron—is supposed to owe its particular value, in some measure, to its power of entering into chemical combination with the red particles of the blood. The observations on the value of a solution of *pepsin*, in the treatment of scrofula, will be read with interest; this was administered first, three years ago, by the author with the best effects, although Dr. Todd, we believe, had previously suggested its employment as a medicine. Recently, its preparation has issued from the laboratory of Giessen, and

it bids fair after some time to come into general use. The author is in the habit of giving it, about a quarter of an hour after every solid meal, the patient taking a larger quantity after dinner than at any other time. It has been objected, that affording the stomach a factitious supply of its own proper seeretion, is likely to diminish the quantity secreted by the stomach itself: the contrary is stated however to be the case. We fully coincide in the opinion that mercury is to be avoided, as much as possible, in all forms of strumous affection, and hold Dr. Smith's observations well worthy of attention upon this point. We are aware that the *use* of calomel in adults, and hyd. c. cretâ in children, is very extensive in the practice of some medical men; but, notwithstanding this, and the high authority of some Dublin physicians of eminence, in favour of this mineral in certain forms of the affection, more especially occurring in the lungs and air passages, *we* consider the practice to be fraught with danger.

"Inflammation of the eye may perhaps, in some cases, be so rapid as to require it, but even here local depletion and counter-irritants are generally sufficient to subdue the disease in such constitutions. I believe that in tubercular peritonitis, one of the most dangerous complications of struma and inflammation, the deposition of tuberculous matter is often hastened and increased by the free administration of mercury. If this remedy be prescribed liberally, as it often is in fevers occurring in those of the strumous diathesis, I have found from experience that there is great risk of producing scrofulous abscesses during convalescence."

A whole chapter is devoted to the consideration of Iodine and its compounds, and which, of all substances ever introduced into the practice of medicine, possess the most decided anti-scrofulous properties. This portion of the work may be read with great advantage. We are inclined to attach more value to the iodide of iron, than we think Dr. Smith is; in fact, in many cases, we consider it to be the most valuable combination. The cod liver oil, lately vaunted so highly, is believed by some to depend upon iodine as a constituent, for what remedial value it may possess. We confess to have great partiality ourselves for a combination of quinine with the iodide of potash, unchemical though it may be, when excess of sulphuric acid be added to complete the solution of the vegetable ingredient; but, notwithstanding, we believe it to be of very great utility.

The local treatment receives separate consideration; but upon this we have nothing to remark, save that it is stated, the preparations of iodine are of far greater use than any other external applications, and that even in diseases of the knee-joint, &c., the mercurial dressings and plaisterings, recommended by Scott and others, should give place to the former. As an ointment, the formula of the *Pharmacopœia* diluted with lard is preferred. Other ointments such as the iodide of zinc, &c., have been recommended, but are not considered equally useful; we cannot say we have found the vaginal discharges of children to be so obstinate and troublesome as our author's experience leads him to consider them, and we have had considerable experience too. We pass over the chapter on the management of scrofulous children which, although very good as far as it goes, contains nothing new with respect to that in which the question is considered.—is it at all possible to eradicate the scrofulous constitution where it has once unequivocally existed? We need only state that the author answers it in the affirmative, and the means by which he considers it may be effected do not differ from those which others, who may believe the same thing, would be disposed to try. We feel ourselves obliged to state, that the remarks upon the treatment and removal of scrofulous scars, and deformities, are destitute of any addition to our existing knowledge; and we agree with Dr. Smith himself in thinking, that those, on the marriages of scrofulous persons, do really need a little excuse for their prolixity, as also those on medical faith, and the royal touch; more especially when the space occupied by them might have been, in our opinion, so much better taken up by further consideration of some points of the special pathology of the general affection. The number of pages devoted to the royal touch, &c., exactly equals that dedicated to the consideration of the nature of scrofulous enlargement, ulceration, &c., which, in a book of 172 pages upon so important a subject, surely ought not to have been the case. We have found it necessary to differ from Dr. Smith in many points, but can recommend his treatise to the careful perusal of all engaged in the practice of medicine, who have yet to learn what is ordinarily known on the subject of "scrofula."

PENCILLINGS OF EMINENT MEDICAL MEN.

DR. KNOX, OF EDINBURGH.

STAND forth, little man! and we will sketch thee in all thy glory: and surely no one who has seen thy bald, intellectual head, or witnessed the bright luminary that peeps from its front, or heard the silver tongue, smooth as that of Belial, which gives accents to its conceptions, can for a moment doubt, that of all the members of the fading and faded Edinburgh Medical School, thou art pre-eminently entitled to the honour of being suspended—in our gallery of the North's *illumiaati*. Would that the pencil of George Cruikshank inspired us to give a sketch of thy countenance! would that our pen could enable us to give the slightest hint of thy extraordinary physiognomy! would that we could titillate the ears of the world—that is to say, of our readers—with the dulcet tones of thy voice. They would confess that, for the first, thou hast not had thy equal since Silenus; and, for the second, that there has been nothing like it since the days of Orpheus.

We are not acquainted with the birth and parentage of this distinguished Scottish lecturer. We believe them, however, to have been respectable. The Doctor, himself, traces them from a brother of the illustrious John Knox, who so unmercifully belaboured the frailties of poor Queen Mary and her court dames: but sure we are that he received his early education at the High School of Edinburgh, and that he was there noted as at once the wildest boy and best scholar of his day; his surviving contemporaries bear witness to the one, and a golden medal, obtained by the embryo anatomist, as *dux* of the Rector's, or senior class, which his sister still loves to exhibit, will corroborate the other. After completing the usual course of classical instruction there, he entered the University of the same place, and ultimately became a student of medicine under the auspices of old John Barclay, then a celebrated private, or non-academical, lecturer in the Scottish metropolis; of whom the subject of our present sketch ultimately became at first the colleague, and eventually the successor; renewing for the world (and refining) his worthy predecessor's character for sly, satirical wit, and carrying the fame of the Institution, as a seminary for sound anatomical and physiological instruction, to a pitch which, probably, no other similar establishment in that, or perhaps any other city, had ever known before.

But, before this, the future lecturer had been placed in a position to which, perhaps, he is in a great measure indebted for that celebrity as a great comparative anatomist, and sound original physiologist, which he afterwards attained. Shortly after completing the usual medical *curriculum*, he received an appointment as assistant-surgeon of a regiment—the 72nd, we think—which then proceeded to the Cape of Good Hope; and in its subsequent dispersion at various periods over the greater part of Southern Africa, the Doctor, while attaining the full surgeoncy of this distinguished Highland corps, acquired an intimate knowledge of the characteristics of the country, and the conformation of its inhabitants, which no other party, probably, has attained. In the peculiarities of the animal kingdom, and especially in the marked distinctions of the Hottentot, Bosman, and Negro races, he is understood to be particularly versant; and many who have read the results of Major Harris's recent expedition to Ethiopia, as narrated in his publication on the Highlands of that country, are of opinion that it contains no point of importance, or any information of unquestionable authenticity, which might not previously have been heard at Knox's lectures, or in the course of his public or private conversation.

On returning, in 1825, we think, from the torrid regions of the South, after a sojourn of ten or twelve years uninjured amidst their pestilential clime, the Doctor formed that association with his former master, John Barclay, to which we have previously alluded. It was, indeed, high time that "Old John," as he was called, should contract some such alliance. With a mind originally perspicacious, if not profound, as his various works on the "Bones," "Blood-vessels," "Life and Organization," "A New Anatomical Nomenclature," &c. &c., testify, Old John had gradually yielded to the influence of advancing years, and his lectures imperceptibly acquired the *vraisemblance*, both in tone and structure, of those homilies by which he (being originally designed for the pulpit) had at one time designed to earn his bread. His audience, indeed, began to entertain the opinion that John's early conviction that he was destined to "shine," as the Duke of Wellington has it, more in the cure of bodies than of souls, was incorrect; and when, on one occasion, the worthy old man—who had trained many of the most eminent surgeons of the day—so far forgot to be *compos mentis*, as to preface, in a moment of pious abstraction, an evening lecture on the organs of generation, with the usual form of Scottish grace before meat,—"For what we are about to receive, the Lord make us thankful," &c., his friends, aided, doubtlessly, by his sharp-witted wife, who (by the bye) was some score years younger than himself, lost no time in forming an engagement with Knox, by which it was stipulated that the latter should at once enter upon the whole functions of the School, and that his predecessor—or, failing him, his widow—should continue to receive a moiety, or at least a share, of the fees.

Under circumstances thus advantageous, Knox commenced his career as a lecturer, with the nucleus of a celebrated though fading class as a basis, presenting a field for operations which the state of medical science in Edinburgh at that period permitted to be carried to an almost unlimited extent. The College or University of the place—founded in the days of James VI.—was fast yielding under the influence of that age which seems assuredly fatal to such institutions as to man; and still more so, under the baneful exertion of that depressing system of hereditary professorship, nepotism, sycophancy, and corruption, which has so long been the disgrace and destruction of our metropolitan hospital schools, and has pressed on the Scotch as well as English Universities, like an incubus on the dream of a fevered man. Alexander Munro, *tertius*, as he calls himself—being the third of the name who has held a professorship, regularly handed down as a family heir-loom, from father to son—was then (and, indeed, still is) holding forth in the chair of anatomy with a dreary prolixity, which caused, and causes, the theatre in which he lectures to present no inapt representation of the Temple of Somnus, in reference not less to the presiding divinity himself, than to the evident effects of his drowsy notes on the ears and eyes of his auditory, and affording at once a memorable and melancholy instance how ability and cultivation (of neither of which is the long-descended Professor destitute) may be blighted, or, at least, fail of their full effect, by the corroding influence of the foul sys-

tem of monopoly and self-election. Now, the animated style of Knox as a lecturer, who had nothing but his own exertions to trust to for rendering his lectures popular, at once stood out in bold relief. With great energy and indefatigable industry, he at once threw himself into the lists; and his class-room, both in respect to students and style, soon exhibited an appearance which had never been observed in Edinburgh, or, perhaps, in any other medical school of the empire, or the world—the establishments in Paris, where talent is sure to meet its recompence, alone excepted. Old John Barclay's hall was surprised to see itself crammed with an audience, which made former notions of impossibility but dreams; galleries, as a matter of necessity, were superadded for the reception of the redundant students; peers of the realm,(conspicuous amongst whom was the present Marquis of Breadalbane, then Lord Glenorchy) and baronets of the United Kingdom—among whom, Sir George Sinclair was conspicuous—were seen attending the Doctor as *dilettanti* anatomists; and Knox seemed on the high road to fortune as well as fame, when an event occurred which at first threatened to mar—but, in reality, for several years afterwards, appeared only to make—or increase his fortune.

All have heard of the atrocities perpetrated by those unprecedented criminals, Burke and Hare; and if compelled to allude to the subject, we yield with the less reluctance, as offering our humble aid towards absolving Knox from all participation in the guilt, if not the facts, of this extraordinary transaction. Public opinion then, and perhaps in some measure still, may be arrayed against us; but those who take the trouble to bestow one moment of reasonable reflection on the subject, will hardly hesitate to arrive at our conclusion—that Knox was wholly undeserving of blame. Bodies were then retailed at twelve or thirteen guineas: it was proved, in the course of the trial, that Knox paid, on an average, ten guineas for the subjects brought by Burke and Hare to his rooms; the other anatomical lecturers regularly charged their pupils thirty guineas for each subject; Knox himself, if he had chosen, might have charged the same: and this being the state of the affair, it is not likely that he would have run his own neck into a noose, for the trifling advantage (at a time when he must have been in the receipt of some thousands a-year) of a few pounds, or the promotion of the interests of his students. In truth, on the latter point, the worthy Doctor was becoming in some degree indifferent: prosperity, which, on most temperaments acts more fatally than adversity, had exerted its usual influence on the Doctor's head; he had in a great measure abandoned the care of his rooms to his assistants, and so far from being supposed capable of encountering any undue risk for the benefit of his students, he was, in reality, more justly chargeable with the imputation of being inattentive to their interests.

But of this point the public could at that period by no means be convinced; and never was man placed for a time in a more dangerous predicament. The uproar in the town, for several weeks, was tremendous. Knox was hourly searched for by the rabble, who fiercely threatened, and no doubt, if they could have laid hands on him, would have effected his destruction: Surgeons' Square, where his lecture-room was situated, was daily menaced by the mob; the streets were eagerly investigated for the obnoxious individual; students, at a distance of a dozen miles from Edinburgh, were savagely assailed on the mere suspicion of belonging to his class;—and the Edinburgh mob seemed eager to maintain its character of being the most ferocious in Europe. Fierce diatribes were heard in every direction; coarse quatrains pervaded the streets; such stupid pieces of mob poetry as the following:—

> Hang Knox, Burke, and Hare,
> Burn the College and Surgeons' Square.
> Burke's the murderer, Hare's the thief,
> And Knox the butcher who bought all the beef.

were seen in all quarters of the city. Christopher North himself, in *Blackwood's Magazine*, fanned the popular flame. For a moment, this high Tory oracle, in one of the most telling and terrific numbers of his "*Noctes*," joined in the fiercest imprecations of the rabble; and it was only by the utmost precaution that Knox escaped Lynch law at the hands of the populace, or being hanged across a lamp-post, as Porteous—another equally, and more deservedly-obnoxious individual—was, a century before.

It may be doubted, however, if, beyond the shock to his feelings, all this did him any substantial injury; for, so far from destroying him as a lecturer, it rendered him more celebrated. Students now flocked to his class-room in such numbers, that it became necessary for him to repeat his lectures twice or thrice a day to different audiences, whom his theatre was incapable of containing at one single sitting; and during two years his classes rather increased than diminished. But a change then came over "the spirit of the scene;" the students fell off in number, his lectures gradually became less popular; he perhaps became more indifferent; his notoriety gradually dwindled, and his school subsided more rapidly than it rose.

Some other explanation of this, therefore, must be given than the story of Burke, and it is a subject on which, we own, we touch with additional reluctance; but one of the chief objects of these sketches would be lost if we omitted altogether an opportunity for "pointing a moral," while employing our efforts in the ornament of a "tale." Knox's peculiar characteristics have, we suspect, been the chief cause of this result. With great satirical powers, he possesses not sufficient self-command to hold them under what the "cannie" portion of his countrymen consider requisite restraint; and he has habitually attacked men and things there with a boldness, and, perhaps, a justice which those who have been the subject of it will not readily either forgive or forget. Old John Barclay himself "drew" and "plucked" a few of the personages about the University, great in their own estimation though otherwise infinitesimally small; but his "plucking" under the name of "Jonathan Dawplucker," was nothing in comparison to the hangings, drawings, and quarterings to which his successor has subjected a far greater number both within the college walls and without. Nor is it to professional "daws" alone that Knox has confined his attention. While the rooks and pigeons that hover around the university crevices, have been exhibited in anything but flattering plumage, the doctor has freely extended his notice to the crows and carrion-birds of the beggarly city corporation, by whom these for the most part have been invested with their powers of fluttering, and canting provosts, hypocritical bailies, and whining town-councillors have been assailed by him with an energy which has rendered *them* objects of abundant ridicule to others, and *him* a subject for intense hatred to them. The "Daws," and the dealers in daws, have accordingly, in self-defence perhaps, united to assail and crush him in turn; the clergy and friends of the church, offended by some free remarks, in the course of his lectures and conversation, on the subject of Christianity, have lent their aid, and by their joint exertions in a country peculiarly susceptible to the influence of religious enthusiasm, Knox has in fact been smothered, and his followers gradually reduced to less than a tithe of their number. A little is perhaps to be said on both sides. Knox may have been too free in expressing his contempt for these professors of Christianity, but on the other hand it must be remembered that the religion of some Christians is often very much worse than the irreligion of some heathens, and though some have not hesitated on the score of his private conversation, to denounce Knox as an atheist, Deist, infidel, &c., we have heard that he at times may be considered as orthodox or trinitarian as the best of them. This, however, is a subject with which we have nothing to do; religion ought never to be obtruded on such occasions; and we have alluded to it merely, because it is the stone on which Knox had stumbled. In his political creed he is said to be equally free. Though we should not hesitate to affirm that he is a radical at heart, others scruple not to assert that with Tories the doctor is a Tory; with Whigs a Whig; with the adherents of the Charter a Chartist; and, assuredly, his conduct during the memorable Edinburgh election in voting for a Whig and a Tory (no admirer of the six points, solicited the suffrages of the constituency on the occasion) afforded some reason for the imputation of those who affirm that a medical man must sacrifice his opinions to his interest, and be "all things to all men" in turn.

Besides his claims to our attention as a lecturer,—for he has never to any great extent yet cultivated the field of private practice—Dr. Knox presents some claims to our attention as an author; though in this respect, beyond a few scientific papers, contributed to the periodical press, he is not publicly known, except as a translator. The *Edinburgh Dissector*, a manual of practical anatomy is, however, we have reason to believe, his handiwork, though ushered into notoriety under the auspices only of "a Fellow of the Royal College of Surgeons;" and he has openly placed his name to a translation of Jules Cloquet's Anatomy, published in Edinburgh some twelve or fourteen years ago. The doctor's style as an author, is far inferior to the manner in which he acquits himself as a lecturer. Want of practice in composition has made him negligent of the minor graces of language; and though he rarely trips in speech, while writing, he is often heedless of the elegance of grammar. As a lecturer, we should say he is nearly perfect. He generalizes trivial details with great adroitness, dwells on important points with due minuteness, draws his deductions with originality and vigour, and impresses the whole on the mind of the pupil by enforcing their practical application. It is rare to find such an instance of perspicuity and address as he evinces; but, unhappily in this country, it is rarer still to find them duly appreciated. As a lecturer in Edinburgh, the doctor's day has gone by, if, indeed, the fame of that city itself, as a medical school, has not also passed away, under the influence of its present medical magnates; and in Glasgow, to which we believe Knox intends to transfer himself, he will possibly find himself still more out of place.

In personal appearance, as we have already hinted, Knox is peculiarly striking. A single glance at him, will satisfy the most careless spectator that he is no ordinary man. The doctor has only one eye; the other has been destroyed either by injury, or congenital malformation; but it requires no great sagacity to give, that with that solitary organ he contrives to see as far as most people with two. His face, though it possesses not one single good feature, is far from being displeasing: and coupled with his fine intellectual head, and his smooth liquid voice, we can readily believe that to the tender sex (whom he especially worships) the doctor is, despite the ravages of the small-pox, no unwelcome companion. In person, he is about five feet six—the intellectual height, as he himself terms it—and strongly, as well as handsomely, formed. He is about fifty years of age, and one of those who may be termed Nature's everlastings; inasmuch as they never look old, and seem never to have been young. Twenty years ago, he looked just as old as at the present moment, and twenty years hence, we have no doubt there will be found in his countenance not the smallest appearance of decay. His mind exhibits just as little susceptibility to the influence of time as his body: it is to the full as buoyant and vigorous as in the prime of manhood; and his spirits seem more exuberant than ever.

MEDICAL ATTENDANCE UNDER THE NEW POOR LAW.

To the Editor of the 'Medical Times.'

Sir,—I shall not trouble you, or your readers, with a vain repetition of the injuries done to the profession, or the evils accruing to the poor, in the administration of the New Poor Law; neither shall I discuss the various plans that have been suggested for its amelioration.

After abundant opportunities of witnessing these injuries and evils, and due consideration of so important a subject, allow me to lay before your readers a new plan, which I think will do away with all just cause of complaint.

Let the Poor Law Commissioners fix a minimum

allowance, *per case*, in each union, which the guardians should increase as they might think right, or find necessary; for instance, if five shillings were allowed for each case in town, seven shillings and sixpence, or ten shillings, might be given where a practitioner had to visit a patient three or five miles off.

Every legally qualified medical practitioner within the district, should be at liberty to offer himself as an union surgeon, with the understanding, of course, that he should make such reports, and give such certificates, as the commissioners, guardians, or patients, might require.

The medical men so offering themselves should constitute the medical board of the union, and as such, give their services, when required, hold consultations on serious cases, or important operations, and, in fact, act like the medical staff of a hospital.

On a pauper applying to the relieving officer for medical relief, he should receive a ticket, containing the names of all the medical officers of the union, with a notice that he might take it to any one of them, at his own choice; the medical man retaining the ticket as his guarantee for payment.

In an union averaging six hundred patients annually, the expense, at five shillings a case, would be £120, which, in my district, would be divided amongst five or six practitioners, of which each would have his proportion, according to his actual attention to his patients. The poor are quite as wide awake to regular and irregular attendance as their betters.

It is not supposed, that five shillings a head would remunerate a surgeon for his labour, but he would not, at any rate, lose anything, and it would always be at his own option whether he offered himself or not.

The relieving officer, or guardians, would examine more carefully the cases brought before them, and especially, would be prevented from sending their own servants or dependants to the union surgeon as pauper cases.

The poor would be properly attended to, as the medical man would have an interest in giving his attendance.

The allowances for operations, midwifery, and vaccination would remain as they are.

In naming five shillings as the minimum, *per case*, I do not mean to say, that should be the sum fixed upon, it is merely to simplify the calculations.

I am, &c.,

X.

TRANSACTIONS OF LEARNED SOCIETIES.

PHARMACEUTICAL SOCIETY, June 12. Mr. Ince in the chair. The following papers were read: —*On the presence of iron in river water, by Eugene Marchand, of Fécamp.*

Spring water, river water, and even rain water, play so important a part in the arts and in domestic economy, that too much pains cannot be taken to determine with exactness the principles which are held in solution, and which almost always communicate to the waters properties, which, in some cases, are useful, in others injurious. This is especially the case when these waters are used in the food of men or animals, and still more, when they are employed in certain arts—in dyeing, for instance.

These reflections were suggested by the result of the analysis which M. Marchand made of the water of two rivers, the Valmont and the Gangaville, which empty themselves into the sea at Fécamp. They both take their source at a distance of about twelve or thirteen kilomeres (seven to nine miles) from the sea, and are united at a distance of about two kilometres from their common mouth.

The following is the result of the analysis of one litre of each of these waters:—

	VALMONT.	GANGAVILLE.
Free Carbonic Acid) Organic Matter....)	Indeterminate Quantities.	Indeterminate Quantities.
Chloride of Potassium .....grammes	0.00000	A trace
" Sodium..... "	0 02596	0.02481
" Magnesium..... "	0.00000	0.00235
" Calcium ..... "	A trace	0.00000
Nitrate of Lime ..... "	0.00319	0.00758
Sulphate of Lime..... "	0 00355	0.00206
" Potash ..... "	A trace	A trace
Carbonate of Magnesia ..... "	A trace	0.00000
" Lime ..... "	0.20290	0.19330
" Ammonia ..... "	0.00193	0 00414
Sesquioxide of Iron & Alumina. "	0.00093	0.00105
Silica ..... "	0 01079	0.01210
	0.24922	0 24989

Hitherto but few chemists, have pointed out iron as one of the ingredients that may be detected in river water, yet all incline to the opinion that this metal exists in a great number, and probably in all those rivers which like those of Valmont and Gangaville, spring from a chalky marl. In fact, this marl contains a combination of protoxide of iron, which is soluble in weak acids, even in carbonic acid. It is natural to suppose therefore, that the waters as they spring from such soils should contain iron in solution, and the organic matters which they also contain, retard the rapid oxidation of the protoxide of iron by the contact of air, so that there is nothing extraordinary in the fact that iron may be found in solution in river water, even at a distance of more than fifteen kilometres from their source.

It is desirable therefore, in analyzing these waters, always to test for the presence of iron. M. Marchand considers the best method of arriving at an accurate determination is to add an excess of ammonia, and a few centigrammes of sulphuret of sodium to two or three litres of the water to be examined. After remaining in contact for twenty four hours, there will be found at the bottom of the vessel, a white powder (Ca O, C O_2 + Fe S), which should be separated from the supernatant liquor, and treated with weak hydrochloric acid, boiling and quite free from iron, at the same time adding two or three drops of pure nitric acid. A liquor will thus be obtained, which, being but slightly acid and concentrated, will posses the property of being coloured red by the addition of sulphocyanide of potassium, and black by the tincture of galls, although the water submitted to examination should contain only half-a-millionth of its weight of oxide of iron, as is the case with the two specimens of water, the analysis of which is given above.

Mr. Squire described Professor Clarke's method of ascertaining the comparative hardness of waters and the patented method of rendering them soft, by the addition of lime water. The process is described in the specification, and in Professor Clarke's pamphlet. The use of the soap test in determining the amount of calcareous matter contained in water, was, Mr. Squire considered, likely to be useful to pharmaceutical chemists, as in many preparations the presence of such foreign matter was known to be injurious. Mr. Squire demonstrated the use of the above test, which consists of a solution of one grain of curd soap in an ounce of spirit of wine, by examining two samples of water, one from a spring at Ascot Heath, the other from the Thames; it was found that the latter contained nearly four times as much lime as the former. A considerable quantity of lead having been absorbed by the water at Ascot Heath from the pipe in which it was conveyed, the sample had been brought to him from the spring for examination, and he had been surprised to find it a remarkably pure water.

Dr. A. T. Thomson considered the process an exceedingly valuable one, and enquired of Mr. Squire if he was aware of the nature of the Ascot Heath spring, whence the water experimentalized on was derived: he considered it a curious fact that any spring water should contain less lime than river water, as it was usually the case that rivers were more free from calcareous matter than the springs from which they originate, on account of the extrication of carbonic acid, and the consequent deposition of lime during their course. He himself did not know of the existence of any such spring, except at Malvern. He thought the subject worthy of investigation, as it would be a great advantage if a supply of such pure water could be conveyed to the metropolis, instead of that which is now furnished. He considered it desirable that the water companies should try Professor Clarke's process on a large scale.

Mr. Squire stated in reply, that the water was brought to him for analysis in consequence of its containing lead, and all that he knew about it was that it was obtained from Ascot Heath. He did not even know the depth of the spring. The palace was supplied with water by another spring, the water of which, although as hard as that of the Thames, contained less calcareous matter by one half.

Mr. Phillips, jun., considered that the absorption of lead by the water at Ascot Heath, was accounted for by the fact of its great purity, it being known that the presence of salts protects lead against the solvent action of water, a fact which had been proved by experiments in his father's laboratory, where portions of lead had been for seven years immersed in water so contaminated, and also in distilled water. In the former case no perceptible formation of carbonate of lead had taken place, while in the latter there was a copious precipitate.

Mr. Ince corroborated this statement, observing, that he had tried a similar experiment with the same result; he doubted whether it was any advantage to have a water absolutely pure for dietetic purposes, as the small quantity of salts which water usually contained is rather beneficial than otherwise.

Dr. Thomson attributed the effects mentioned, to the presence of carbonic acid absorbed from the air, as he had made the same experiments in closely corked bottles, with a different result.

Mr. Scanlan had observed, that in condensing distilled water in a leaden worm, a considerable quantity of the metal was absorbed, rendering the product quite useless.

Dr. Pereira thought it by no means desirable to supply perfectly pure water to the metropolis, as the inevitable result would be the frequent occurrence of colica pictonum, arising from the lead which would be dissolved by the joint action of the water and carbonic acid. In reference to Professor Clarke's process, he thought the fact had been overlooked that the addition of lime water would only remove the carbonate of lime, which was held in solution by carbonic acid, while it would have no effect whatever on other salts of lime, as, for instance, the sulphate, which in many places constitutes the chief impurity.

Mr. Mowbray observed, that one important element, likely to affect the solvent properties of water, appeared to have been overlooked in the preceding discussion. It was well known that ammonia existed to a considerable extent in Thames water. The power of ammonia as an oxidising agent, was very great; its addition to a protoxide salt of iron, rapidly causes the absorption of oxygen so as to convert it into the peroxide. Water companies, who derive their supply from deep wells, are in the habit of exposing the water to atmospheric influence in reservoirs, in order to soften it; the chemical changes that ensue in these cases, are, besides the evolution of carbonic acid, and, consequent precipitation of carbonate of lime, the absorption of ammonia and decomposition of sulphate of lime existent therein.

In the case where printers suffered from colica pictonum, Mr. Mowbray believed the lead to have been introduced in a state of solution by means of the caustic ley, used to wash the types; also, that in the case where steam appeared to have oxydized the lead pipes, and where the distilled water, issuing from such pipes, was found largely contaminated with lead, he would regard the great oxydising power of the steam as chiefly arising from the ammonia it contained.

On the Formation of Scientific Committees for the Advancement of Pharmacology. By Jonathan Pereira. M.D., F.R.S.

In this communication, Dr. Pereira expressed his desire to draw the attention of the Council of the Society to the propriety of establishing, under the auspices of the Society, a Scientific

Committee for the advancement of pharmacological knowledge, and he observed that those who have made materia medica an especial object of their study are well aware how much ignorance still prevails with respect to the natural history and origin of a considerable number of the substances used in medicine. Many points remain to be settled, questions to be answered, and uncertainties to be resolved, with reference not only to exotic, but even to indigenous products; not merely to rare, but also to some of the commonest drugs; not simply to modern, but also to some of the oldest articles of the materia medica. He then pointed out the facilities possessed by Great Britain for carrying on such enquiries. Her numerous and important colonies in all parts of the world, and her extensive commercial relations, particularly fit her for taking the lead in investigations of this kind in which moreover, she is peculiarly interested. From her extensive possessions in different parts of the world are obtained a very large portion of the substances now used in medicine, and by the establishment of a committee on Pharmacology in this country, an opportunity would be obtained of bringing into notice the various medicinal substances produced in the different portions of this great empire. In this way, substances now unknown to, or little employed by us, might be brought into use and, in some instances, perhaps, the produce of our own colonies might be advantageously substituted for that of other countries. Furthermore, in those cases in which British products are inferior to those of other countries, the committee might be able to ascertain the causes of the inferiority, and suggest the means of removing them. In these and other ways, then, such a committee might be useful in a commercial, as well as a scientific point of view. It might be made the means of declaring to the remotest part of our colonial possessions the wants of the mother country, and conversely, of making known to England the capabilities of the different portions of the British empire.

Dr. Pereira in suggesting the establishment of a committee for carrying out these investigations, did not deem it desirable to limit the committee to members of the society, but to include such other persons as may be both willing and able to promote the objects for the attainment of which the committee was established. He said he was anxious that the formation of the committee should be conceived on a broad and liberal basis, and not on exclusive principles. He was further of opinion that several committees, having for their common object the advancement of chemistry and pharmacy, might with great propriety, be established: as for instance, one, on pharmacetical chemistry.

It would be the duty of the general committee, which he proposed to call the Natural History Committee of the Pharmaceutical Society, to prepare from time to time lists of queries, *agenda* and *desideranda* for each part of the world whence medicinal products have or may be obtained. These lists would be published in the Pharmaceutical Journal; forwarded to the respective countries by private hands, by foreign ministers, by public bodies, and by any other available channels ; distributed to travellers who would thereby have their attention specially called to the wants of the pharmacologist, and republished in newspapers or journals which circulate in those countries to which the particular lists of queries refer. The answers, when received, to be read before the society, and published in its "*Transactions.*"

For ascertaining particular points, it might be desirable, in certain cases, to offer rewards—either of an honorary nature, to stimulate the ambition of naturalists and others, or as a recompense for outlays in attaining the objects in question.

It is conceived that merchants and drug-brokers would be peculiarly interested in these enquiries. New drugs are frequently brought to this country, and old ones from new localities, which are unsaleable, except, perhaps, at a ruinous sacrifice, for want of a proper scientific examination. Now, by furnishing the merchant and wholesale dealer with information of an useful kind, an encouragement would be held out to such persons to furnish the committee with all new articles which may, from time to time, be brought to this country, and, a notice of which would speedily appear in the Pharmaceutical Journal.

Mr. Ince pledged himself to introduce the subject at the next meeting. He felt persuaded that the plan would be adopted, and had no doubt it would produce a very beneficial effect.

Mr. Mowbray said, that the Medico-Botanical Society had lately formed a similar committee, and proposed, among other means, to obtain the assistance of our consuls in various quarters.

Dr. Royle in expressing his concurrence in the proposal, stated that he had very frequently, during his researches in Materia Medica, been surprised to find how much ignorance prevailed respecting the natural history of drugs among the dealers and importers from whom he had expected to derive information. There were many points which even the best informed had been unable to clear up. The wholesale druggists had on many occasions when applied to respecting any particular drug, referred him to the merchant or broker from whom they had obtained it, and by this party he was referred to his correspondent at the port whence the drug had been exported ; there the information ended. Articles were collected in various parts of distant countries, offered for sale at a market in some particular locality, and sold for exportation to parties who took no trouble in enquiring whence they came or how they were prepared. Hence many of the statements published in this country respecting the foreign drugs were founded on conjecture or erroneous data. For instance, myrrh had long been ascribed to Arabia, because it was an article of commerce among the Arabs, but it had recently been shewn to be the produce of Africa. Frankincense in like manner had been stated to be a product of India, instead of Africa. In the case of some medicines, the comparative market value of the produce of different localities was regulated by prejudice. For instance, the East Indian senna, which comes to this country in a pure state, is worth much less in the market than the Alexandrian, which is much adulterated, although he believed the medicinal value of the former to be at least equal to that of the latter. Travellers were often unable to supply the deficiencies in our knowledge on such subjects, from not being aware on what points information was required, and the reports which they brought back were often vague and imperfect. This evil might be avoided, and the desired knowledge obtained by the proposed plan of furnishing travellers with lists of *desiderata* with other needful instructions. Professor Royle proceeded to observe, that brokers frequently condemned drugs because they were unacquainted with them, and new remedies were sometimes imported from countries where they had obtained great celebrity, but their importation resulted in great loss, on account of the difficulty which prevailed in circulating any new product in the market. The existence of a committee of practical men to whom application might be made in such cases, would be essentially useful in a commercial, professional, and scientific point of view.

Mr. Mowbray observed, that in order to render the proposed measures efficacious, the co-operation of the medical profession was essential. It was, in fact, impossible for the chemist to effect any good results in reference to new remedies, without such aid. Any dealer who should presume to offer in the market an article not usually understood, was suspected of interested motives in recommending it ; and it not unfrequently happened that large quantities of valuable remedies untried in this country, were imported on speculation, and destroyed or allowed to spoil for want of a demand.

Mr. Johnson, having just returned from a distant part of Africa, could corroborate much that had been said as to the difficulty experienced by travellers in obtaining the knowledge most in demand of the products derived from the countries through which they passed. This difficulty would be in a great measure removed by the publication of the requisite instructions for travellers. He had recently been enabled to identify the tree yielding gum myrrh, and had thus established the fact that it was a product of Africa, although not known by that name or used as a medicine by the natives. Its principal use there, was as an ingredient in ink, being mixed with lamp black and other substances, to which it was added for the purpose of preserving the parchment or paper. He had found two kinds of myrrh, one of which was entirely, and the other only partially, soluble in water. The former was preferred by the natives. He believed both kinds were imported into this country, and sold indiscriminately. Lists of *desiderata* were published for the use of travellers by the Entomological Society, and he thought the plan very desirable as a means of promoting the study of materia medica and pharmacy.

STATISTICAL SOCIETY, Monday, June 17.—Lieut.-Colonel Sykes, V.P., in the chair.

The subject for the evening was, "On Vital Statistics obtained by means of a Pneumatic Apparatus for Valuing the Respiratory Powers of Man in Connection with Health, by Mr. Hutchinson, Surgeon, of Milton Street, Dorset Square." It was the result of upwards of 10,000 facts from observations drawn from 1200 living objects—the laborious work of three years. The plan adopted by Mr. Hutchinson, was to classify man according to his occupation, and then to submit those classes to the following examination:—

Cubic inches fully expired	Weight
Power of expiration	State of pulse
Power of inspiration	Respiration per Minute
Circumference of Chest	Age
Height	Temp. of expired air

The result was, a strict relation between the cubic inches fully expired, the power of inspiration and expiration, and the height; stature being an unerring guide to what ought to be the capacity of a healthy chest, as indicated by the following table:—

Mean Height.	Result of Observation.	Arithmetical Progression.
5·1	175·0	174
5·3	188·5	190
5·5	206·0	206
5·7	222·0	222
5·9	237·5	238
5·11	254·5	254

From this table, the law has been determined, "that for every inch of height, from 5 to 6 feet, eight additional cubic inches of air, at 60 deg., are given out by a forced expiration. The healthy standard being determined, the amount of chest disease was distinctly marked; for instance, in the earliest stage of consumption, a man's full expiration was 100 cubic inches, whereas, his standard of *capacity* should have been 204, and in the advanced stage, it was 34, and should have been 246 cubic inches. The comparative *power* of inspiration was between the healthy and diseased as strongly marked. The simplicity of the apparatus by which Mr. Hutchinson arrives at his results, adds considerably to their importance; it is as intelligible to the non-professional, as the professional observer, which is not the case with most instruments; the stethoscope, for example, which requires a system of education to render it of the least value. Mr. Hutchinson's invention is explained and understood in less than five minutes, and the observation themselves occupy scarcely three. This ingenious and valuable instrument was fully described at a late meeting of the Society of Arts.

PERISCOPE OF THE WEEK.

TUBERCULAR LEPROSY.—[This and the three following articles comprize the principal contents of the last number of the *Medical Gazette*.]—A paragraph appeared a short time since in the columns of the *Medical Times*, noticing the occurrence of a peculiar disease in New Brunswick, of which we find a particular account in the *Medical Gazette*, from the pen of Mr. Skene, of the 52nd foot, who was appointed by the Lieut. Governor, one of a commission to investigate the nature of the epidemic. Mr. Skene ascertained that the disease in question was the tubercular leprosy, or elephantiasis of the Greeks, from the close resem-

blance presented by the symptoms to the accounts of that disease met with in the works of Bateman, Simpson, Copland, and others. He quotes the definition of it given by the last-named writer in his Dictionary, as follows:—"Dusky red or livid tubercles of various sizes, on the face, ears, and extremities; thickened or rugous state of the skin, diminution of its sensibility, and falling off of the hair, except that of the scalp; hoarse, nasal, or lost voice; ozœna, ulcerations of the surface, and extensive fœtor." Nineteen cases of the disease were seen by Mr. Skene; seven deaths had occurred in Traeadie, and five persons, who were known to have contracted the disease in that district, died elsewhere. From the cases which came under his notice, Mr. Skene selected several to illustrate the peculiar characters presented by the epidemic; of these we give an abstract:—the first patient noticed is a married woman, 46 years of age, who presented the following appearances on the 29th of March last: the whole surface of the skin seemed as if smeared over with oil; the whole of the face was studded with tubercles, varying in size from that of a pepper-corn to that of a bean; the larger ones about the lower part of the face, where they became confluent, and caused much enlargement of the lips, and the cheeks to be pendulous. This enlarged mass, particularly under the chin, is divided by numerous rugæ, more especially by a transverse one, larger than the others, giving or causing the appearance of what is commonly called a "double chin," in a very remarkable manner. Nose very much enlarged, also pendulous, with ulceration commencing at the lower part, its mucous membrane excessively thickened; the eye-brows are devoid of hair, and the cilia have almost entirely disappeared. The whole of the inside of the mouth and fauces is studded with tubercles of various sizes, confluent about the velum and uvula. Voice husky and nasal; breath intolerably fœtid. Many tubercles of various sizes were seen on the upper and lower extremities. Respiration short, and she coughs a great deal; sleeps and eats well, and does not suffer any pain. Has had the disease about five years and a half. Her husband, although he sleeps with her, is free from it, and is in perfect health; but one of her sons, about eight years of age, is affected therewith.—In the second case, that of a boy fifteen years of age, the internal mucous membranes were principally affected; the lips were enormously enlarged, and full of tubercles on the inner side, which have the appearance of small cicatrices on their summits; tongue much thickened and protruding between the lips, with numerous fissures crossing each other in different directions, and full of tubercles. Palate and whole of the fauces thickly covered with tubercles, small and confluent; uvula and tonsils extensively tubercular: in fact one mass of disease extending down into the pharynx. Constant cough; breath very offensive; voice a mere whisper; and when raised by extraordinary exertion, not like that of a human being. There were also extensive ulcerations on the calf of the left leg, superficial ulcers on the left thigh, incipient ulceration about the roots of the nails, and large oblong tumours in either groin, presenting somewhat the appearance of femoral hernia. The sensibility of the diseased parts was much impaired, if not wholly gone. The disease had existed six years, and an uncle of the boy's was reported to have died a month previously in a shocking state. The third and fourth cases do not present any distinctive features particularly worthy of notice; they are well marked instances of tubercular leprosy, and altogether Mr. Skene is convinced that the disease is identical with the tubercular leprosy which prevailed throughout Europe during the middle ages, and which has more recently been seen in Iceland, the Faroe Islands, Shetland, Holstein, Madeira, the Crimea, Africa, Ceylon, and the East and West Indies. The new locality for this disease forms a part of the province of New Brunswick. It is chiefly confined to the east side of the land lying between the Bay of Chaleur, and the estuary of the Miramichi river, and more particularly to the settlements on the Neguac and Tracadie rivers. The first case occurred in the year 1817 in the person of a woman, a native of Acadia, who afterwards resided in Tracadie, where she gave birth to five children. Her youngest child was born in 1809, after which she continued in delicate health for six or eight years, and it was observed about this period that spots or blotches developed themselves on the face, extending over the upper part of the trunk and extremities. After this, distinct lumps appeared on the face, inside of the lips, and in the throat; the hair of the eyelashes and eyebrows fell off; the voice became hoarse, and husky; in short, she appeared to have exhibited all the characteristic symptoms of the disease, and died in 1829. Her husband became affected with the disease three or four years before she died, and sunk in 1831. From these cases the disease would appear to have gradually extended itself; and although, ten or eleven years ago, only two cases existed, the commission found, independant of the deaths which have occurred, thirteen confirmed cases in Neguac, one confirmed case in Tabisiutac, and one eighteen miles up the north-west branch of the Miramichi river, making nineteen in all. The explanation of the primary cause of this disease which is offered by Mr. Skene is somewhat obscure; he says that he is led to think that the primary cause of all the symptoms detailed in the foregoing cases, and also of the others submitted to inspection, was a morbid principle, *sui generis*, known only by its effects, which most probably resides in the blood,—the common pabulum of the organs, being generated therein by a virus, which, when once introduced, reproduces itself, and by degrees transforms the normal elements of blood into new compounds, which contaminate the whole system, and control the innervation and all other vital influences; the most prominent symptoms being a perversion of nutrition, together with the secretion of new products in the tissues of organs. [This little bit of mystification, which disfigures an otherwise practical paper, clearly shows that the author is utterly ignorant of the causes of the disease in question.] The origin of this morbific cause he leaves unsettled; its propagation he regards to have been effected by hereditary taint or contagion. He concludes, moreover, that as all the persons who came in contact with the lepers, were not affected, those who became diseased, must have had some intrinsic constitutional peculiarity, or were exposed to certain extrinsic causes, which rendered them especially liable to the attack. The intrinsic causes are supposed to be depressing mental affections, age, and sex; on these, however, Mr. Skene places little reliance, nor has he much knowledge of the action of the extrinsic causes, which are generally supposed to influence the occurrence of this disease, namely, indigence, including filth, exposure to extreme temperatures, scanty or unwholesome food, together with miasmata generated in the soil or sub-soil. Upon all these points it appears that Mr. Skene's information is too slight to enable him to offer an opinion. The diagnosis in the advanced stage of the disease is readily made, as the symptoms are so well-marked that little difficulty can occur in detecting it; in the earlier stage, the peculiar tawny discoloration of the palate and fauces appear, in the absence of tubercles, characteristic of the malady. It cannot be confounded with scrofula, inasmuch as this latter symptom is never present; nor with scurvy, inasmuch as there is no tendency to local hæmorrhage; nor with syphilis, which is originally a local affection; nor with dry gangrene, which chiefly affects the larger joints. Although this disease has hitherto been regarded as incurable, Mr. Skene is not without hope that the assimilation of the virus may probably be accelerated and accomplished before the constitution has given way; that is before organs essential to life have become irremediably obstructed; the external evidence of this fatal state being intimately connected with the development of tubercles in the superficial tissues. With respect to the treatment, which may be either active, palliative, sanatory, or preventive, the only suggestion thrown out by the commission has reference to the two last, namely, the erection of a lazaretto, strict seclusion of the leper in this establishment, and legislative sanction for the removal of those patients who, while medical authorities were adjusting their differences, might introduce the seeds of a most loathsome malady into one of the most populous districts of the colony.

*** The cuichunchulli, or viola parviflora, has been found of considerable service in the treatment of this loathsome malady in Brazil. Its action is emetic, diaphoretic, and cathartic. (Vide Sir Robt. Kerr Porter's Paper on the Cuichunchulli in the Medico-Botanical Transactions.)

FRACTURE OF THE VERTEBRÆ.—Three cases, which terminated fatally, are recorded by Mr. Lyon. In the first case, that of a blacksmith, 24 years of age, the injury was produced in a very singular manner; he was running rapidly down a steep hill, when he stumbled, and was thrown violently forward, pitching upon his head, and turning heels over head. The violence was consequently applied indirectly, the impetus of the stroke upon the head being conveyed through the cervical to the dorsal vertebræ—where the fracture took place—a mode of production comparatively rare, the elasticity of the intervertebral cartilages, and the yielding that results from the undulating line of the column, enabling the spine generally to resist the effects of falls either on the head or feet. The man survived the accident eight weeks, and, on examination of the spine after death, it was found that the spinous and oblique processes of several of the superior dorsal vertebræ had been fractured, lay confusedly together, and were connected by dense tissue, approaching in some points to cartilage. The body of the third dorsal vertebra had been fractured obliquely forwards and downwards, its spinous process broken, one part of its body carried forwards for nearly two inches, and likewise downwards for about the same distance, so that the extremities of the fractured spine overlapped each other for an inch and a half; the posterior aspect of the upper portion rested on the anterior of the lower, and the broken spinous process of the upper portion was supported on the fractured body of the lower one. The fractured portions were held together firmly in front and at the sides, by condensation and agglutination of the surrounding tissues. The separation of the fractured surfaces being so great, the spinal cord was, of course, completely divided, its extremities separated for more than an inch, and covered by membrane; they were injected and soft, and the membranes red and thickened. In the second case, that of a collier, 27 years of age, the fracture was caused by the man's body having been crushed between two railway waggons, the lower part of the back being chiefly injured. The accident was followed by complete loss of sensation and motion in the parts below the injury. The poor fellow survived to nearly the completion of the eighth week after the accident. On examining the body after death, a fracture was found extending from side to side obliquely through the body of the eleventh dorsal vertebra; the superior articulatory processes were also broken, the spinous process of the tenth vertebra forced up, and its body carried forward the third part of its breadth, thereby narrowing the spinal canal at that point, and stretching and pressing upon the cord, which was much softened, and its membranes thickened and separated by effusion. A small part also of the vertebral canal had been broken up, and a fragment was placed across it, with its sharp edge resting on the cord. The portions of the bodies of the fractured and displaced vertebræ were held together at the sides and front by osseous matter, in such quantity as nearly to encase them, and prevent more than very slight motion. The state of the ligaments was not ascertained. In the third case, also that of a collier, 37 years of age, the accident occurred by a large stone falling on his back from the roof, while he was at work. The man died seventeen days after the accident. Upon removing and sawing the injured part of the spine through the centre, from the back to the front, the intervertebral cartilages between the eighth and ninth dorsal vertebræ were found wanting, having been destroyed by absorption or ulceration. The surfaces of the same vertebræ were bare, soft, and soaked in pus. There was some extravasation between the membranes within the sheath of the cord, and the latter was much compressed and lacerated by a small, thin, pointed fragment of bone, which had been detached from below the base of the spinous pro-

cess, and driven inwards. The inter-articular ligaments were also lacerated, so as to allow the one vertebra to be raised posteriorly, and carried slightly forwards, and thereby still further to compress the cord. Mr. Lyon says, fractures from the direct application of violence to the spine occur in far greater frequency among colliers than in any other class, in consequence of their liability to be struck while at work in the recumbent position, by heavy stones falling upon them from the roofs of the mines, as in the last instance; and, in this posture, the spine, being unfavorably placed for offering resistance, frequently gives way. Fractures of the spine may, in many instances, exist without the possibility of detection. There may not be any alteration in the line of the column; unnatural motion may be absent; crepitation may be wanting, or may not be heard; while implications of the functions of the spinal marrow, if present, do not afford a positive means of elucidating the diagnosis, seeing that they are common to concussion and extravasation uncomplicated with fracture. The prognosis is very unfavourable in cases of fractured vertebræ; and although the life of the patient be not destroyed by this species of injury, it very often, but not invariably, happens, that sensation and voluntary power, generally lost from the moment the injury is received, are only partially restored; and oftener still, that they never in the least return; and the patient, often unable to retain his fæces, or urine, incapable of locomotion, but by exertion of his hands and arms, drags on a comfortless and hopeless existence, a burthen to himself and all his connections. The function of respiration is the only one resident in the spinal cord, the entire interruption of which is immediately destructive of vitality: and as that process is partly dependent on the phrenic, and partly on the spinal nerves, the immediate consequences in fractures of the vertebræ will vary as the injury is above or below the involuntary or diaphragmatic, or higher or lower in the spinal or voluntary nerves of respiration. But, although the function of respiration be the only one presided over by the spinal contents, the interruption of which may be immediately fatal, the collection of mucus in the bronchi, the tympanitic abdomen, the ammoniacal urine, and sloughing of the soft tissues, shew that the spinal nerves perform other functions besides those of respiration, voluntary motion, and sensation, the interruption of which may materially aid in hastening the fatal result, which so generally follows fractures of the spinal column. If death be not occasioned immediately, or very soon, by the deprivation of important or extensive nervous functions, danger to life arises from several sources—inflammation, softening, or suppuration of the spinal cord; or the first and latter of those actions in the sheath; or similar states in the intervertebral cartilages, and occasionally the involvement of all these parts at the same time. If the patient should escape these risks, still, in consequence of pressure on the cord from displacement of the vertebræ; from the effects of undue deposition of callus or effusions, which become organized; of induration or softening of the cord, &c., sensation and power of motion never return, or return only in a slight degree; the vital power of the paralyzed parts are much diminished: indeed, it may be said, that they do not possess more than vegetable life: from very slight pressure this is destroyed, and upon separation of the resulting sloughs, large ulcers are produced, while the same causes still acting, the ulcers extend, and from the consequent discharge and irritation, debility and death are much hastened.

Midwifery Statistics.—During 1838, in the eastern district of the Royal Maternity Charity, under the superintendence of Dr. F. H. Ramsbotham, 2136 women were delivered; 1115 male children, and 1046 females, were born, 25 were twins—about 1 in every 85½ cases; of them, in 11 cases, both heads presented; in 9, the presentation was head and breech, or some part of the lower extremities, and in 5, both were breech, or inferior extremities. The children, in 5 cases, were boys, in 8 girls, and in 12 of different sexes. Of the cases generally, 2087 were head presentations, 7 being of the face, or about one in every 318; 68 were breech, or lower extremities—1 in 32; 6 were transverse, or 1 in 360; in all these, the operation of turning was performed; 3 of the children were born dead. In 1 case, a placenta and breech presentation, the child was still-born; the mother did well. In 6 cases, alarming hæmorrhage before delivery, or 1 in 356. Three of the children were still-born; all the mothers did well. In 11 cases, there was retention of the placenta, requiring the introduction of the hand for its removal—about 1 in 194. Two of the women died, one from hæmorrhage, and the other from hysteritis. Four cases occurred of hæmorrhage after expulsion of the placenta, in one of which, the mother died, from the interference of a neighbour. There were three forceps cases, or 1 in 712; one of the children was born dead and putrid, the others were living. In one case, premature labor was induced, at the seven and a-half months. The child survived its birth one hour. The same operation had been performed previously on the same woman. There were two fatal cases of rupture of the uterus, on 1 in 1068; 9 deaths from puerperal causes; 2076 children were born alive, and 85 dead.

Creosote in the treatment of certain diseases of the conjunctiva and cornea.—Dr. Tanesville first used this remedy in diseases of the eyes in 1836, in a case of opacity of the cornea, with ulceration resulting from scrofulous ophthalmia, which was from three to four years' standing. After failing with all the known means, he used mercurial ointment, with which he incorporated a few drops of creosote, and introduced a small quantity of it between the eyelids evening and morning. This treatment was followed by rapid amelioration. The ulcers cicatrized gradually, the opacity disappeared, and in the space of two months the patient was cured. Dr. T. has since used it with the greatest success in many other cases of acute and chronic scrofulous ophthalmia. He says that he has applied it very usefully also as a topical remedy in several external scrofulous affections, ulcerations of the skin, &c., whence he concludes that it is an invaluable means in all local affections of scrofulous origin. He observes, however, that it should be employed conjointly with a suitable constitutional treatment. Simple cerate may be substituted for the mercurial ointment or fresh lard, and this is indispensable in cases where mercurial ointment cannot be borne by the patients. The use of creosote becomes more requisite in proportion as the disease is more chronic. Dr. H. Tanesville generally uses from ten to twenty drops of creosote to the ounce of ointment, but in protracted cases he exceeds this quantity. If the introduction of this ointment should produce too violent a smarting, it may be moderated by bathing the eye with fresh water or cold milk. One of the most important advantages of creosote, used as a caustic in scrofulous ulcerations of the cornea, is its facility of application. It is sufficient to introduce a small portion of the prepared ointment between the eyelids, and to rub the latter slightly against the globe of the eye, whereas touching the little ulcers themselves with the caustic is a matter of some difficulty in children.—This ointment is very efficacious also in curing inflammation of the Meibomian glands. It is also used with success in chronic vascular albugo, which is often the result of granular inflammation of the conjunctiva. In its simple form it is used only after the inflammatory symptoms have been removed by the ordinary antiphlogistics. In purulent ophthalmia it is employed conjointly with a general active treatment.

Removal of cancer by the knife.—M. Leroy d'Etiolles asserts, in a paper recently read before the Academy of Sciences, that extirpation, as far as it is practicable by surgical operation, does not stop the progress of this disease; and that, as a general rule, the knife should never be resorted to except for cancer affecting the lips and skin. In other cases, he says, extirpation should never be attempted, except when the life of the patient is placed in danger by hæmorrhage from ulceration. The same opinion is entertained upon this subject by the profession in Italy: at the recent meeting of the Scientific Congress at Lucca, the awarding of a prize of £20., by the medical section, for the best Memoir on Cancer, gave rise to a lengthened debate on this formidable disease; in the course of which, Professors Pacini, Cento, Canti, and Regnoli, maintained that it is an incurable affection. Dr. Regnoli read a statistical report which he had drawn up, and from which it appeared, that out of two hundred and fifty persons on whom cancerous degenerations had been extirpated by the knife, scarcely twenty had survived the third year. He was, therefore, induced to look upon amputation as a palliative measure only.

A new method of making pressure in uterine hæmorrhage.—An anonymous correspondent of the *Provincial Medical Journal* thus writes:—"I found my patient (a delicate lady, with her seventh child) in a state of syncope; some large coagula were discharged in the bed, and the uterus was expanded to full half its size before delivery. Fortunately, the nurse and sister were both women of firm minds; one forced some brandy into the mouth, while the other applied stimulants to the nostrils. I immediately passed my left hand into the uterus, and emptied it, while with my right hand I made pressure externally; contraction took place, and my patient rallied. I now took out my *new-fashioned bandage*, '*Salmon and Odys' patent single truss*,' and applying the circular pad to the abdomen, and the other to the spine, (reversing the usual method,) outside the clothes, I made a firm and most agreeable pressure, which was continued for several hours, to the great comfort of my patient.

GOSSIP OF THE WEEK.

We learn from the "Medical Gazette," that the St. Marylebone vestry, growing dissatisfied with the expenditure in drugs and good feeding, caused by their too-distinguished physicians and surgeons,—Clendinning, Mayo, Harrison, Phillips, and Stafford,—voted the discontinuance of their gratuitous services, and resolved on the employment of an apothecary in their stead, whose salary being decently small, was to be economized out of the cheaper medicines and more indifferent food he would be expected to order for his unfortunate charges. The resolution of one meeting requiring, however, the confirmation of a second, this curious attempt at economy was defeated; and the vestry stand disgraced with a murderous essay at parochial legislation, as foolish in its result as it was wicked in its design.

A "Medical Mutual Life Assurance Society," has started into existence, with the indifferent recommendation of announcing, as members of its provisional committee, two gentlemen (Dr. Pereira and Mr. Randall) who publicly disavow the "greatness thrust on them."

We understand from the Secretary of the Medico-Botanical Society, that his Majesty, the King of Holland, has consented to become one of the Honorary Royal Fellows and Patrons of the Society.

A Parliamentary return announces that the amount of duty paid on patent medicines, in the ten years ending Jan. 5, 1844, averaged nearly £30,000 annually. Our contemporary, the "Provincial M. and S. Journal," reasonably enough asks, what must have been the actual consumption?

Mr. James Annesley, of the Madras Medical Establishment, has received the honour of knighthood.

Dr. Maunsell, the Secretary to the Irish Medical Association, and very active Conservative politician of the Corporation of Dublin, has been appointed Secretary to the Council of the College of Surgeons, Ireland.

The Medical Association of Ireland, held its sixth annual meeting on the 4th inst. The chair was taken by the distinguished President, R. Carmichael, Esq., and the speakers were Dr. Lane, of Wexford, Dr. Fry, of Ferbane, Dr. O'Grady, of La Mancha, Dr. Jacob, of Maryborough, Dr. Cane, of Kilkenny, Dr. Colvan, Dr. Peebles, Dr. Harvey, Dr. Macdonnel, and Sir Arthur Clarke. Mr. Carmichael gave his anticipatory approval of the general character of Sir James Graham's proposed Bill, and the Meeting appears to have gone with him. The report announces nothing but content with the present prospects of medical reform. As an instance of how much this body is satisfied with Sir James Graham, it was moved that £500, handsomely advanced by Mr. Carmichael to help the Association, should be returned, as no longer likely to be needed. The worthy President generously handed over the whole sum to the Irish Benevolent Fund.

Obituary.—On Saturday last, the 15th inst., at Addison Terrace, Kensington, John Braid, Esq., of Newcastle-upon-Tyne, senior Surgeon to the Infirmary of that town.

Professor Hope, on Thursday last, at his house in Moray Place, Edinburgh. He retired about two years ago from the Chair of Chemistry, in the University of Edinburgh, after filling it for nearly half a century.

Appointments.—Asst.-Surgs.: E. Findlay, from the Illustrious, to have charge of the Romney, slave depot at the Havannah, v. Birtwhistle, invalided; J. Tait to the Fearless; J. G. Buchanan, to Greenwich Hospital.

Gentlemen admitted Members of the Apothecaries' Hall, 13th June, 1844:—William Culverwell, Charles Watkins, William Hammond, John Sims Cousins, John Legge Lucas, John Lynch, James Charles Wells, Thomas Anthony, Thomas Leaman Henley, Samuel Betton Gwynn, Richard Ineledon Scott, Samuel Beecroft, Taylor Hannah Murison.

Gentlemen admitted Members of the Royal College of Surgeons, Friday, June 14, 1844.—E. S. F. Arnold, G. Cotton, W. Westall, J. Williamson, J. Gould, H. A. Hoie, J. D. Cronin, S. T. Badger, E. Garraway, C. W. Blashfield.

ON THE PHYSIOLOGY OF HEALTH AND DISEASE.

APPLIED TO ANIMALS AND VEGETABLES, BUT MORE ESPECIALLY TO MAN.

By M RASPAIL.

[Passing over several *genera* of worms, which are possessed of much inferior interest in a medical point of view, we next come to the 4° *genus* of our author—the *Filariæ.*]

The *filariæ*, or *draeunculi*, are cylindrical and very thin worms, which acquire an immoderate length, and of which the greater part are capable of living in water, and even in the humid earth, while waiting for a prey upon which to affix themselves. The *filaria* was, at a very early period, recognized as a distinct species from the *ascaris;* and there is no tissue nor organ of the body, however compact, in which this insect has not been found, busily pursuing its fearful ravages. Plutarch has handed down a passage from Agatharcides, an historian and philosopher, who flourished in the time of Ptolomy Philométor (An. 3770 B.C.) in which we find, for the first time, a description of the disease produced by the *filaria*,—a disease of which Hippocrates, and the writers immediately succeeding him, make no mention:—"The people inhabiting the country bordering on the Red Sea," says Agatharcides, "are subject to a peculiar disease; certain small, dragon-like insects, which are found in their legs and arms, gnaw these parts away; they sometimes shew their heads externally; but as soon as they are touched, they retreat and bury themselves in the flesh, twisting about on every side, and thus producing the most insupportable inflammations." Plutarch adds that no one, either before or since Agatharcides, had observed a similar phenomenon. Galen, Avicenna, Rhazès, Ambrose Paré, and others, subsequently directed their attention to this subject; but they seem to have been undecided as to whether these bodies were of a verminous nature, or were not rather the filaments of some small nerves. The progress of micrographic studies, however, soon cleared up the incertitude as to the position the *dracunculus* should occupy among the *helmintha;* and Linnæus entitled it the *Gordius Medinensis.*

The *Filaria Medinensis* sometimes attains a length of three feet, although it remains as thin as a thread. Like the lumbricus, this worm appears but a lengthened ovary, of which the head and the thoracic region might be considered one of the extremities. The intestinal canal, which traverses it from one end to the other, is very narrow, and easily broken. It but seldom happens that one can pull this worm entire from the body of the patient, the head and the tail being readily detached from the rest of the body, under the least effort of traction. The *filaria* is most frequently met with in man, beneath the cutaneous tissue; it is there that it forms its burrows, crawling under the muscles, the tendons, and the aponeuroses. The parts which it seems to prefer are the leg rather than the thigh: around the two malleoli, the arms, the hands, the hips, the loins, the scrotum, and even the head. When, from any cause, the insect is obliged to abandon its burrow, and approach the surface, the flesh becomes tumefied and inflamed; there is developed a pustule of the size of a pea—a phlyctæna, or a phlegmonous spot, according to the temperature and the nature of the organ; the patient experiences at this point, a painful sensation of crawling. On opening this pustule with a needle, we see the free extremity of the worm escape; this should be rolled carefully around the instrument, taking care not to exercise too great traction, for fear of breaking the insect in half. The use of aromatic fomentations is apt to drive it inwards, unless we employ an internal treatment at the same time. This worm spares neither age nor sex, and attacks strangers as readily as the natives of the countries where it is usually found. One of the characteristic effects which it produces, is to create a series of spiral furrows upon the skin; it disorganizes the dermis, by burrowing into its substance. These traces will be much more visible after the disappearance of the worm, when the affected tissues shall have become dried up, and their vitality destroyed. May we not, here, have in fact the source of those various forms of *lepra* and of *rupia*, so prevalent in Arabia and in Egypt? Such appears to me very probable. This insect has also been met with in the *globe of the eye*, giving rise to insupportable pain, to leucoma, cataract, and perfect blindness; in the *lungs*, producing pulmonary phthisis; and in the *bones*, exciting excruciating torture to the patient.

Third Group: Compound and Articulated Helmintha.—This group of worms offers a striking analogy, both in organization and development, to the polypi, inasmuch as their reproduction takes place, as well by *gemmæ*, which remain adherent to the maternal parent, as by *ova*, by means of which the propagation of the species may be carried on in a separate manner. The *gemmæ* become united by their extremities, and the worm is then said to be *articulated;* or else they shoot out in a divergent manner, and the animal is then, as it were, *ramified* or *tuberculated.*

First genus: *Tænia, or tape-worm; Lumbricus latus*, of the Latins.—Next to the two species of *ascarides*, the tænia is most frequently met with in the human race. Its body is thin like a thread, and at the most a *decimetre* in length, being terminated posteriorly by a chain of flat ovarial articulations. which may acquire a length of even two or three hundred ells, for its development is unlimited: such is a general idea of the structure of the tænia. The head is distinguished by four buccal orifices, diametrically opposed to each other, and at equidistant points: they communicate with the central intestinal canal; a little above them we find, in some species, a circle of hooks or fangs, and sometimes, in the centre, a retractile sucker. The head is narrowed, behind, into a long neck, which is the true body, while the belly would seem to be formed by the series of articulations. We have already observed that, in the helmintha, the thoracic region of the body forms but a small part; whilst the abdominal region, devoted to the development of the ovarian apparatus, appears to constitute the whole of the trunk. In the tænia, the same relations subsist; but the ovary is a mere annexation, and not a component portion of the abdomen; the intestinal canal terminates where the ovarial articulations commence. The tænia is hermaphroditical, and reproduces itself, by means of *gemmæ* or articulations, seated at the extremity of the body, and which seem to have a separate circulation; these gemmæ are filled with ova, like the gemma of the plant, which we call the fruit. We may distinguish, upon one of the sides, the vaginal opening whence the ova pass outwards. This articulation may be detached from the body, without the animal thereby losing the power of reproducing others; but, if it remain adherent, it is this part which is the seat of reproduction and regeneration, by giving birth to another gemma which is united end to end with it, and the latter to a third, and so on *ad infinitum*, provided that the size of the body of the prey allow to the parasite this unlimited development. These articulations, when detached from the body of the tænia, have from time immemorial been known under the name of *vermes cucurbitini*, by reason of their resemblance to the seeds of some cucurbitaceous plants. When this worm requires to feed itself, it clings to the intestinal walls, by implanting into them its circle of fangs. Immediately afterwards, affixing one of its four mouths against the corresponding surface, it draws it upwards into a fold, and is thus enabled to apply the next mouth in its turn, and so on with the third and the fourth. In this manner, the head of the tænia is entirely plunged, so to speak, in the living tissues, which it tears with its hooks, and drains by an incessant suction. We may, hence, conceive the tortures induced in the patient, as well as the variation of the symptoms, depending on the spot on which the worm shall affix itself in the alimentary canal, or in accordance with the constitution or temperament of the patient. I have seen cases of violent hysteria, convulsions, epilepsy, marasmus, tetanus, colic, &c., produced by this cause.

There are usually two species of tænia, described in man: the *tænia cucurbitina* (*tænia solium*, Lin.) and the *tænia vulgaris* or *lata.* The latter, however, appears to be but a deviation or accidental organization of the former species; the one produces exactly the same morbid effects upon the human body as the other. Sheep, oxen, horses, dogs, and other domestic animals, are subject to several varieties of tænia, but which seem to vary only according to the differences of age and habitation, that is to say, of nutrition; these species are:—the *tænia villosa*—the *tænia nodulosa*, or *tricuspidaria*—the *tænia ovina*—the *tænia denticulata*—the *tænia pectinata*—the *tænia perfoliata*—the *tænia canina*—and the *tænia infundibuliformis.*

2° *Genus:* Hydatids.—We have shewn that the *vermes cucurbitini* are but the articulations of the tænia developed one in conjunction with the other; each of these articulations may be considered as an ovary, or as a complete uterus, independent of all the others. When these articulations are detached from the animal which supported them, they are quickly expelled with the fæcal matters, and the ova which they contain are either decomposed or disseminated by chance through the atmosphere. But this mode of propagation of the species is certainly not the normal one. In fact, the animals at the base of the scale have the instinct of depositing their ova in the tissues most suited to their incubation, and to the nutrition of the small being which is to be excluded. The tænia, then, as well as all other species of helmintha, will necessarily seek to deposit its ova in the living tissues on which it feeds itself. It is for this purpose that the ovarial articulation of the tænia is provided with a vaginal *osculum*, through which we may sometimes see issue a species of perforating organ, not unlike that of the strongyli and ascarides. When, then, the tænia would consign its ova within the substance of a tissue contiguous to the alimentary canal, or within the current of the circulation, it possesses a ready means of perforating the wall of the organ, or the venous coat; it first brings into action its cephalic hooks or fangs, and then the exsertile organ of each of these ovarian rings; the *osculum* of the ring being applied, like a cupping-glass, over the small gaping orifice of the perforation, will direct through it the ova with which the animal is filled, and incubation will accomplish the rest. Suppose then that, gliding into the *ductus choledochus*, the tænia, progressing from point to point, deposit the contents of its ovarial articulations within the substance of the liver; it is evident that at each perforation it will introduce a great number of ova within the tissue. The edges of the wound becoming re-united, the cavity will acquire the characters of a cyst—filled with ova. But these ova will enlarge by the progress of incubation, and, attaching themselves to the walls which encircle them, the young worms will excite, by their suction, an impulse of development in these tissues. The cyst—that is to say, the artificial cavity—will enlarge with the worms which it contains, and, thus, we shall have engendered the true hydatid of the liver. But, suppose that the tænia introduce its ova into the circulatory current; the incubation then taking place in the vessels which convey these germs, the young worms will affix themselves to the coats of the tube, there determining varix or aneurism, and which, by the indefinite development of the surfaces attacked, may in its turn even assume the characters of an encysted tumour. So, again, if the circulatory current transport these ova into the neighbourhood of the cerebral pulp, these vampires will quickly give rise, in this delicate medium, to a cavity or cyst of an indubitable nature. The forms of hydatids usually met with are: the *hydatis globosa*, *hydatis pisiformis*, *hydatigera fasciolaris*, *cœnurus cerebralis*, *echinococcus hominis*, *echinococcus veterinorum*, *acephalocystis*, and *ovuligera carpi.*

Morbid Effects of the Development of Hydatids, properly so-called; that is to say, of the Incubation of the ova of the Tæniæ.—The development of these insects will necessarily give rise to symptoms which will vary according to the place of election: loss of memory, if they take up their seat in the anterior part of the lobes of the cerebrum; loss of sexuality, if in the cerebellum; headache, furious or maniacal delirium, epileptiform convulsions, lethargy, &c., followed by derangement of the cir-

culatory, digestive, and respiratory systems; cough, dyspnœa, and asphyxia by occlusion, should the incubation take place in the primary air-passages; asthma, convulsive cough, sanguinolent and purulent expectoration, and pulmonary phthisis, should they penetrate further into the tissue of the lungs; loss of appetite, indigestion, disordered alvine evacuations, acute pains in the epigastrium, and vomitings of cyst-like substances, when the incubation has taken place in the stomach; if in the liver, and the communication be not intercepted between it and the *ductus choledochus*, the hydatids when detached will be voided by the anus, and the patient will offer all the symptoms characteristic of jaundice: if the duodenum be obstructed below the *ductus choledochus*, the hydatids will then be voided by vomiting; these insects have frequently been seen in the urine, after nephritic pains, or subsequent to an anti-syphilitic treatment; when lodged at a sufficient depth in the abdominal walls, they not unfrequently lead, by disorganization of the tissues, to the formation of fistulous openings; lastly, acephalocysts have frequently been observed to be expelled, in great numbers, from the uterine cavity. [See Mad. Boivin, and other authors.]

We may then state, by way of summary: 1° That there is no species of animal, to whatever class it may belong, which is not more or less liable to worms, should its mode of alimentation prove favourable to the incubation of the ova, and their subsequent development—2° The intestinal worms have the faculty of depositing their ova in all the viscera, and in every kind of organized and living tissue—3° The hatching or exclusion of these ova might lead us to suppose the existence of a new species; for, in the study of the specific differences of these insects, we are guided solely by the difference of dimensions and of habitation.—4° When the worm is expulsed from the body of its prey, it must, of necessity, deposit its ova in the excrements, or on the ground; and these ova, raised as dust by the winds, may become the germ of contagions and epidemics, for a single worm excludes, at least, three thousand ova, and a patient will sometimes void an incalculable number of vermicular ascarides—5° The parasitism of the helmintha being accomplished by suction, and often by perforation, we may readily imagine that there is scarcely a disease which may not be traced to this source. The difference of symptoms will depend solely on the locality invaded, and on the greater or smaller number of these parasites. May we not thus trace the cause of the paroxysm, or intermittence of diseases, according as these reptiles shall apply themselves to their work of destruction, or as, tired of their labours, they shall lie by to digest the fluids of which they have drained the tissues—6° The *helmintha* are parasitic only to living animals; they die and become decomposed at the same time as their prey; hence, these vampires quit the body of their victim before the approach of decomposition—7° If we carefully examine the urine and fæces, we shall become convinced that nine-tenths of diseases are the work of *helmintha*, and that their cure may be accomplished by a well-regulated employment of anthelmintic remedies. In epidemics of bilious and intestinal fevers, we may constantly observe thousands of worms voided along with the excrements of the patients.—8° The general and local effects of the invasion of worms being known, we are enabled to discover the cause, immediately that the outward symptoms are manifested, without these reptiles being positively submitted to the eye—9° If we add to the number of these parasites which attack us in the cradle and abandon us only in death, those which are introduced into our tissues accidentally, we shall have sufficient to account for the production of the few remaining diseases, which have not already been traced to the ravages of worms. With the exception, then, of those maladies, the causes and origin of which we explained at the commencement of these lectures, there are merely such as are dependent on the *moral emotions*, or *passions*, which may not be ranked as the effect of the *parasitism of insects*.

[The THERAPEUTIC principles, advocated by M. Raspail, may be summed up in a few words: according to him, the great source of disease, where there is no vice of the atmosphere or of the diet, nor any direct introduction of poison, is a verminous cause, and must, therefore, be treated as such. We shall conclude this division, and with it our author's work, in our next paper.]

LECTURES ON THE ANATOMY AND PHYSIOLOGY OF THE EYE,

FORMING PART OF THE COURSE OF LECTURES ON ANATOMY AND PHYSIOLOGY, DELIVERED AT CHARING-CROSS HOSPITAL.

By T. WHARTON JONES, F.R.S.

Lecture IX.—March 2nd, 1844.

Having, in my last lecture, considered the curvatures of the lenses of the human eye, and also their refractive densities, I now come to consider the powers of the lenses of the eye in bringing rays of light to a focus. These powers, as I have already said, depend both on the refractive power of the substance composing them, and on its curvature.

The combined power of the lenses of the eye is to bring rays of light to a focus at 18-20ths of an inch behind the vertex of the cornea—the distance at which the retina is situated.

Let us now examine what share each of the lenses of the eye has in producing this effect.

1. *The Cornea.*—If, instead of several refractive media, the eye had but one, and that of the same refractive power as the substance of the cornea, and having the same curve as the cornea, the rays of light would be brought to a focus at the distance of four times the radius of the cornea—that is, at one inch and three-tenths behind its anterior surface.

Again, if the rays of light, after being converged by the cornea, (which is a bent medium,) entered, on quitting it, air instead of the aqueous humour, they would not only lose their convergence, but become actually divergent.

2. *The Aqueous Humour.*—The power of the aqueous humour by itself, considered as a lens, in air, would be to converge parallel rays of light to a focus at the distance of one inch and one-tenth behind its anterior surface.

The refractive density of the aqueous humour being less than that of the substance of the cornea, from which it receives the rays of light, and its surface being like that of the cornea, towards the incident rays, its effect is to diminish the convergence of the rays produced by the cornea, but this in only a very small degree, seeing that the difference in the refractive power of the substance of the cornea and aqueous humour is very small.

3. *The Crystalline Body.*—The principal focal length of the crystalline, if in air, has been calculated to be about one-third of an inch, a focal length, according to the calculations of Munro, intermediate between those which would be presented by lenses of the same size and shape as the crystalline, but composed—the one of glass, and the other of water; that of glass having a focus of one-fourth of an inch, that of water a focus of one half of an inch. The refractive density of the crystalline being in the mean greater than that of the aqueous humour; and its curve towards the incident rays, its effect is to hasten their convergence. But it is to be remarked that, as the density of the crystalline is not the same throughout, being greatest in the centre, the rays of light in passing through the crystalline will undergo, instead of one single bending, a series of bendings, tantamount to a gradual curve, both in approaching the dense centre of the lens, and in leaving it, on their way to the vitreous humour.

Vitreous Humour.—The substance of the vitreous humour having less refractive density than the crystalline, and its curve being concave towards the incident rays, its effect is to increase their previous convergence. This effect, however, is but slight in degree.

Having thus considered the powers of the lenses of the eye, we are prepared to consider the eye as a whole, in its character of an optical instrument.

In the first place, I beg your attention to the effect of this instrument, composed of a bent glass and lenses, in imitation of the eye.

You are already prepared to understand the principles concerned in the production of this effect. I will, therefore, now confine myself to the detail of the action of the lenses of the eye on the rays of light from external objects in their course to the retina. The pencils of rays, diverging from the various points of external objects fall upon the surface of the eye by their bases; but those only which fall on the surface of the cornea are concerned in the production of vision—the rest being reflected. Even of those which fall on the cornea, some are reflected; the rest are transmitted by the cornea, and the effect of the refraction of the cornea on them, and of that of the different humours, is, to converge them: so that each pencil represents two cones with their bases towards each other at the anterior surface of the cornea.

By the convergence which the rays undergo in passing through the cornea and aqueous humour a greater number of pencils pass through the pupil than would have so passed, had the iris and pupil been situated in front of the cornea. Those rays of light which enter the cornea in an unfavourable direction are stopped by the iris, and are either reflected or absorbed by it.

The dioptric effects of the lenses are principally that of the cornea, and aqueous humour in first converging the rays; and secondly, that of the crystalline in bringing them to focal points on the retina. The convergence produced by the cornea and aqueous humour alone would lead to foci at a distance from the cornea of four times the radius of its convexity; that is, one and three-tenths of an inch, consequently behind the retina.

But the pencils of light which have been admitted by the pupil, meeting the crystalline body are still farther converged by it, and in passing from it into the less refractive vitreous humour they are again still farther converged; so that they are brought to foci at a distance of eighteen-twentieths of an inch; *i. e.*, on the surface of the retina.

The difference in refractive power between the air and the cornea being much greater than between the aqueous humour and crystalline, the rays of light undergo their greatest degree of refraction—are made to converge, most on first entering the cornea. The crystalline contributes comparatively little to the convergence.

We might draw this as an inference from the fact, that after its removal persons can see distinct objects, even without the aid of glasses.

The curve of the anterior surface of the cornea being the same as that of the anterior surface of the crystalline, their surfaces are not concentric but incline towards each other. Hence, the axis of the cones, which the pencils of rays represent as just explained, if oblique in reference to the axis of the eye, is not absolutely in a straight line. Even the axis-ray of the cone coinciding with the axis of the cornea, is not in a straight line, and for this reason:—

While treating of the anatomy of the eye-ball, I dwelt on the want of symmetry in its parts. The pupil we saw is not directly in the centre of the iris, but is towards the nasal side. We saw also that the crystalline is towards the nasal side of the eye-ball, so that its axis does not correspond with that of the cornea and iris, but with that of the pupil.

In consequence of this, as was first pointed out by Dr. Wells, the ray which coincides with the axis of the cornea, will fall to one side of the axis of the crystalline, and, therefore, entering it obliquely, will be refracted.

According to this, there is no such line as that to which the name *optic axis* was formerly given. Dr. Wells, however, retained the name in a more correct acceptation.

The rays of light from the upper extremity of an object, fall on the lower part of the retina; those from the lower extremity of an object, on the upper part of the retina. The rays from the two extremities of an object, must thus decussate in their course to the retina. The point where this decussation takes place, is called, the *focal centre of the eye*, and is about 6-10ths of an inch in front of the vertex of the retina; that is, close to the

posterior surface of the crystalline. The angle which the axis-rays of the pencils, proceeding from the extremities of an object, form at the *focal centre*, or point of decussation, is called the *visual angle*. The angle, formed by the same rays, prolonged to the retina, after decussation—that which is subtended by the image on the retina—is in consequence of the convergent action of the lens, something less than the visual angle; but so little, that the difference may be disregarded, and we may assume the visual angle under which any object is seen, to be the same as the angle subtended by the image on the retina, and take it, therefore, as a measurement of the image on the retina, and consequently of the apparent magnitude of the object.

LACERATIONS, &c. OF THE PERINÆUM.

By CHARLES CLAY, Member of the Royal College of Physicians, London, Graduate of Edinburgh, Author of "Peritoneal Sections," and Lecturer on Medical Jurisprudence, &c., Manchester.

(Continued from Page 214.)

In addition to perforations of the perinæum, Velpeau remarks, that lacerations frequently occur; the latter, however, are but seldom connected with the true perinæum; when they are, it is a tearing from one of its terminations towards its centre, and but seldom in the median line. The parts immediately connected with the perinæum are liable to laceration more frequently than is generally supposed, certainly, more frequently than the true perinæum. These lacerations, or slits, are sometimes transverse in the vaginal canal; when small, they are of little consequence, and soon cured; if such lacerations occur near, or at the anus, which they sometimes do, injuring the sphincter, aud connecting the vaginal and intestinal canals, then the case is one that will require every attention from the surgeon. The causes of these injuries are pretty nearly the same as those of perforations, into which I shall not at present enter. Speaking of the support of the perinæum during the last stage of labour, Velpeau deems *it necessary, if properly applied*, but admits that strong arguments have been advanced by various writers, tending to prove that support of any kind to the perinæum in the last stage of labour, is "decidedly uncalled for, and unnecessary;" and *though I may not be inclined to go quite so far in my condemnation of support as this*, yet I feel confident that, in very many cases, such support is not only improperly and unnecessarily applied, but that very many of those lacerations and perforations to which the vaginal and perinæal membranes are liable, *may be traced to such support as the cause of mischief.* Most authors on midwifery are willingly and good-naturedly disposed to consider these lacerations and perforations, in many cases, as an unavoidable accident; yet it is impossible for the eyes and ears of reflective individuals to be closed against the four following positions :—

1st. In the practice of a careful and experienced accoucheur, cases of laceration and perforation are scarcely known; at all events, they are extremely rare, and only connected with extraordinary circumstances. 2ndly. In the animal kingdom where (with one or two exceptions at most), no artificial aid is ever given, we never hear of, or see a case of laceration, putting aside the case observed by Harvey in a mare, which injury might possibly have arisen from some other injury inflicted previous to labour. I have myself seen breeding mares, previous to casting their foals, affected with pruritus, and, by rubbing themselves against trees, stumps, &c., inflict no little injury upon themselves. 3rdly. In cases of labour in the human being, where no assistance at all is rendered, either from the desire of secrecy, or rapid birth, lacerations, &c., are unknown; and this is the more remarkable, as the former class includes the young and inexperienced, first labours, &c., when the parts are the least disposed to give way to dilatation; whilst in the latter, by the quick descent of the head, the natural evolution on its own axis in surmounting the perinæum (which is so easily observed in a slower process) is, in a great measure, defeated by the descent assuming too much of a straight line, and, therefore, is more liable to rupture the parts opposing its advancement. 4thly, and lastly, a fact which is of great importance, is that in cases with lacerations, &c., have occurred, and from circumstances that have been concluded unavoidable, yet in subsequent labours, even with larger children, the women have escaped without any such injury, although it must be borne in mind that a cicatrix had been formed, and that cicatrix thereby rendering the parts less disposed to dilate than they otherwise would be, if no such state existed. On calm reflection, without prejudice, I think it must be admitted that these four positions go very far to prove that lacerations ought to be (not as a very modern author has declared them to be) "an accident of very frequent occurrence," *but one of great rarity;* as I have before stated, I know of no better test of bad practice than its frequent occurrence. That too officious meddling, under the idea of giving assistance, is a very frequent cause of laceration, there cannot exist the slightest doubt, nor that this accident is of frequent occurrence among midwives; the case brought forward by Velpeau of Madame B. in the early part of this article, if I am not mistaken, will fully confirm my views of improper interference. It was a first labour; the pains had been moderate from six o'clock in the evening to midnight; at two in the morning they were strong; at five, when M. Velpeau attended, the head was protruding through a perforation in the perinæum, and the delivery was completed through the perforation. In this case, I do not say that there is any proof, from the statement, that improper interference had been attempted; but it is extremely probable that the midwife's patience had been exhausted, and, to provoke more effectual pains, some rude attempts at assisting the patient had been practised, and the rupture was the consequence. Another circumstance which throws suspicion on this case is, that in lacerations or perforations, generally the head or part presenting escapes at the moment of rupture; but with Madame B. the rupture occurred some time before M. Velpeau arrived, and even then, the head was not expelled; in all probability, the rupture had been made before the head pressed upon the perinæum at all; and perhaps I should not be far wrong, if I stated the probable cause of rupture was the midwife's fingers, in illustration of which I will relate a case that occurred in my own practice some years ago. I was sent for, late one evening, by Mrs. T., a midwife, to a case which she had attended from the early part of the day; the pains had been very trifling; when I arrived, the midwife seemed much alarmed, and on enquiring what was the matter, the midwife said "the patient had torn herself." I immediately requested to know how that had happened; the midwife hesitated, and gave me very unsatisfactory answers, ending them with a request that I would go up stairs, and examine for myself: "but I suppose the child is born?" "no," replied the midwife, "it is not; and it is some time since she had a pain." I therefore went to the patient, not forgetting, however, to tell the midwife that it was a strange statement, for a patient to tear herself, and the child not yet born. On questioning the patient, I found she had had scarcely any pains, except whilst the midwife was pretending to help her. On examining, I found the presentation natural, but the head had not descended the pelvic cavity sufficiently to press upon the perinæum; but, to my astonishment, I found a large perforation of the perinæum, through which I could easily pass two of my fingers. I afterwards challenged the midwife with roughly treating the patient, and causing the mischief, when she candidly confessed, that in order to bring on pains, and, as she termed it, to make more room for the child, she introduced her fingers into the vagina, and pressed the perinæum downwards forcibly, at which time her finger ends unfortunately went through, at which she was so frightened, that she immediately sent for me; she further stated, it would be a severe lesson to her; nothing would ever induce her to do the like again; and, therefore, hoped I would give her every assistance in my power.

As there had been a cessation of pain for a considerable time, and the patient disposed to sleep, I set the midwife to watch, with strict orders to send for me the moment pains occurred, but on no account to meddle with the case. The patient continued to rest for nearly five hours, when pains came on; I was sent for, and though only at a short distance, before I could get there, the child and placenta both lay on the bed clothes, so that I cannot say it was positively born through the rupture; but I am quite of the same opinion with Velpeau, that the head could not have passed over the opening, and got over the band formed at the vaginal end of the perinæum. The case did well; and in a subsequent labour, two years after, she bore a large child without any such accident, and without any assistance.

From all that has been written on this subject, it is evident that the principal cause of laceration and perforation, is unequal pressure on the perinæum, by the child, in its presentation, assuming such a position, that the various parts presenting form points of pressure instead of a broad equal surface, as in a natural presentation. Again, the presentation may be natural, but, in consequence of the premature rupture of the membranes, or deficiency in the mucous secretions, the head, in bearing down, *pushes the perinæum before it*, and does not *slide along it* by the assistance of the secretions; the fact is, that the head loses the power of turning on its own axis; under these circumstances, lacerations are probable, particularly in first labours, and where the presentation deviates from the natural; independent of the deficiency of the secretions, the unequal points of pressure offer additional difficulties against the part, presenting, sliding along the internal perinæal surface; therefore, the perinæum is pushed before it, and often lacerated. If I admit, for the sake of argument, that counter-pressure, or support to the perinæum, be necessary: how are we to apply it, so as to avoid the perniciousness of doing it unequally? If unequal pressure from within is mischievous to the advancement of labour, by analogy, it stands fair to reason that outward unequal pressure would be attended by the same disadvantages. It is impossible to apply pressure to the perinæum from without, except by adding to the difficulties that the part presenting has to contend with, in sliding over the perinæal surface; the true secret of laceration is not the want of sufficient dilatability in the perinæal membrane, but in the dryness of its internal surface preventing the part presenting from taking its natural course for ultimate expulsion. Some accoucheurs support the perinæum by pads of cloth; others, by the fingers, or palm of the hand; others, again, recommend, not the support of the perinæum alone, but to check the too sudden advancement of the head, or part presenting, by pressing against it in the line of advancement. With respect to the application of pads of linen, or, in other words, a napkin, to the perinæum as support, it must be borne in mind that nature intended both sides of a membrane (to be so extensively dilated,) to be kept moist; and if any accident, maltreatment, or natural deficiency should have taken away, or lessened the secretions from the internal surface, can there be any reason or common sense in applying a pad to absorb the trifling secretion that may be left on the outside of the membrane? On reflection, it appears so absurd that it is a wonder such a practice was ever followed. If any support is really necessary, the only legitimate means is the palm of the bare hand, or fingers, which, if done properly, would not be quite so objectionable; but the common method of applying serves it for pressure on one point only; it is, therefore, unequal, and as the pressure is invariably made against the part presenting, the pressure only tends, as I have already stated, to prevent the part from sliding over the inner surface, and, therefore, is not the protection against laceration, &c., that is generally supposed. To apply the hand effectually, and with some prospect of advantage, it is not only necessary to smear the hand with some unctuous matter, but also to curve the hand, so as to cover the ball-like mass shewing itself at the perinæum at the time of its dilatation, and then apply *but a slight degree of pressure*, the principal object being rather

assist by a curved sliding motion the part presenting to accomplish its proper revolution on its own axis, within the pelvic cavity. The mere antagonist pressure against the part presenting, without reference to the perinæum, appears to me calculated rather to encourage the prospect of perforation, than of protecting the parts from it. *Whenever I have had occasion to use support,* I have invariably used the hand curved, and smeared as above related; but I must confess I am no admirer of the practice of support to the perinæum, although I have often practised it. Old customs are not so easily laid aside; and it is yet more difficult to introduce any thing by way of a substitute into practice, although it may not be entirely new, and may have the support and experience of many. I have already stated *that it is the unequal pressure on the perinæum, whether that pressure be from within or without, that is the cause of laceration,* along with a deficiency of the necessary secretions. In order to satisfy myself more particularly on this point, I made the following experiment. Two pieces of sheet caoutchoue were cut of exactly the same length, breadth, and thickness, (viz. length—two inches and a half) I took one piece, and gradually extended it until I reached the length of twenty inches; then taking the other piece, I applied a strong pressure on the centre of the piece of caoutchouc, against the surface of a table, and then gradually endeavoured to extend it to its full powers at each end, when I found the powers of extension considerably diminished, and nothing like what was observed in the first piece tried. This was no more than might be expected; because the part receiving the pressure of the thumb, and the counter pressure of the table, was prevented from exercising its powers of dilatation, and, therefore, the part on either side the thumb must be required to extend so much more in proportion, being robbed of the assistance of one-third of its substance; now it is evident that the second experiment with the pressure could never accomplish the same dilatation as the first experiment, without laceration; not only because the pressure might be unequal, but that the parts pressed upon could not dilate in the same proportion; and also more dilatation (exceeding its powers) was required from the two extremities not pressed upon. Another experiment arose from the trial of the two preceding, viz.: a similar piece of caoutchouc was found to extend itself equally well, *nay even better,* when extended on a curved surface, which, in fact, was pressure on one side only, and analogous to the pressure of the child's head on the perinæum. The above experiments will be perceived, on the slightest reflection, to be of great importance; the analogy between the caoutchouc and the perinæum in time of labour is very close; indeed so close that I am sure the reasoning upon it is no more than just. Now let me turn to the consideration of the perinæum itself. Suppose (which is the fact) that in time of labour, in order to allow the expulsion of the child's head, it must dilate to a certain given number of inches; and that, if left to itself, with pressure on one side only, (the child's head), and the secretions sufficient, it is quite able to accomplish the extent of dilatation required. Then take the same case (particularly if there has been too much officious interference), the membranes ruptured, and the natural consequence—the secretions deficient; then add to the mischief, by applying counter pressure on the outside of the perinæum to the part presenting, preventing the part pressed upon from giving its share of dilatation, whilst the parts unsupported are called upon to do more than they are capable: what is the result? Laceration, or perforation; such certainly is the most probable prospect; and I cannot but imagine that every unprejudiced mind, on calm reflection, must see it in the same light. If these views are correct, it must follow that artificial support to the perinæum during the process of dilatation, is not only improper, but decidedly pernicious; and I should say, more frequently the *cause*, than the prevention, of rupture or laceration. If then the old practice of support be founded on erroneous views, the sooner it is got rid of the better; and the sooner other methods more congenial with nature are substituted, the greater credit will be attached to the practice of midwifery. Nor am I alone in the supposition that to support the perinæum is next to useless. M. Pinel Grand-Champ, in his Thesis, 1825, considers it as injurious and unnecessary; and Mende, successor of Osiander, at Gottingen, taught the same doctrine in Germany. Schimitt reasoned in a similar manner; and I believe the non-support of the perinæum has been taught in the Dublin school, as well as in others, which to relate would shew a formidable list of names, among which will be found some of considerable standing and experience. If practitioners suppose the question settled in favour of artificial support, merely because it is the more generally practised, they are mistaken; truth, though slow in its advances, (in science particularly) is, nevertheless, certain ultimately to prevail; and when at last convinced, we often wonder that it should have escaped being acknowledged so long. The plan I suggest as a substitute for this improper and artificial support, is one that has long been practised by myself and many others; it is therefore less to be objected to than a new proposition, however good, emanating from some one or two individuals of comparatively little experience. It is simply neither more nor less than lubricating the vaginal canal and external perinæum freely with lard, from which the salt has been previously washed (or some other similar substance); a portion, the size of a walnut, should be introduced as high up in the vagina as possible, and allowed to melt there, independently of some being applied externally; this answers the place of the mucous secretions, facilitates the descent of the head, but particularly assists in allowing the head to slide on its own axis over the perinæum. In a long practice, I never had a laceration where the parts were well lubricated, and I have heard no few practitioners declare the same, who have been in the habit of using lubrication. I do not deny but that, under any circumstances, a laceration might possibly take place; but I again assert, *it ought to be a very rare occurrence indeed; and will be so in a good accoucheur's practice.* Where lubrication is used, there is not the slightest occasion for support by artificial means. After all, some may deem it preferable to use the support to the perinæum; if so, let it be understood that it should be given by the hand curved, and covered with lard, as already directed; and that when applied, no force of pressure should be used, but simply holding the hand to the parts without pressing hard, the object being rather the assistance of the natural efforts in advancing the presenting part forward, towards the vaginal outlet, that is, assisting the natural revolution of the presenting part within the pelvic cavity. This article has become of greater length than I at first intended it to be, and some may say too long for the matter under consideration: to this I answer, most important results frequently arise from apparently trifling circumstances, particularly in subjects connected with midwifery.

The next subject on which I shall venture to offer a few remarks, is the following question; "Has diet any effect in lessening or increasing the volume of the fœtus in utero, so as to be attended with any peculiar facilities, or the contrary, in difficult labours?"

(To be continued.)

COURSE OF LECTURES ON THE THEORY AND PRACTICE OF MEDICINE.

Delivered by C. J. B. WILLIAMS, M.D., F.R.S., Professor of the Practice of Medicine, and of Clinical Medicine, at University College.

Disease of the Cardiac Valves—(continued).—We were yesterday considering the signs and symptoms of valvular disease, and I adverted to the two chief classes of these diseases—the obstructive and regurgitant; the signs of the obstructive aortic being connected with the first sound, and the regurgitant aortic with the second sound; but regurgitant mitral is, in some measure, connected with the first sound. The distinction between the obstructive aortic, and the regurgitant aortic, is obvious. The mode in which it is distinguished, is by the manner in which the sound is propagated to the walls of the chest; the regurgitant mitral being transmitted most distinctly, and chiefly at the part corresponding with the apex and surface of the left ventricle; it is not heard so much in the upper part of the chest; whereas the sound of the obstructive aortic is above that, and is chiefly heard from the middle to the top of the sternum. Speaking of the symptoms produced by disease of the aortic valves connected with arterial excitement, there is almost always hypertrophy of the heart, and the arteries become the seat of an unusual impulse, a jerking kind of motion; and the symptoms, if the hypertrophy is considerable, are rather those of arterial excitement, than of venous obstruction. On the contrary, mitral regurgitation and mitral obstruction produce especially the signs of venous obstruction in various parts of the system; in the vessels above the left auricle, and in the lungs, producing pulmonary congestion, pulmonary apoplexy, bronchial flux, sometimes hydrothorax, and bronchial congestion, with a liability to inflammation and congestion of all the other viscera, to a great degree. Thus, the whole venous system is affected; the right side of the heart is dilated, and regurgitation takes place, and the veins of the neck and brain become congested. The regurgitation produces, sometimes, lethargy and stupor; and the other organs, more particularly the liver, are affected.

We find that a long continuance of this disease causes structural changes to take place in the different viscera; the lungs are more hypertrophied than usual; the liver, more especially, is enlarged, not merely under the influence of congestion, but a species of hypertrophy; and sometimes, there is a transition to a state of subsequent contraction and degeneration. The same thing takes place in the kidneys; and thus, diseases of other organs are superadded to the disease of the heart, and this super-addition of other diseases is really a common cause of the fatal termination of regurgitant disease. The different valvular lesions I have mentioned may be combined together; in some subjects, you will have murmurs in both situations, referable to the mitral valves and the aortic orifice. The mode of distinction, here, is by the loudness and the distinctness of character of the murmur in both situations. Under these circumstances, you may have the aortic murmur heard in the middle of the sternum, and transmitted, as usual, to the arteries; but you hear also a loud distinct murmur at the apex, as loud as at the mid-sternum.

I have already mentioned that there are some cases of aortic murmur transmitted to the apex of the heart; but the character is usually different in this and in mitral disease. The sound of the latter is shorter than in the murmur which is produced at the aortic orifice. The aortic murmurs are never so superficial. The blowing or whistling sounds are likewise different in character in these two cases: there is a deep, grating, hoarse murmur in the aorta, whereas the murmur at the apex is loud, whiffing or blowing. This distinction is very useful in our prognosis, more particularly if these murmurs supersede the natural sounds. Then, you know, in conjunction with these, the other signs of the disease may be different; and the great reason why these signs of heart-affections are sometimes so complicated, that we cannot determine the position of the murmur at any one particular spot, is, as I before stated, because the enlargement of the different parts of the heart causes great displacements and alterations of position; and the only constant relation which is preserved, is with regard to the direction of the current into the arteries, or its direction backwards through the auricles.

Prognosis of Valvular Disease of the Heart.—Now, with respect to the *prognosis:* this is very important, especially when valvular disease is combined with other lesions. There is a common notion abroad, that it is very difficult to combat organic diseases of the heart, and that they must be speedily fatal. But this is far from being the case. It is so, in the worst forms, certainly; but organic disease of the heart presents every variety, and there is no doubt but that, in the slighter forms, we may, by placing the patient under more favourable circumstances with regard to regimen and medicinal agents, prevent the dis-

ease going further; and, in even the more serious cases, by proper treatment, the disease may be retarded.

The prognosis of valvular disease of the heart is serious, in proportion to the amount of the lesion, and the departure from the natural condition. The amount of hypertrophy and dilatation will be determined by specific signs; and the amount of valvular lesion by the murmurs superseding the natural sound, or by the irregularity of the hearts' action. Another important element is, the suddenness of the invasion of the disease, which sometimes renders the case more dangerous than where there is a greater amount of lesion, which has come on more gradually. This rule is applicable to all organic diseases. It is remarkable, on opening the bodies of persons who have been long suffering from this disease, to see the extraordinary amount of valvular lesion present; so extensive, indeed, in some cases, that the whole hydraulic apparatus is completely perverted in its mechanism; the muscular structure is greatly changed, and it is a matter of astonishment how persons could live with such an amount of disease. If, in such a case, you inquire into the history of the disease, you find it has been going on for a very long period, so that, in fact, the system has accommodated itself to this imperfect structure. On the other hand, persons die with all the symptoms of obstructive disease of the heart, and yet the lesion is only very trivial; this arises from the suddenness of the attack. Another thing to be considered, is the state of the constitution, which materially affects the tendency of the heart to disease, general weakness, or cachexia, materially increases the chance of a fatal termination from heart-disease; in fact, heart-disease proves fatal in most instances, not so much by the sudden suspension of the heart's action, as by the gradual failure of all the powers of the system; and, inasmuch as the circulation fails when the blood is bad or vitiated, this poverty or diseased state of the blood often hastens, in a remarkable degree, the termination of the disease. A pallidity of the countenance, a congested state of the veins, weakness of the circulation, constant coldness of the extremities, and dropsical effusions, are all indications of the approach of a fatal termination.

There are two circumstances which are more particularly the cause of death in organic disease: one of these is inflammatory excitement of various organs, leading to their subsequent exhaustion. This is apt to occur in various organs, perhaps more particularly in the lungs, which become congested, and afterwards inflamed. Great bodily exertion is another cause; and, belonging to this head, we find a degree of over excitement, disproportioned to the powers of the system. Sometimes the excitement leads to a fresh attack about the heart itself, inducing endocarditis, pericarditis, or some of their varieties, which greatly aggravate the lesion already existing, and produce a fatal termination.

There is another class of effects; and that is the gradual disease produced in other organs by heart-disease. Structural disease in other organs is a frequent result of heart-disease, producing a disturbance of the circulation, and a stagnation of the blood in the capillaries. A congested state of the liver commonly presents itself with heart-disease, and if this goes on long, it tends to produce structural changes; and the alterations that most commonly occur, in connection with these affections, are granular thickening of the liver and the kidneys, accompanied by an impaired state of the functions of these viscera, which re-acts upon the heart, and on the pulmonary circulation, and prevents the purifying process of the blood, so essential for the preservation of its proper state, and its circulation through the body. It is when this granular thickening becomes thoroughly established, that the system exhibits signs of a permanent break-up, under which the patient lingers for a time on the brink of the grave, and at last dies.

Treatment of these Affections.—Now, bearing these facts in mind, our treatment of valvular lesions would not appear to be so hopeless as has been generally considered. We should examine the bile and the urine, and see how they are secreted; and we may, by appropriate treatment, hope for considerable improvement in any condition of heart-disease. There is scarcely any condition in which the system may not be kept up for some time by proper measures, patching up the system, and watching its variations from the known standard.

The general treatment of a diseased heart, in the first place, is to be directed according as excessive or defective action predominates. There are cases in which excessive action, connected with hypertrophy, is predominant, and the action of the heart and the neighbouring arteries very strong. Moderate sedative and depletory measures should here be adopted. The same thing is to be said in case of inflammation: the treatment must be more or less antiphlogistic; although we have not the same means of knocking down the inflammation altogether, as we cannot with impunity reduce the system to too great an extreme in these cases. Another class is that in which the action is altogether defective, as shewn by faintness, weakness in the circulation, and irregularity of the heart's action. This is generally benefitted by stimulating means; but remember, there are some instances of defective action, where the heart has already got such a load that it cannot propel it, and we shall here give more relief by taking away some of the blood. This is the congestive form of the affection; and in congestive affections, as well as in increased excitement, it may be useful to use depletion to a moderate extent, and as a temporary measure; on the other hand, where there is a deficiency of blood in the system, and a tendency to anæmia is obvious, from the pallidity of the countenance, and the extreme tendency to dropsical effusions, this, generally speaking, will be benefitted by a treatment of a more or less stimulant character.

We must consider, likewise, the different kinds of lesions as modifying, in some degree, the treatment. As a general rule, it may be stated (from which, however, there are some exceptions), that diseases of the aortic orifice, connected with a considerable amount of hypertrophy, commonly require a great amount of depletion, and an antiphlogistic treatment. I question if the same treatment should be observed, with regard to medicine and regimen, in lesions of the mitral valves, also. This is the general rule; but, still, all is to be done in a gentle way, not carrying the depletory measures to an extreme. The diseases connected with the mitral orifice are more commonly attended by weakness of the system and the circulation, by which the pulmonary organs may be greatly congested; and mild tonics should be administered at the same time, or subsequently to other measures. When the structural disease is considerable, these medicines should be reserved for the periods of intermission. We may divide the exacerbations into two classes: 1° They may take place from mere nervous excitement, mental or otherwise; attacks of violent nervous palpitation, referable to mental anxiety, or something disturbing the digestive organs. Here, palliatives, such as hydrocyanic acid and opium, with mild aperients, will often prove means of relief. There are effects produced by these exacerbations that require attention; when the heart is healthy, the effects will pass off without any remedies; but when the heart is diseased, we have not only to remove the immediate consequences of this excitement, but also the previous morbid effects; thus, if the lungs be congested, means should be adopted to act on the circulation, and keep up the action of the blood; if the liver is affected, measures should be taken to act on its secretion, as doses of mercurial medicines. It is a very useful practice in all these cases, to give diuretics, combined with mercury, for a short time, after any attack of this kind. I do not know that anything better can be suggested. In combination with blue pill, henbane and squill, with a little digitalis, if the action of the heart is not very weak, may be given; two to three grains of blue pill, the same quantity of extract of henbane, one grain of quinine, one grain of squill, and half a grain of digitalis, are the best constituents for a pill, and form one of the most useful combinations that I know of, not only for removing congestion, but also the low inflammatory states that are sometimes produced.

Besides these nervous cases, there are exacerbations of a sub-inflammatory character, produced by exposure to cold, over-exertion, and the occurrence of rheumatic affections. Under these circumstances, the chief remedies are: moderate antiphlogistic measures; generally, local depletion at the region of the heart, by cupping or by leeches, followed by blisters; and mercury and opium are sometimes useful in these cases, but the pill mentioned before answers extremely well. Diuretics should be combined with these, until the congestive and sub-inflammatory symptoms are removed. When the patient is extremely weak, so that we are afraid of withdrawing blood, dry cupping is often useful. This is not, however, so saving a measure as is generally supposed. I have found many physicians recommend dry cupping, under the idea that it saves the blood, but this is a great mistake. It causes extensive effusion of blood into the cellular texture, and the blood is decomposed, and is no longer useful; it is formed into a clot, and must be absorbed again, in an altered state. The exhaustion from dry cupping is much greater than when the scarificator is used. Besides this remedy, plunging the hands in hot water rendered stimulant by mustard, or the application of a poultice, is useful. If there is anything like a rheumatic tendency, the best kinds of remedies are colchicum, and iodide of potassium, as a means of acting on the secretions. When these temporary exacerbations have subsided, and the circulation is relieved, great benefit will be derived from tonics or mineral acids. The most useful is nitric acid. Gentian, too, is used with benefit. Mineral acids are serviceable where there is a disposition to dyspepsia. In cachectic states, where there is a deficiency in the quantity or quality of the blood, stronger tonics are employed, particularly iron in its various forms.

Complications of Heart-Disease.—In cases of disease of the heart, we have likewise to consider the morbid conditions that arise from a defective state of the circulation. Dropsy is the chief of these conditions, and it has to be treated, generally speaking, with diuretics and purgatives. Those diuretics I have mentioned, under the head of dropsy, are useful; acetate of potass is serviceable in inflammatory cases, combined with digitalis or squills, and also sweet spirits of nitre, and spirits of juniper; tincture of cantharides is also allowable; but no diuretic has so good an effect, in such cases, as the pill I mentioned before. Measures should also be adopted to relieve the congested state of the kidneys, where their secretion does not go on. Cream of tartar, &c., is useful. Elaterium is an admirable remedy for getting rid of the dropsy, and improving the action of the liver. It, however, is apt to cause great sickness, and a tendency to faintness, and, generally speaking, cream of tartar, in large doses of from half an ounce to an ounce, taken in the morning, produces free watery stools, to a great amount. It should be continued at the same time that tonics are given. After this, it may be useful to give tincture of digitalis, with the tincture of cantharides. When the dropsy continues, it may be necessary to combine these diuretics with tonics. Dr. Abercrombie recommends a combination of squills with sulphate of iron; but I am not so strongly impressed with its utility. Tartar emetic is very useful in cases where there is not too great weakness. Chalybeates and tonic medicines do much towards promoting the action of the excretory organs, as well as increasing the general strength of the system. The treatment of diseases of the heart is a very important subject. The chief object is to preserve a proper balance in the system: to avoid extremes; and to try to adapt the circulating powers to the existing defects, as well as to avoid all circumstances which overtask the organs of circulation. Gentle exercise, or friction, greatly promotes circulation, and it is also much benefitted by the improvement of the excretory and digestive organs. As a general rule, in organic diseases of the heart, the diet should be as nourishing as the digestive organs will bear, without producing fulness or inflammation. The starving plan, in

organic diseases of the heart, is most prejudicial. I have seen many cases where this plan has been adopted, and which, with scarcely one exception, were invariably benefitted by a return to a moderate nourishing diet. The diet must be proportionate to the digestive powers. There are some few cases, it is true, in which the regimen must be abstemious. These are where inflammation is present, and exacerbations arising from inflammatory action; or else, where there is a great amount of hypertrophy of the heart, and continued increased action, &c. Under these circumstances, the diet must be extremely sparing for a time. But by far the greater number of cases of heart-disease proceed from nervous irritability. One great rule, in relation to the diet of a patient affected with cardiac disease, is to take care that the quantity of food taken is not too great in bulk, and, therefore, vegetable food should be avoided as much as possible. This is one reason why a moderate animal diet, in conjunction with farinaceous food, is better than slops, or things of that kind, which distend the stomach without giving it strength. It is necessary, therefore, to avoid any large bulk of liquid. Many patients find out by experience the utility of modifying their diet, so as to make it of as dry a condition as is consistent, taking scarcely more than half a tumbler of liquid at their dinner. If the system becomes encumbered with a great quantity of liquid, mischief results. Further, it is important to avoid anything that will tax the heart, and excite it to excessive or undue action. In severe cases, this should be particularly studied, and the patient should not be allowed even to go up stairs, or ascend to any apartment not on the same floor; he should always walk on the same level. Constantly lying down, or sitting in one position, should be avoided; and walking about, now and then, so as to enliven the system, is desirable. Friction of the extremities, if the patient is too weak to move about, should be employed, two or three times a-day, so as to promote the circulation. In many cases, moderate exercise is highly useful, not merely on account of promoting the circulation, but also the action of the various functions of secretion and digestion. Exercise in the open air, and on horseback, is highly desirable, gentle riding answers very well. In this way I have seen cases, that had gone on apparently to their last stage, completely recover. Mental tranquillity is an important element towards recovery.

No absolute rule can be laid down with regard to stimulants. They should be used in the smallest quantity. Malt liquors increase the action of the heart, to a great degree. Many persons are in the habit of taking malt liquors, and a certain quantity in these cases is essential to their common mode of diet; so that this must depend very much on the habits of the individual. Generally speaking, white wine, with a little water, or weak spirits and water, are useful to act on the kidneys.

WHAT IS THE VALUE OF LIEBIG'S THEORIES?

By Professor Schultz, of the University of Berlin.

(Concluded from p. 212.)

Liebig's work, if closely examined, only contains ideas on the mechanism of the effects of organic life, as also on the chemical state, which precedes and follows life. Liebig labours under a great mistake in considering the mechanism of the effects of life and the chemical conditions of life, as life itself; for he confounds the chemical effect with the primary life and the primary chemical state with the vital effect. In the organism he likewise mistakes cause for effect, taking always the part as a whole, and identifying simple chemical and mechanical relations of the organism with the nature of the whole organism itself: whilst he overlooks the great abundance of really organic and vital phenomena. Liebig always remains in this self-deception, which leads him to think that his researches are made in the science of physiology, while, in fact, he is closely adhering to chemistry. This contains the key for appreciating the value of Liebig's work on organic chemistry. Many errors do not belong to Liebig alone, but to the present century, and originate in the darkness in which the doctrine of vital power is enveloped, and which chemistry was thought to disperse. If we consider one by one the organic phenomena, which Liebig makes the subject of his explanations, we easily perceive that he is constantly misled by this erroneous idea—that the vital phenomena must be explicable through the chemical theory of transformation of matter; and thus he always takes the means of organisation, as its *tendency*, whilst the tendency of organic life is quite lost sight of, and not in any way mentioned. Liebig treats only of the means and ways by which the organisation attains its purpose; but this purpose is entirely and completely neglected by him. Let us suppose Liebig's assertion true, that the supply of air and food form a sort of static equilibrium, by which both depend on and promote each other; his conclusion would still be wrong, that the mutual action between atmospheric oxygen, and the carbon and hydrogen of the food, constitutes the real tendency of life, and that the living body is nothing else but an oven, or a steam-engine, to which Liebig so often compares it. The living tendency might even make use of such chemical and mechanical means, without being mechanical or chemical on that account. But in this respect, the imperfection of Liebig's work goes further than it might seem. For this dependence of inspired air on food, and the mutual corresponding want of oxygen on the one hand, and of carbon and hydrogen on the other, do not at all take place in nature as Liebig represented it; this representation he only created to be applied to his theory. Thus, Liebig says, that the time after which a starving person dies depends on his fatness, on his state of motion, on the temperature of the air, and lastly, on the presence or absence of water. This is explained as if starvation were a process of combustion, in which death ensues, as the fire is extinguished, if no more fuel be found in the body; that is to say, no more fat serving as fuel instead of food. On the other hand, fat will be consumed sooner in the body, if respiration is heightened by work or exercise; and here, it would only be necessary to add, according to the comparison of Aristotle, that the lungs represent a pair of bellows, and thus fire would be extinguished the sooner—the greater the current of air. The greater the want of water, the more is combustion promoted. *The real cause of death by starvation is, thus, the process of respiration.* This is Liebig's own expression!

All this appears very consistent, and it is only a pity that the principal doctrine is false; namely, that the time after which death by starvation ensues, depends on the quantity of fat existing in the body. For the herbivorous animals, which, in general, form much fat, however fat they may be, die in a much shorter time than the carnivorous animals, which form generally hardly any fat. A lean carnivorous animal—a dog or cat—starves from four to six weeks before it dies; most of the rapacious animals must often starve for weeks, before they succeed in seizing new booty; still they maintain themselves all this time without fat. An herbivorous animal—a fat sheep, a hen—cannot starve above eight days, in spite of their fat. This is the real physiological fact, which, however, does not at all agree with the chemical theory of starvation. That fat is absorbed in starvation, cannot be denied; but not fat alone is absorbed, but all the other organic structures, the albumen, the muscles; and the azotic substances in general, which cannot be burnt, are absorbed as well. But, suppose fat alone to be absorbed in starvation and burnt by the oxygen, could death ever arise from this consumption of fat? "Would," as the author says, "respiration be the real cause of death?" According to Liebig's own theory, it would be impossible. For it is Liebig's principal doctrine, that organic life consists in change of matter, and that change of matter is based on the process of consumption caused through respiration. In other words, *respiration is the real cause of life.* To prove this sentence is the purpose of Liebig's whole work. But now again, Liebig tries to prove, that in death by starvation respiration is also the cause of death. Does Liebig make no difference between life and death? or should both have the same internal principle? Liebig seems still to consider life as somewhat different from death, and to fall here into a little contradiction with himself in his zealous creation of chemical theories, which are to be used for every thing, and are, therefore, of no physiological value whatever. We have particularly mentioned this instance, because it shows best how the chemical theory of life is directed against itself, for life cannot conceal death in its own substance. What is the tendency of starvation? destruction of organic excitement, and dissolution of organic form into chemical matter; but this, in starving persons, is done rather by putrefaction than by consumption; the lungs exhale ammonia, instead of carbonic acid; so much so, that breathing ceases and the blood putrefies. All this seems to be unknown to Liebig. Liebig says that, in a young growing animal, much fibrine and albumine are used for nourishment, whilst circulation and respiration are more accelerated than in the grown-up animal. In these strong respiratory movements, there would be a want of carbon and hydrogen for consumption in the lungs; and in order that calorie be produced, and the invading oxygen resisted, nature, with admirable wisdom, added to the caseine of milk, which alone can be transformed into blood, butter, and sugar of milk, in order to furnish carbon and hydrogen to the respiration for consumption. But we see that the accelerated circulation and respiration of young animals is only apparent, not real; for the heart being very small, expels in spite of rapid pulsations, much less blood than the bigger heart of grown-up animals in slower pulsations. In the same way, the respirations are quicker, but not so deep, and the smaller lung does not allow before puberty a very strong respiration. Thus, nature would have entirely failed in its purpose to create butter and sugar of milk in a strong process of respiration, and at a time (as in a later age), where respiration and circulation are really heightened, it would have omitted to provide for it. On the other hand, we see that butter and sugar of milk really become blood, inasmuch as the sugar of milk (like the sugar formed in the stomach during every digestion) is transformed within the intestinal canal, through the bile, whilst the fat of the milk enters into the constituents of the lymph, and into the lymphatic globules, which form the base of the blood vesicles. This fat is mostly transformed into the colouring matter of the blood vesicles, and this matter, with the considerable quantity of carbon it contains, is eliminated not through the lungs, but through the liver, as gall. Nature is shown here to have had no chemical, but vital tendencies, in the formation of milk. The chemical action in respiration is not the purpose, but only the means of the living organism, to effect assimilation and organisation of food. Thus, the tendencies of life are quite different from consumption of butter. For the rest, we have shown elsewhere, that even in the adult, during digestion, a great quantity of fat is formed, and that it was a great mistake to believe fat superfluous in the sanguification of the adult. Further, Liebig says, the carnivorous animals and man have too little carbon and hydrogen, in their azotic food, to give fuel to the lung. Thus, they are forced to consume a great quantity of food to procure carbon for the lungs. An Indian, who does not mix vegetables with his animal diet, must eat five times as much meat as vegetables, to procure the sufficient quantity of carbon for respiration. Lions and tigers are so rapacious on this account. In warm climates, respiration is diminished, and therefore less food is necessary. But Liebig has here been misled by the common phrases of the voracity of rapacious animals. Notwithstanding their voracity, these animals do not consume half, perhaps, not the fourth part of the food, which the herbivorous animals eat; for the latter eat the whole day, the former rarely. This fact again disagrees with Liebig's theory, and shows that the quantity and quality of food must have other purposes than to serve for com-

bustion. Animal food is difficult to be preserved in hot climates; if taken in great quantity, it is easily decomposed within the intestinal canal, and is, therefore, not so well digested as vegetable food. In the tropical countries, much vegetable food is required, in spite of the diminished combustion (according to the chemical theory). We see that, with his chemical physiology, Liebig never reaches the real purpose of life, unless eating, drinking, digestion, and sleep, are the only vital tendencies. With his chemical theory he does not get out of the intestinal canal, and he does not perceive that life must have another purpose than transformation of matter, and that no change of matter ever can produce the series of vital phenomena, which arrest our particular attention. If we consider the world as a whole, it is certainly very interesting to investigate the relation between the external world and the organism; but these relations are not life itself, but means of life, and outcasts of it, and this difference must be adhered to. In conclusion, we must remark that Liebig is not the only one who fell into the above mentioned errors; his way of applying chemistry to organisation, must rather be attributed to the influence and spirit of our age. Many others incur the same blame; only Liebig, not knowing the difficulties which physiology laid in his way, and unacquainted with the dangers to which he exposed himself, has been induced to go deeper in this erroneous direction, than he would have done otherwise. As for the rest, we must observe, that we acknowledge with great pleasure Liebig's great merits as a chemist, and that they will afford great interest to the physician as regards the residue of life. But we consider it our duty to oppose with all our might an erroneous application of chemistry to physiology, in which the doctrine of transformation of matter and of chemical process is confounded with the process of life, because the consequence of this mistaken application may have an injurious effect on practice.

PARISIAN INTELLIGENCE.

(FROM OUR OWN CORRESPONDENT.)

Paris, June 20, 1844.

On Typhoid Fever.—Dr. Guersant, senior, physician at the Children's hospital, made the following remarks on a case of this affection, complicated with parotidœa, then in his wards. The patient, though apparently of a strong constitution, was lymphatic, and subject from childhood to ophthalmia, and swelling of the ganglia of the neck; besides which, the skin was thin and white, and the muscular system but slightly developed. These symptoms counter-indicated the use of powerful depletory remedies. Vomiting took place, as usual, only during the first two or three days; this symptom is occasionally observed to persist much longer, and then the case is far more serious, and frequently fatal. In general, it is preceded by constipation, and this coincidence, according to a recent author, ought never to be lost sight of, as it indicates that the danger is great. In this case the constipation disappeared without any purgative having been administered, and was followed by diarrhœa, which was soon after succeeded by constipation a second time. Generally, diarrhœa exists from the beginning, and very rarely does the obstipation last longer than a week, whether the former be spontaneous, or produced by the administration of a purgative, which, as you know, is used in certain forms of typhoid fever; when once established, it continues more or less abundantly throughout the different stages. Involuntary stools take place only in very serious cases, as when adynamia exists; this state never occurs in the first stage, but generally in the second or third week; it then indicates in general a fatal termination. The diarrhœa is sometimes accompanied with pains in the abdomen; it must be clearly understood that I mean spontaneous pains, not those produced by pressure; these last, in the majority of cases, being among the number of the local phenomena, whose existence is necessary to enable the practitioner to establish a positive diagnosis. As to the former, when present, they are felt chiefly around the umbilicus, in the epigastrium and still more so in the right fossa iliaca. Meteorismus, when observed, comes on usually from the 6th to the 15th day, and even then it is very rarely seen to persist during the whole of the disease; on the contrary, it sometimes happens that the abdominal parietes retract, become hard, and seem to be closely applied to the intestinal tube. The *gargouillement* is one of the most constant local phenomena to be observed, especially when diarrhœa exists. Though this symptom has been denied by some persons, I, on the contrary, have always met with it in real typhoid fever. The cause of this difference was perhaps because the abdominal parietes frequently require to be strongly pressed to produce it, and as this causes the child to cry, some practitioners content themselves with a superficial examination. This gargouillement is to be met with in the two fossæ iliacæ, and especially in the right. It is remarkable that the tongue, when the disease lasts some time, from white and moist, becomes dry, smooth, brown and fuliginous. Some physicians have asserted that this is because the patient sleeps with his mouth open, but as Professor Rostan justly observes, this cannot be the only cause. In fact, when a person in good health sleeps thus, the tongue becomes dry, it is true, but still remains red; it is therefore evident that the brown colour and the fuliginous state, which sometimes arise, depend on the special nature of the disease, and not because respiration has been performed by the buccal orifice; the more so, as it is only in very intense cases, that this symptom, as well as fœtor of the breath, are remarked. The thirst, in general, is considerable; as to the appetite, you must not attach much importance to this symptom, because children often say they are hungry, without being really so, in the hope that you will allow them to take some food. It is only when they are intelligent, and when you have had opportunities of verifying their veracity, that you must consider their answers as worthy of your attention. The general symptoms are likewise of importance; thus, the external appearance, the *virium defectio*, the colour of the face, the anxiety of the patient, the weakness, &c. As to the disturbances which affect the nervous system, such as cephalalgia, giddiness, *susurrus*, *tinnitus aurium*, it is only when the patient has reached a certain age, that they can be ascertained. Cephalalgia, for instance, can never be recognised in very young children; and I say this, notwithstanding the opinions of the authors already mentioned, who assert that when it exists, if you shake the head of the child, it frowns or half closes its eyelids. In many cases, the child makes a wry face, and frowns or closes its lids when you shake its head, without it being possible to attribute this to the presence of cephalalgia. Let us, therefore, set aside these subtleties of diagnosis, and admit that often it is impossible to ascertain whether headache exists or not; when it does, it seldom lasts long, but generally disappears from the seventh to the tenth day. The diseases of children present this peculiarity, viz: that it is often difficult to discover such or such a symptom, which by its presence would render the diagnosis much easier. Thus, delirium is as difficult to recognise as cephalalgia; in very young children, it is replaced by other symptoms indicative of a disturbance in the cerebral functions: such as agitation, screaming, anxiety, &c. It exists rarely in the commencement of the disease, coming on generally from the seventh to the fifteenth day, and then only in serious cases. Sometimes it is accompanied by stupor; and from time to time, by coma. Disturbances in the different senses are frequently met with in children affected with typhoid fever; such as, susurrus, tinnitus aurium, deafness (which comes on generally from the ninth to the twenty-fifth day), with or without otitis; as to those of the eye, they can only be relied on, when the patient is old enough to give an account of his sufferings. Another symptom, though secondary, ought never to be omitted; the apparition of lenticular, roseate spots, or papulæ, on the thorax and abdomen. This sign, characteristic of typhoid affections, appears in children somewhat sooner than in adults; in these they are seldom seen before the end of the second septenary period, whereas in children they develope themselves sometimes on the fourth day, but being few in number (seldom more than five or six), it is necessary to pay great attention, in order to discover them. Epistaxis indicates a sanguineous congestion of the pituitary membrane; this phenomenon is very frequent, but rarely lasts longer than two or three days, and in general does not constitute a serious complication. The pulse is sometimes so rapid that it cannot be counted, beating from 140 to 160, and even more in a minute. As to the existence of sibilant and mucous rhonchus, considered by some practitioners as one of the characteristic signs of the disease, I consider them more a complication, than a part of the affection, for it may exist without bronchitis. It is, however, as frequent in children as in adults, and the only cases in which it is not met with, are those which are either very mild, or which end fatally in a very short period. This, at least, is the opinion of MM. Rilliet and Barthez, who say that it does not exist in one-seventh of the cases. *Parotidæa*, uncommon in adults, is still more so in children; in more than one hundred cases, recorded by the authors just named, there was only one, and this in a boy aged nine, who died on the twentieth day. It is far more frequent in adynamic fevers, especially when they are epidemic. Let, however, its cause be what it may, it seldom appears earlier than from the third to the eighth day, and its presence indicates great danger. It has been asserted, erroneously in my opinion, that parotidœa is the cause of the gravity of the disease; it being far more rational to conclude, that it is, on the contrary, the result of the gravity of the affection. In general, the later it appears, the less the danger; but when the two sides are affected at the same time, the case is almost hopeless. This, fortunately, is of rare occurrence; though it is not uncommon, when the first does not end in suppuration, that the second increases in size as the first decreases. When the swelling is considerable, painful, rendering deglutition difficult, you must have recourse to local bleeding and emollient applications, followed by discutients, as mercurial frictions. If, in spite of all your endeavours, suppuration takes place, the abscess must be opened at a very early period, for fear of the accidents the pus, by infiltrating itself into the neighbouring parts, may give rise to. The treatment of typhoid fever in children, is very simple; being composed of mild diluent tisannes, emollient poultices on the abdomen, &c.; and experience has proved that, by these means, the disorder goes through its phases with regularity, and ends favourably. In eighteen cases, related by the authors already quoted, not one ended fatally; although in three, the disorder was serious, and in two *very* serious, with a tendency to adynamia. The feeble constitution of the patients, the impossibility of employing local or general bleeding, so as to check the disease, or of making them take saline purgatives, forces the physician to leave the principal part of the cure to nature. M. Stæber, to whom we are indebted for an excellent work on typhoid fever, thus expresses himself: "I think that, in children, still more than in adults, the expectant method is that which ought to be preferred, in the generality of cases." It is natural to suppose that the cure does not take place very rapidly; still this plan, though seldom indicated in adults, unless the physician is called in at a period when he can but remain a silent spectator, is often the only one that we can, nay ought, to recommend for children.

On the Cure of Hydrocele by Iodine Injections,* by Professor Velpeau.—There are few surgical operations so easy, so simple, and which need less preparation; in what, in fact, does it consist? Of a puncture, and the injection of a certain quantity of liquid; after which the patient may be abandoned to nature, which, in general, is sufficient to effect a cure. I have operated on upwards of 300 cases of hydrocele; in my wards at the Charité I receive, on an average, from 30

* The form la employed by Professor Velpeau is the following:—

℞ Tinct. iodin. ʒj.
Aquæ distillatæ, ʒij. M.

to 40 patients yearly, and operate, at least, on 10 in my private practice annually ; and *I now declare that I never had a case in which the consecutive accidents could be attributed to the iodine injection.* A patient, it is true, died, after having been operated on; but death here was caused by inflammation and purulent infiltration of the cellular tissue of the pelvis, *without communication with the tunica vaginalis.* It is, therefore, impossible to attribute this to the operation for hydrocele; nay, what is more extraordinary, especially when compared with similar cases in which the vinous injection was made, is that, on one occasion, the liquid, instead of entering the cyst, was injected in the cellular tissue, and yet did not produce sphacelus. The patients are cured by this method, on an average, in a fortnight, and I never witnessed a case of gangrene or suppuration from its use. It is therefore evident, that the iodine injection produces a degree of irritation sufficient to cure the hydrocele, but does not produce a suppurative inflammation; and this has been proved by experiments on animals, where the liquid is absorbed without causing any accidents. The same result has been obtained in cysts situated in other parts of the body; thus, about three weeks ago, I injected one on the neck, and the swelling diminished in size. It must not be supposed, however, that I assert that the iodine injection never fails; but what may be affirmed without fear of contradiction, is, that it almost always succeeds, failing only once in sixty, or even one hundred cases; unfortunately for mankind, we have but few remedies so certain in their action. This, perhaps, may be attributed to the formula I have adopted. To resume, therefore: the advantages of this method are;—1° that the cure is almost always obtained; 2° that gangrene does not take place, even when the injection enters the cellular tissue; 3° that the operation is sooner done than that in which the vinous injection is employed, since it is not necessary to heat the liquid, or to leave it a certain time in the cyst, &c. If, after the operation, you wish to hasten the resolution, the patient must be treated as for orchitis, and since scarifications with a lancet are useful in the latter, they will equally be so in the phlegmasia which follows the injection. In the generality of cases, this, however, is not requisite, the patient recovering without any remedy being employed ; it, perhaps, takes eight or ten days before he is quite well, but this is not of much importance, as his sufferings are slight. Finally, I have remarked that the iodine injection is a powerful discutient when hydrocele is complicated with *engorgement* of the testicle or of the epididymis.

On Phlebitis Infantum, by Professor Trousseau.—After the birth of the child, inflammation of the umbilicus very often takes place, and propagates itself first to the *extra* and *intra* portions of the vessels of the umbilical chord, and then to the peritonæum and subcutaneous cellular tissue in the neighbourhood of the umbilicus. It is in this manner that it may be explained, why erysipelas in new-born babes, which commences almost always on the skin covering the pubis, and from thence extends itself to the rest of the body, is almost always fatal; and why the opinion was emitted long ago by Underwood, that signs of intense peritonitis exist in cases of death produced by erysipelas. The mode of development of the peritonitis, in this case, is easily explained. The *funis umbilicalis* may be considered, after the birth of the child, as a foreign body, which, similar to an eschar, must be thrown off; and this cannot take place, but by the development of a local inflammation, which, however slight it may be, necessarily exists. Nature in this, as in every other action, decreed that this eliminatory inflammation should be accompanied with no danger. But, as there are no general rules without exceptions, so in this circumstance, and especially during the existence of *febris puerperalis* in an epidemic form, the influences exercised on the mother and the child cause the slightest phlegmasia to be followed by serious accidents and suppuration. It is in such cases that the inflammation of the umbilical vein may extend along the vessel to its peritoneal covering, throughout the whole extent of this membrane, and finally, to the vena portæ and its divisions. The influence produced by the presence of these epidemics was pointed out by Underwood, who stated that erysipelas of new-born babes was most frequent in these states, and that the peritonæum after death presented similar alterations to those observed in the abdomen of the females in fatal cases. Here, the erysipelas seems to be the manifestation of a general disposition of the economy, as unappreciable in its essence, as that of the woman about to be attacked with *febris puerperalis.* In the child, this disposition manifests itself by ophthalmia, aphthæ, phlebitis umbilicalis, peritonitis, erysipelas; the two first constituting the mild, and the three last the dangerous, form. In females, it shews itself by colluvies gastrica, phlegmasia of the ligamentum latum or of the ovary, generally offering but little danger, and by phlebitis of the uterine veins, and peritonitis, which is very often fatal. You may often hear eminent surgeons deplore the loss of numerous patients from erysipelas and phlebitis, even after the most benign operations. These terrible complications may be observed not only in the public hospitals, but likewise in private practice: and almost always you will remark that puerperal fever is very common at the same time. It is, therefore, rational to admit, that a peculiar general cause exists, which exercises an influence on new-born babes, and causes several local affections (some mortal) to develop themselves. The proof of this assertion is not only to be drawn from the simultaneous existence of a certain number of diseases, which present a certain affinity to each other, but likewise from the unusual gravity assumed by local lesions apparently very simple. You had a striking example in the following case :—a child was brought to the hospital and placed at No. 3 (*bas*) Salle St. Julie; the symptoms presented were—a pale countenance expressing great anxiety, fever, uneasiness, small erysipelatous spots near the nose. Though the manifestation of the epidemic influence was very slight, I prognosticated a fatal termination; in fact, the baby died the next day, though the erysipelas had not invaded more than one quarter of the left cheek. The *post-mortem* examination revealed here, as in certain puerperal fevers, no lesion by which so sudden a death could be explained. It may, therefore, be asked if, under such epidemic conditions, the constitution is not, to a certain degree, prepared through the occult influence of a septic state, to yield to the action of the slightest occasional cause. But where is the seat of this cause? is it in the blood? the nervous system? the elementary tissues? These are questions that will, perhaps, never be explained; for, though we are able to verify the effects, and to discover certain distant influences, yet the immediate causes will ever be hid from our view, and remain the secret of Him who gave life to matter, and who alone knows its sudden springs.

On Spontaneous Evolution.—Dr. Danyau communicated the following fact at the last meeting of the *Société Medicale, du XII Arrondissement.* I was called, at about 11 p.m., to see a woman just received at the Maternité (Lying-in Hospital,) and in whom the child presented by the arm. Before her entry, version had been tried, but in vain ; one of the arms was beyond the os externum, as well as a loop formed by the funis ; the child was evidently dead, and Mad. Charrier, chief *sage femme*, considered embryotomy as requisite. On my arrival, the woman had just been taken out of the warm bath, and previously to being put into it, she had been bled, and an emollient clyster administered. On examination, I perceived that spontaneous evolution was about to take place ; the shoulder having descended sufficiently to permit the centre of the clavicle to correspond with the symphysis pubis, the side of the thorax and abdomen as also the hip appeared successively at the anterior border of the perinæum, and the inferior extremities were soon after expulsed, leaving only the head and one arm in the interior; both of these were shortly extracted. What renders this case the more interesting, is, that the gestation had reached its natural term, and that the child weighed upwards of seven pounds.

Academy of Sciences. Sitting of the 17th June—Baron Ch. Dupin in the Chair.—Books received: "Report on the Present State of Knowledge of the Nature of Inflammation; by T. Wharton Jones, F.R.S., &c."—"Report on the Fauna of Ireland, Div. Intervertebrata, by W. Thompson, Esq., President of the Natural History and Philosophical Society of Belfast."—"Proceedings of Chemical Society (Part 7) and of the Geological Society, London."—"Edinburgh New Philosophical Journal, conducted by Professor Jameson, January to April, 1844."

On Cataracta.—Dr. Szolaski addressed the details of a case of cataracta lenticularis and Morgagniana. The patient, ætat 104, who had been blind for the last ten years, was operated on by couching; no consecutive accident took place, and the sight is now quite restored.

On Polygonum Tinctorum.—M. Delille, Director of the Botanical Garden, Montpelier, writes to state that M. Jaume St. Hilaire is mistaken when he asserts that he introduced this plant into France, as it was first cultivated at Montpelier.

On Alcoholic Ferments.—Memoir read by M. Bouchardat. After giving a table to shew that the three alcoholic ferments differ from each other—in the form, colour, and dimension of the globules—in the manner in which they decompose sugar—in the medium in which they exist; the author examines:—1°. *The immediate composition of alcoholic ferments.* They are formed of:—protein (*matière animale proteine*), insoluble in alcohol, containing nitrogen, hydrogen, carbon, oxygen, sulphur, and phosphorus;—nitrogenized substances, soluble in alcohol;—solid fat;—phosphuretted liquid fat;—lactic acid, lactate of lime and soda;—acid phosphates of lime and soda.—2°. *Elementary composition.* The protein, which forms the principal part of the ferment, differs from caseum, albumine, and fibrine, from an excess of oxygen, being not less than 2 per cent.—3°. *Action of chlorhydric acid at* 0.001. Water, containing one-thousandth part of chlorhydric acid, dissolves with facility caseum, albumine, &c.; on the contrary, the alcoholic ferments resist its action, except when the globules are torn, shewing that they are composed of two substances: one, soluble in the acidulated water; the other, quite insoluble in this liquid.—4°. *Action of the cerebral substance on an aqueous solution of sugar.* ℥viss. of the brain of an adult animal was mixed with lb.ij. of water, and lb.ss. of sugar was afterwards added. In 48 hours, the temperature being at 77° F., fermentation began and went through its phases with regularity. In the experiments performed by M. Colin, albumine required a temperature of 91½° F., and a period of three weeks, ere fermentation began. If, instead of the brain of an adult animal, that of a young one be taken, mixed with sugar and water, and exposed to a temperature of 77° F., alcoholic fermentation does not take place, but the mucous transformation instead. The reason of this difference is, because the globules offer no resistance, but are destroyed by endosmosis in the sugar and water; and as they no longer exist, fermentation cannot take place.—5°. *Nature of alcoholic ferments.* They present perfect analogy with the nervous globules of the animals in the higher classes.—6°. *Experiments on the development of the globules of alcoholic ferments.* The whites of four eggs and lb.ij. of sugar were dissolved in lb.viij. of water, containing 0.001 of chlorhydric acid. The solution was carefully filtered and divided into two parts; to the first, nothing was added, and, two months after, the temperature, the whole time, being from 59° to 77°, no change had taken place; to the second, a dissolution of ʒiiss. of tannin in ℥iiiss. of water was added; an abundant precipitate took place, which, being exposed to a temperature of 77°, was partly transformed into globules, whose action was similar to that of the ferment.—7°. *Experiments on the multiplication of the globules.* lb.ij. of sugar, ʒxijss. of yeast, and ℥viss. of albumine, were dissolved in water, by means of 0.001 of chlorhydric acid. The temperature maintained at 68°, fermentation took place rapidly, and continued with regularity during four days; after which, the ferment was collected and found to be equal to ʒxiiss., a result far different from what is observed in the brewer's vat, where it is as 1:7. The same experiment was per-

formed, the albumen being replaced by gluten, and the quantity of ferment was ℈j. less. It may, therefore, be concluded, that if seven are found in the brewer's vat, it is because protein exists, and, being placed in a fermenting medium, produces globules of ferment, in the same way as the must in wine.

On Animal Magnetism.—M. Thorilier writes, stating that the nervous fluid forms a sort of atmosphere around the living body, and is under the influence of the will, by which its direction and its intensity is modified. From a series of experiments, the author concludes:—that iron may be magnetised by the will, not only by immediate contact, but likewise at a distance, and even when separated from the person by a pane of glass or a glass bell;—that the three principal points from which the fluid escapes, are, the hands, epigastrium, and forehead.

Academy of Medicine. Sitting of the 18th June—M. Ferrus in the chair.—After a few remarks from MM. Velpeau, Barthelemy, and the president, the *procès verbal* was adopted.—Professor Blandin expressed himself as follows, on the case of vesico-vaginal fistula, communicated by M. Segalas: M.S. made a mistake when he said that the anatomical preparation, which I shewed, was taken from the body of a female who died after having been operated on by me—as peritonitis was the cause of her death, and no operation had been performed. I said, it is true, that vesico-vaginal fistulæ were very difficult to treat, and I still say so; but I do not affirm that their cure is impossible, the more so, as examples are recorded. What I wished to be understood to say was, that fistulæ of the bladder, in which the ureters are affected, are *very* difficult to be got rid of. As to the case presented by M. Segalas, the fistula was in all probability urethro-vaginal, not vesico-vaginal; the more so, because the symptom on which the diagnosis was established—the constant flow of the urine—takes place in the former as well as in the latter.—Professor Velpeau: The observation is interesting, on account of the complication of calculus and fistula; there are several cases in which the two affections existed simultaneously, and, in all probability, the latter was caused by the former, since, by its removal, it disappeared.—M. Dubois d'Amiens remarked, that M. Segalas has distinctly stated that the fistula had been produced by protracted accouchement.—M. Parizet here read a letter from M. S., in which it is stated that he had made a mistake, in saying that the patient who died was one operated on by Professor Blandin.

Discussion on Ophthalmology.—M. Jobert de Lamballe was called upon to read a report by the president, but Professor Berard proposed continuing, first, the discussion relative to the report, presented by Professor Velpeau in a preceding sitting (v. *Medical Times*, Vol. X. p. 174), before reading another report. This proposition, seconded by Professor Velpeau, was adopted.—Professor Berard: As some time has now elapsed since the report, which gave rise to this discussion, was read by Professor Velpeau, I will briefly enumerate the principal points to be discussed. They may, if I remember right, be included in the following questions:—1° Is it useful to establish different varieties, founded on the anatomy of the eye?—2° Do any specific ophthalmiæ exist, i.e., produced by general causes? First question: Professor Gerdy denies its utility, and founds his opinion on the size of the eye, the similarity of the treatment and the symptoms. I cannot coincide with him in opinion, and our colleague is too good an anatomist not to know that the tissues are of a very different nature, and that, consequently, the symptoms and treatment must likewise differ. In proof of this assertion, I will pass in review the symptoms and treatment of two diseases, *conjunctivitis* and *iritis*. In the former, the symptoms are: sensation of a foreign body under the lids; abundant mucous secretion; light not exciting; infiltration of the sub-conjunctival cellular tissue; chemosis;—when chronic, producing granulations on the surface of the membrane. In the latter: secretion very slight; smarting pain, sometimes violent, coming on principally at sunset, during the night, or at break of day; felt chiefly round the eye; pupil motionless; secretion of pseudo-membrane;—when chronic, pupil permanently motionless, on account of the abnormal adherences. And how different is the treatment! The first yields to derivatives, purgatives, and astringent collyria. The second requires more active remedies: general and local bleedings; substances which have a peculiar action on the pupil, as belladonna, and the *solaneæ;* remedies which I call *anti-plastic*, especially calomel. The same remarks may be made relative to affections of the cornea. And as to photophobia, what is its cause? Opinions differ on the subject; by some it is attributed to ulcerations of the cornea; by others, to inflammation of the sclerotica, or the ligamentum ciliare. This last, in my opinion, is the most probable; in fact, photophobia takes place in certain positions of the eye, from the excitation caused by the slightest ray of light; this may be explained by the traction made on the ciliary circle by the contraction of the iris, and, therefore, the treatment here consists in paralysing the action of that membrane by the remedies just mentioned. As to the second question: I do not think it can be answered in the present state of medical knowledge. It is true that scrophulous persons are very subject to diseases of the eye, blepharitis, conjunctivitis, but especially keratitis; in the exanthemata, the same remark has been made; and, in all probability, a time will come when, by the inspection of the eye, the species will be recognized with as much certainty as rubeola, scarlatina, variola, &c., from the examination of the skin.—Professor Gerdy: It is not my intention to criticise, but merely to examine, the doctrine by which the different species have been established in ophthalmology; according to the school of Paris, it is founded on the anatomical characters; and to that of Montpelier, on the vital properties. Now, though I do not deny that, according to the part affected, the symptoms may differ slightly, still I cannot admit it as the basis on which a classification may be established; and we might, with as much reason, make the same distinctions with the inflammation of the various parts of the intestinal tube, and the choice of such or such a mode of treatment, as in that of the eye. And even with those practitioners who admit these divisions, is their method of treatment chosen according to the seat? No! On the contrary, it is guided by the nature of the disease—inflammation, neurosis, &c. I, therefore, conclude, that these distinctions are erroneous and arbitrary. And as to the *causes:* with slight modifications, they are the same in all; thus, from a peculiar idiosyncrasy, the same cause may produce in the same individual, at one time a conjunctivitis, at another an iritis, &c.—*Constitutional influence:* though it is impossible, from the examination of the eye, to say that such a person is of such a constitution, still it cannot be denied that it exercises an influence, and necessitates a modification in the treatment. Professor Velpeau does not admit of rheumatic ophthalmia, but I have often seen patients affected alternately with ophthalmia and rheumatismus, and cured by the treatment applicable to the latter.—*Symptoms:* however limited they are at first, they may extend gradually to the neighbouring parts; besides which, none are absolutely peculiar to any one given part, but may affect indiscriminately any part of the eye. (The remainder of the discourse of the Professor, on account of the late hour, was postponed until the next sitting.)

Obstruction of the Veins by a Substance similar to White Cheese.—M. Bricheteau, M.A.M., Physician to the *Hôpital Nêcker*, communicated the following curious fact. A woman, aged 56, quite deaf, after remaining three months in his wards, died suddenly. On the *post-mortem* examination, the cavities of the heart, the vessels of the right inferior extremity and of the arm, contained, instead of blood, a matter somewhat similar to white cheese. All the organs were healthy, with the exception of the left kidney, which presented two or three small abscesses. Ought we to consider this alteration as the result of the inflammation of vessels?—Professor Velpeau remarked that, in 1824, he met with a substance, similar to cancerous matter, in the iliac and femoral arteries.—M. Ferrus mentioned the case of a patient who was ordered to be bled; nothing escaped when the vein was opened, until the extraction of a fibrinous chord, about a foot long.

GARLAND DE BEAUMONT, D.M.P, B.L., & S., &c.
Honorary Physician to the Spanish Embassy.

ERRATUM.—Page 216, col. 3, last line, instead of "the presence of a calculus in the female *is very common*," read, "*is* NOT *very common.*"

COMPOUND DISLOCATION OF THE ANCLE.

To the Editor of the 'Medical Times.'

SIR,—If you consider the following case of sufficient importance and interest to appear in the columns of your Journal, you will oblige me by giving it as early insertion therein as you conveniently can.

I remain, Sir,
Your obedient Servant,
W. ILOTT.

Bromley, Kent.

I was sent for, at 2 p.m., on the 26th of March, to attend Henry Garth, aged 53, who had been partly buried in a bed of gravel, in consequence of its suddenly falling in on him. I found that he had received a compound dislocation of the malleolus internus, on the right side; the external wound was two and a half inches in length, extending across the lower end of the tibia, and then turning round and running nearly an inch further upwards, along the course of the bone. There were other wounds and contusions, about the face, olceranon, &c., and there was severe concussion of the whole spine; but these do not form part of the present subject, any further than that they, of course, added to the degree of danger arising from the more alarming injury to the ancle. The patient is a man of rather infirm health, without any actual disease; of a timid, nervous disposition; of rather weak intellect; and of such eccentric habits, as to cause him to lie under the suspicion of occasional insanity.

I found him very cold and faint, with a feeble pulse; but very collected in his senses. There was no fracture of any bone. There was not, nor had there been, any very considerable hæmorrhage. I administered a little æther, after which he rallied, and appeared in a fit state for making an attempt at reduction. This was effected without any difficulty, except what arose from his own irritability and dread of pain. I had some trouble to bring the edges of the wound into close contact, and found it necessary, on that account, to put in three ligatures. I dressed the wound with adhesive plaister, and applied a long bandage. I then placed the patient on the affected side, with his limb in the semi-flex position, and applied a cold saturnine lotion. I dressed his other wounds, and gave him a warm æther draught, but desired him to abstain from all further stimuli, without my permission. When I left him, he had greatly recovered from the coldness and faintness which immediately resulted from the accident. I did not visit him again that evening, but heard a favourable report of him. I sent him some saline medicine, with the addition of syrup of poppies, and volatile tincture of valerian.

27th, 10 a.m.—I found his leg quiet, and not very painful; a few startings had occurred, but not so as to disturb the joint; pulse 72, rather full; skin a little above natural heat; tongue coated; had had but little sleep; great pain in his back and bowels; complained much of his head; there did not appear, on examination, any more serious injury to the spine than was discovered yesterday; neither was there inflammatory tenderness over the bowels. He had had two or three copious stools, and passed his usual quantity of urine. I took away eight ounces of blood. I now put the limb up in splints, directed a continuance of the same medical and dietetic plan, and believing the case fully justified me in so doing, I determined to give nature every chance of herself repairing the very serious injuries which the patient had undergone.

3 p.m.—I found that he had had more sleep at

short intervals; his skin was cooler, and pulse softer; he complained less of his head, back, and abdomen; bowels had been again twice moved; has little pain in the ancle; wishes much for a little more sleep. Ordered three-fourths of a grain of acetate of morphia, at bed time, and a continuance of the same general treatment.

28th, 7 a.m.—Has passed a quiet night, with three or four hours sleep; tongue moist, but coated at its back; pulse 70, rather full; skin cooler; complains of dizziness; head rather hot; still has the greatest pain in his back and bowels. Has also a feeling of rawness and soreness in his throat. These two circumstances probably arise from his violent efforts to extricate himself from his perilous situation, and to make his accident known to those who might be within hearing. Has had no fresh stool, but plenty of urine. Leg quite free from inflammation, and tumefaction. Cooling lotion to be continued, with saline aperient mixture, and moderately low diet.

3 p.m.—Ancle still quiet, and free from much pain; complains of its jumping at times, but it still retains its good position; pulse 68; skin not hot; tongue coated; has had no more sleep; complains, but not so much, of head, back, and abdomen; has something a little approaching to singultus, but not decided; bowels not moved to-day; urine has a copious sediment. I ordered the anodyne to be repeated, and gave 8 grains of ext. coloc., with gr. iij. of calomel in the morning; diet, &c., to continue as before.

29th.—Has passed a restless night; frequent vomiting of deep green and yellow bile, mixed with dark grumous fluid, like blood; no pain in the stomach. Has been quieter for the last two or three hours, without sleep, and has had less pain of head, back, and abdomen, since the discharge of bile. Pulse 68—tongue as before—skin cool—has passed urine, but had no stool. They report him to have been a little delirious in the night, but he is now perfectly collected. Ordered a repetition of the calomel and colocynth, with saline mixture and aromatic confection; allowed some mutton broth. I now made my first examination of the wound. The edges were in perfect contact; there was a slight attempt at union; the whole joint and parts near are quite free from inflammation; there is a slight quivering of the gastrocnemii muscles. Took out two of the ligatures—dressed the wound afresh with emp. adhesiv. Also, applied strips of bandage, to resemble the eighteen-tailed bandage, and admit of an easy daily examination.

Finding the state of the limb so quiet, and believing the disorder of the stomach, &c., to arise from the general concussion, more particularly of the spine, I determined still to trust to the powers of Nature, for the reparation of the injury.

30th.—Has passed a quieter night—had four hours of sleep; no vomiting, but feels slightly sick. Bowels have not been moved, but there is less pain of head, back, and bowels. Pulse 65, rather bounding; skin cool; tongue coated; ancle quiet, but starts a little. Ordered pulv. cath. with calomel gr. iij. statim. Allowed beef broth. The evening report was, that he remained as he had been in the morning, but the bowels had not been moved. Ordered strong doses of infus. sennæ, magnes. sulph. and tinct. jalapæ, to be repeated at intervals. Not to take the anodyne, unless disposed to be very restless.

31st.—Has passed a restless night; bowels have not acted; there is no sickness; ancle still uninflamed; no general change. Omitted anodyne last night; has taken two doses of his cathartic; ordered to take a third dose, and report progress in the afternoon.—P.M. Bowels reported not to have acted, but there is no sickness. Ordered magn. sulph. ʒij., with ℥ss. of aq. menth. pip., and aq. destill., every three hours till the bowels have acted. To omit morphine again.

April 1st.—Bowels have been copiously moved twice; motions natural; night has been restless; still has slight dizziness; ancle quiet; omitted morphine last night. Ordered to repeat it to-night, and tinct. cinchonæ c. to be added to the saline and aromatic confection.

April 2nd.—In *statu quo*. Opened the wound and dressed it: little or no union has taken place, but there are slight granulations over two-thirds; remaining and upper third looks a little sloughy.

Having given this detailed account of the progress of the case for the first week, I do not think it necessary to do so any longer. It was now quite clear, that the constitution was recovering from the shock it had sustained, and that Nature was making some effort to repair the local injury. With the exception that his bowels have been rather inclined to costiveness, and the portion of the wound, which became sloughy, did not entirely heal till near the middle of May, the patient's progress towards recovery has been very regular. No constitutional or local disturbance has occurred to excite uneasiness. Being a man of nervous habit, and accustomed to out-door exercise, he has complained bitterly of such a long confinement within doors. As soon as it could be done with safety, he was allowed to get out into the garden on crutches. His spirits and general health were soon much improved. A strengthening plaister and bandage were applied, and the splints removed about a fortnight since. There is slight stiffness on the affected side, but the left moves very freely. He is able to move about his garden with ease and comfort, but has been cautioned against using his limb too much at present.

It must be quite unnecessary to state to the members of our Profession the points of interest in this case, which seem to give it a prominent claim to publication. It affords, from the discouraging aspect at first given to it, by the age, constitution, and mental condition of the patient, a very strong additional argument in favour of the prevailing practice, of giving Nature, in every instance where it can be done, a full and fair chance of repairing local injury.

NOTICE TO CORRESPONDENTS.

A Surgeon *cannot, as a chemist, retail drugs to his patients, except in purely surgical cases. The question of our Correspondent is, in other words, can a surgeon play the part of a prescribing druggist, without incurring the prescribing druggist's hazard? We repeat* "No."

A. R. S. *is not a medical man, but expresses great interest in the cause of good medical government. He has read Dr. Hodgkin's paper, as well as the letter of Sir James Clarke, with great pleasure, and suggests in addition, the necessity of some Board, composed principally of "intelligent physicians and surgeons, and partly perhaps of other scientific individuals, which should be superior to the Colleges of the three capitals, and be in direct communication with the Government on the great questions of public hygiene, quarantine laws, medical jurisprudence, lunatic commissions, a part of the registration of the deaths, health of towns, state medical appointments, &c." A. R. S. is mistaken in thinking his suggestion novel. We believe Sir James Clark has spoken of it, and its wisdom is generally recognised.*

M. R. C. S. L. A. C. *on the Apothecaries' Society next week.*

A. B.—*The Company* can *refuse to examine a gentleman who has been five years apprenticed to a retired army medical officer, an M. D. of Edinburgh, and an M. R. C. S., Ed. With a proper representation, however, we should think they would not refuse.*

C., Reading.—*We have not heard that the work named has been taken in hand.*

A. L.—*No fee is asked, unless a diploma be sought. We owe our Correspondent thanks.*

An Old Subscriber *thus writes*:—

Sir,—In case the College Council persist in excluding their members from the Fellowship, or what would be better, decline to abolish the invidious caricature of a distinction altogether, I have resolved to burn my diploma of twelve years standing, in the public market place of the town in which I reside, with every possible expression of unqualified contempt for an Institution which dares attempt to rob its members of a position they have paid for. Had there been a higher grade in the power of the College to grant, at the time I was examined, I should have gone for it, but as there was not, I consider the moment Mr. Balfour had sacked the twenty-six odd pounds, I was entitled to every privilege and honour the College had the power of bestowing; instead of which, the Council create and confer a fictitious degree, and call it a Fellowship, which, in the eye of the public, presumes a certain superior something in the Fellow over the Member. I think, Mr. Editor, that the sooner we start a College whose members shall have a voice in the management of their own affairs the better; and the sooner we get rid of Sir James Graham as a medical reformer the better also. If you think this expression of my feelings worth notice, please give it a place in your straightforward journal."

Fanqui.—*Strictly speaking, our Correspondent got no title to practice by the Eastern appointments of which he speaks: but they would prevent the Society, we think, contemplating an action.*

Mr. Fisher.—*Williams' Lectures commenced in No.* 134. *They have been publishing at intervals of a fortnight ever since.*

We have to apologize to several of our advertising friends for the unavoidable postponement of several advertisements.

A.—*The cost price of the Drugs.*

Several gentlemen have written to us, suggesting that the "Summary" should appear in the body of the work, rather than on the cover. On further enquiry, if we find it generally recommended so to place the "Summary" that it may serve as a standing Index to each Number, in addition to the Index of the Volume, we will alter our arrangements to accomplish the suggestion.

"Sir Benjamin Brodie's Lecture," "The Truths and Falsehoods of the Theories of Liebig," and "Dr. Foley's Letter," next week.

Communications have been received from several gentlemen, and are under consideration. The reply to our paper on Liebig's Theories, by Mr. Sullivan, Physiological Chemist in Liebig's Laboratory, Giessen, will appear probably next week.

THE PHARMACEUTICAL NUMBER
OF
THE MEDICAL TIMES
FOR JULY, (No. II.) IS NOW READY.

It contains:—

79 Articles from the Annuaire de Therapeutique for 1844, giving the recent Improvements and Discoveries in Medicine, their Administration, &c.

Continuation of a Series of New Researches on the Sulphites, by Dr. Sheridan Muspratt, of Giessen.

New Experiments on the Digestion of the Herbivora, by Prevost and Morin.

Description of the Habits and History of the Cochineal Insect, with a Narrative of its Introduction into Algiers.

The action of Oxygen in the Nascent State on several Organic Bases, by Bouillay and Bouchardat

Observations on the Internal Heat of the Earth.

The Beeberu Tree, and its Virtues,

Preparation of Hydrochlorate of Morphia.

Account of the Cascara de Lingue et de Pingue

Daguerre on an Improvement in the Daguerreotype Process.

Account of a New Photographic Process, by Mr. Hunt.

The best Mode of Preparing certain important Extracts, by M. Burin.

A Selection of important Recipes for Practical Chemists.

A New Formulary, containing about 300 New Recipes of great value.

THE MEDICAL TIMES.

SATURDAY, JUNE 29, 1844.

Ruinous failures and desperate remedies ever produce one another in minds of small calibre.—LACON.

A SINGULAR and significant circumstance connected with the *Medical Times*, is likely to rise into the importance of a professional question—a question which will involve a decision on some of the rights and duties of the Medical Journalist.

Our readers will recollect that, in following out our plan of mirroring for the Profession the progress of our science, we noticed, a fortnight since, a paper on the Urine—as well as a few other articles of less value—which had appeared in the

pages of a contemporary, whom all will recognize when we name "unfortunate." The paper on the Urine was abridged from ten pages to one: the other articles were given in about as many lines as, by some special obliquity of critical taste, they were in the orginal allowed to occupy pages. Our forsaken friend, attributing, of course, the failure of his recent spasms of pecuniary expenditure to every cause but the right one, has grown angry at us for pointing attention to his contents, and determined, poor thing, as a last hope, to invoke against the assaults of the "boy of bigger size" the protection of the High Court of Chancery. Accordingly, on Thursday, the 20th inst., we received from the solicitors in whose hands our poor friend's affairs seem to be, a notice characterized by all "the pomp and circumstance of glorious" law, charging us in very frank terms with "especially" "pirating," in the preceding week, the "greater portion" of a certain article on the Urine; and with committing sundry other "piracies, ('tis surprising to say it,) of apparently *less* importance. In this backward season, when delicacies are rare, a bit of law, gratis, is one that will doubtless prove not unacceptable: our readers, then, shall have, as cheap as ourselves, the remaining portion of *the* legal notice:

"And we hereby give you notice, that if such piracies be repeated or continued after this application, a bill in chancery will be filed against you without further notice, for the purpose of obtaining an injunction to prevent their repetition, and to compel an account of the sale of the numbers of your work containing such pirated matter.—Dated this 20th day of June, 1844.

"Yours, &c.

"LOFTUS AND POTTER, Solicitors.

"36, *King-street, Cheapside, London.*"

There may be some readers who, inclined like ourselves to view the sunny side of humanity, would spite experience so far as to extend even yet to our contemporary the "last, long, lingering hope behind," that this was no genuine document. Urged by similar promptings of benevolence, we sent a messenger to Messrs. Loftus and Potter. We grieve to own it;—their reply has cut off every hope for contemporary wisdom. Courteously was our man received; honestly—as may be from attorneys—was he promised what was coming; and the explanatory justification was not suppressed. How could they help our contemporary *getting into Chancery, when we were weekly taking away "the cream of his work?"* Those who have noticed how thin in quality, how small in quantity, was the cream thus rifled by our piracies, must have dure bowels if they feel no pity for those whose scientific beverage was the skim-milk we left behind! Fattened to overflowing ourselves, with the cream won from richer dairies, our complacent heart (the very concentrated essence of the milk of human kindness) is grieved to its core at the doleful reclamations of our *skim-milk* contemporary, and the impoverished condition of his "lean kine" of readers. *Furor arma ministrat.* Poverty is close akin to desperation: why, then, will our ill-fated contemporary not venture on a piratical excursion of retaliatory vengeance, and skim from our our pans the cream *he* so ill, and *we* so well, could spare? Upon our words, the theft would be the wisest, and certainly not the most dishonest, part our contemporary has for some time played: were it only a *viaticum in extremis*, it would be something; and if he'll only honestly acknowledge the appropriation like ourselves, we offer, or rather he offers, the best of guarantees, that we'll expend no Chancery powder and shot on him

But we are wasting in very *dull* jests, space that asks for more serious employment. The matter that should have our attention is this: IS THE PROCESS THREATENED US, FAIR IN RIVALRY OR HONEST IN MORALITY? This is a question we now *respectfully* and most *earnestly* put to our brother-editors and the whole profession. The great, the "*especial*" piracy charged on us, let it be remembered, is the abridgment of a paper of ten pages into one,—that abridgment containing a full acknowledgment of the source used. A mere abstract, it occupied more than three-fourths less space than the original!

Now, supposing that a bad state of law sanctioned the pretension, is it right in a Journalist, for any cause in itself essentially so *petty*, to immesh a fellow-labourer in the proverbially costly toils of a chancery suit? Supposing that by some accident we stood in any position in which, instead of proudly awaiting the contest, sure of our means as of our right, we had the prospect, whatever the absurd wrong in our opponent's cause, of perishing in a vortex of legal costs, what persecution can a human being fancy more wanton in its origin, or miserably fatal in its results? If such a *resume* as ours be a piracy, what reference to another's recorded labours can be an honest transaction? Accept this hypothesis, and no large work, whether a History by Gibbon or Hume, a Dictionary by Johnson, or a Pharmacopœia by Phillips, has been ever legally abridged; nor any compendium of what others have thought and done, been a work within the pale of morality!

And, what is the constant, well-known, and well-recognized practice of all the journals? The morning papers largely quote from one another: the evening, and, with few exceptions, the weekly, papers are made up from the morning papers: but there are no such men as our contemporary to threaten them with injunctions. Are the Medical Journals, weekly, monthly, or quarterly, strangers to the practice? Who has read them, and not seen a special division for extracts or abstracts? Each quotes freely from its neighbour, measuring the number of its selections by no consideration but convenience, or the fear of giving too much publicity to a dangerous rival. Is our contemporary the exception he would wish to make us? Far from it. He extracts as much as others; clumsily, irregularly, and without judgment, it is true; but still he extracts as constantly as ourselves, with the difference of not abridging to one-tenth, but publishing, verbatim, "cream" and crudities together. In his prospectus, he claims credit and support on the ground of giving "analyses embodying the most *striking facts*, in the original communications published in the British and American Medical Journals, with similar condensed analyses of the original articles contained in the Journals which are devoted, &c.!" and so anxious, so devoted is he to this *tabooed* work of extraction, that in its service he has done his honesty the violence of extracting from us without uttering one syllable on his obligations! Few who attend to those matters will forget that, when other journals like ourselves commissioned reporters for the Meetings of the British Association at Cork and Manchester, he wholly depended on extracts from the *Athenæum* and *Medical Times*, and a moment's look at the *Medical Times* for July 9th, 1842, (page 234, of vol. 6,) and at the *Lancet* for July 16th, (vol. 2, for 1842, page 643,) will show how careful is the regard which our exacting opponent is accustomed himself to pay to the claims of copyright. An important original article by Martin Barry, on "Muscular Fibre," is there transferred from our columns *verbatim*, without one word of acknowledgment!

So far then universal custom—in *this* instance not the worse for having our contemporary's sanction. But advancing to independent reflection, and maturely weighing circumstances, which in their relation to health and its dependence on knowledge, must always be important, is there not about the disputed privilege something more than the legality of a custom, or the sacredness of a right—*the holiness of a duty?* What is the great and paramount duty of the medical journalist, if not to make known to his brethren, what without profanity may be called the "whole gift of God"—*the whole progress of our science?* To amuse our readers is an agreeable, but surely only a supererogatory function. It is an accidence, not an essence of medical journalism. To give standard doctrines of old date, is a higher, but still no essential labour. The proper teachers for them exist elsewhere: they belong to our lectures and standard printed authorities. It is the *new* series of experiments, the novel development of facts, the record of hitherto *unnoticed*, or the deduction of unexpected truths from hitherto *unheeded*, phenomena, the disproof of received falsehoods, the certifying of impugned truths, the remarkable improvement, the elevating discovery,—these are the things that properly belong to the Medical Journal: these are the titles which call for its existence, constitute its utility, and form its whole proper peculiar responsibility. As medical practitioners, the end of our being is made the solace of others: our ordinary physical blessings are assured us on condition of mitigating our fellows' physical evils; our very *business* is the

recreation of the best of other men: the happiest episode of their life is the constant history of ours: *practical benevolence*. The Medical Journal, therefore, is the instrument, the aid of this benevolence—or loses that representative faithfulness that can alone preserve it. It ceases to be a Medical Journal, as it ceases to make the medical man's usefulness a plenitude, as it omits to possess him of every aid to good which the wonderful developments of science in any quarter of the world have laid open to him to the latest moment. What, truly considered, are the medical improvements of which men converse so heedlessly and slightingly? They are the least ambiguous, the least disputable of earthly goods. In reference to man's positive enjoyment, or that negative, but truest form of happiness, which springs from his deliverance or protection from pain, they are equally the greatest of human boons. Money saved, we have been told by a shrewd thinker, is twice that money earned; and next to the donation of health and life, assuredly stands that important adjunct—their preservation. Now, the great chemist's experiment, or the good physician's generalisation, occurring in an obscure workshop, or elaborated in some secluded study, may enhance the intellectual pleasures of the whole human family, and more friendly still, scare off from thousands in different and remote climes, tortures that make their life the direst of curses, and plunge tens of thousands of affectionate kindred into cruelest affliction. Each step of our scientific progress, humble as it seems, is the creation of a glorious heritage, shared immediately by tribes of suffering brethren, and possessed in sure reversion by every human being. It is a landed property of physical enjoyment, thrown open like a common to all: it is a boon of a kind Deity, loving humanity more as humanity advances in years. It is a new Promethean gift—fresh fire, stolen to comfort earth with heaven's light and warmth—a reclaiming from the boundless infinite of mental being, a new happiness, for the everlasting use of man.

The boon exists—we thank the medical inventor—but what is its existence if not diffused? But the boon *is* spread and diffused. The *Journalist* is the honoured instrument of making the good discovered in Paris, Giessen, or London, the good applied in the remotest corner of the globe. If he invent not the benefactions of science, at least he distributes them! Shall we forget to thank him? Worse still, shall we punish him for his very utility? Still worse, shall the executioner giving the punishment be a *medical* man? Worse—much worse—shall he be a medical journalist?

But it may be said that Liebig's researches have no such high and humanitarian claim on the "Medical Times'" notice, and that if we left our readers ignorant of his doings, practice would not be less successful, nor practical amelioration less consulted. Our contemporary at least can maintain no such doctrine. In one of those multitudinous announcements, which in ingenuity of empirical attraction, and universality of unfulfilled promise, surpass the kindred advertisements of Parr's Pills, and Holloway's Ointment, we are gravely told of the very paper that we are now blamed for making known, that it contains "*discoveries which at the moments of their development made the* WHOLE *nervous system of the discoverer thrill, as if by an electric shock*, AND THE EYES OF THE OBSERVERS GLISTEN WITH DELIGHT!" (See Ad. *Times*, June 22.) Would it be just to Liebig, would it be kindly to the profession, or mankind, that discoveries so *very* extraordinary, at least in their effects, should be left in the obscurity in which it is our contemporary's fixed doom to walk, lights so much wanted for ever hidden under his miserable bushel! We ask the question seriously, trusting that our brethren of the pen and of the profession, in a matter which so nearly concerns them, will not deny us the benefit of their frank opinion.

ON VARICOCELE;

WITH THE DESCRIPTION OF A NEW MODE OF OPERATING IN THIS DISEASE, WHEREBY A RADICAL CURE IS OBTAINED.

By M. VIDAL, (DE CASSIS,) M.D.,
Surgeon of the Hopital du Midi, Chevalier of the Legion of Honour &c.,

(Continued from 243.)

PART II.

OPERATIONS PROPOSED FOR THE CURE OF VARICOCELE.

An ætiologieal error caused varicocele to be considered as belonging to a class of diseases, the radical cure of which was impossible. Thus, we find, in Delpech's writings, that varicocele is uncommon in youth, whilst, on the contrary, it is very frequent in old age; an opinion quite erroneous: it being principally from ten to thirty years of age that it begins; and this constitutes a marked difference between the varices of the scrotum, and those of other regions, these last being the companions of old age; besides which, they present an extraordinary tendency to become general, and to develop themselves more and more, as we grow older: a circumstance not at all extraordinary, as they are produced by general causes, or a sort of diathesis, and consequently, partake of the character of these causes. On the contrary, the principal influences by which varicocele is produced, are: excess of sexual intercourse, horse-exercise, dancing, forced marches, orchitis, and phlegmasia of the genital organs. Now, almost all these causes act only at a certain period of our life, and are, according to pathologists, merely occasional; the effects, which they induce, are neither permanent, nor general, but chiefly of a local character. Thus, it is very rare to meet with varicocele, complicated with varices in other parts of the body.

The sphere in which certain causes act being limited, they must, in general, produce but a local disease, justifying thus the attempt of a radical cure by an operation, or other appropriate means. The limited duration of these causes will naturally lead to the conclusion, that the continuance of the disease will likewise be limited, and consequently, that the cure will be spontaneous, immediately that these causes cease to act. This fact (the spontaneous cure of varicocele), though at first sight apparently unfavorable to my method, is so, in reality, only when the operation is performed in every case indiscriminately. But it may be said, since the disease may terminate by a spontaneous cure, why have recourse to an operation? In reply, I would remark, that such a termination of varicocele is very uncommon, and that, before such an event takes place, the swelling of the scrotum may have produced all the mental and physical consequences to which I have already referred. Furthermore, the operation which I propose, is not a mutilation; on the contrary, in its mode of action, it resembles that adopted by nature in a spontaneous cure; so that, in performing it, I do but abridge the efforts made by nature when they take place, and induce or aid them when they are insufficient. I stated, that another objection made against the radical cure was the danger attendant on the operation; and that this idea originated in a forced analogy, in the confusion of the ancient with the new methods, and perhaps, in the disdain entertained by some persons for the recent progress made in operative surgery. In point of fact, no distinction has been made between a varicose state of the veins of the lower extremities, and that of the scrotum; and, as the operations performed on the saphena, in order to obtain a cure, have very frequently failed, or been followed by a relapse, and, in many cases, by very serious consecutive accidents; some surgeons have concluded, that all such operations, even on the veins of the scrotum, ought to be rejected. But, what a difference is there between the calibre of the saphena vein, in its femoral portion, or even in the leg, and that of the veins of the spermatic chord. Now, it is a well known fact, that the larger the veins are, the greater is the danger.

In the appreciation of the dangers attendant on this operation, it would be as unjust as illogical to form our opinion from the various operations formerly recommended, but now entirely and justly abandoned. Thus: the actual cautery; incisions of the scrotum, followed by the ligature, or opening of the veins; extirpation of the varicose veins, with or without previous ligature; removal of a part of the scrotum, and even of the testis itself. All these ancient methods, highly dangerous, are now deservedly forgotten and condemned. Indeed, the best of them may give rise to serious accidents, and there is not one which is not capable of producing intense inflammation. In all, the contact of the air increases inflammatory action, and the phlegmasia appears, often, even before the vein is obliterated, constituting a highly dangerous complication. It is, therefore, necessary, in appreciating the diverse methods proposed, to place aside all those anterior to 1830; it being, at this period, that a simple operation was brought forward for the radical cure of varicocele, and, what is most important in the history of surgery, it was then that the first regular plan was given for subcutaneous operations.

M. Gagnebé, in his thesis in 1830, concluded from the researches of J. Hunter, Delpech, MM. Andral, Cruveilhier, Breschet, Velpeau, and Briquet, that phlebitis was produced by the action of the air on the spermatic chord, and, therefore, proposed employing the subcutaneous ligature. This method, however, was not at first adopted by the generality of practitioners, but one proposed by Dr. Breschet in 1833. This distinguished Professor had, as surgeon at the Hotel Dieu, repeated opportunities of employing and testing his method. There are few surgeons in Paris, who have not witnessed cases in which his plan was successful, and M. Landouzy wrote a pamphlet containing the enumeration of the advantages to be derived from its use. This author does not quote a single unsuccessful case; but, in my opinion, the term *success*, here employed, does not absolutely mean a *radical cure*; still, as in this part of my memoir, I intend endeavouring to prove the innocuousness of the modern methods proposed for the cure of varicocele, I consider it just to quote this plan, which has been employed the most frequently, and which has received the greatest degree of publicity; the more so, as the following assertion has been made in reference to it:—"*success was constant; nay more, this method never produced any serious accidents.*" It is true, that a great deal has been said concerning a patient who died from the accidents produced by this operation; but M. Jeanselme, in his report, thus expresses himself:—"I endeavoured to obtain positive information on this subject; all the details of this case were given to me, with scrupulous exactitude, by M. Desprès, *prosecteur* at the Faculty of Medicine, who was

present at the operation, and who attended the patient subsequently. From these details, it is evident, that death was not owing to the accidents produced by the operation, but to the repeated acts of imprudence committed by the patient." It would have been far better, had all the details of this interesting case been published, instead of the mere statement of the cause of death. But, admitting the most unfavourable supposition, and adding to it another, said to have been caused by the method proposed by M. Ricord; is this sufficient to make us reject all operations for the radical cure of varicocele? Especiallywhen,taking into account those performed by Professor Breschet, Messrs. Reynaud of Toulon, Ricord, and myself, nearly one thousand may be counted in which no serious consecutive accidents took place! Such a mode of proceeding would lead equally to the rejection of all operations, even the most simple, such as that for the extirpation of a wen, or the removal of a portion of the amygdalæ. Is it not far more logical to attribute these occasional, unsuccessful cases, to some inattention on the part of the operator, or to some errors in diet on that of the patient, rather than to the operation itself? Thus, in the method by ligature, if the wire, instead of passing into the cellular tissue under the vein, pass through the vein itself, the patient will, in all probability, have an attack of phlebitis. If, again, the patient, instead of following the regimen requisite to ensure success, is imprudent, as in the case operated on by Professor Breschet, serious consecutive accidents will necessarily take place, without their being in any way caused by the operation. Now, if the method proposed by M. Breschet (a method invariably followed by inflammation), and performed by him repeatedly during the last ten years, has only been productive of one unsuccessful result, it is evident that the operation in itself is not dangerous. In order to establish my theory beyond a doubt, I prefer quoting the experience of other surgeons, to the result of my own private practice, or that obtained on the patients in my wards at the Hôpital du Midi. Had I done the latter, I could have quoted upwards of 50 cases, in which neither abscesses nor phlebitis, nor the slightest accident, took place. But these successes, were they far more numerous or more decisive, would not make me conclude that my method was infallible; but, I can safely assert that the operation for varicocele, such as I recommend, is one of the least dangerous that can be performed; indeed, were I to be guided solely by my own experience, I would say that my method was perfectly innocent.

Operation.—The process I have adopted is that recommended by M. Reynaud, of Toulon, with a slight modification.

Dr. Reynaud's Method.—Take a strong and straight needle, pointed at one extremity, and at the other offering a screw, to which is fixed a thin silver wire. The varicose veins being separated from the *ductus deferens*, the latter is pushed backwards, the former being held in a fold of the skin. The needle is passed under the veins, and drawn out, until the silver wire appears at the opposite side; a small linen roller is next placed on the part, and the wire tied over it; finally, a sound is placed between the roller and the wire; by its means, the latter is twisted, and the veins gradually obliterated and divided. Should the pain be violent, it is easily soothed by slackening the tourniquet, made by the sound; and if the inflammation assume a phlegmonous character, the parts may be exposed to view, and an emollient application used. This, however, is seldom necessary; on the contrary, the sub-cutaneous ligature requires generally to be tightened. To accomplish this, every third day a turn is to be made with the sound. In general, in a fortnight, the parts, with the exception of the skin, are divided by the wire; and, in order to be certain that no vein remains entire, the apparatus may be left in place, until it falls of itself; or, what is still better, the integuments may be divided with the bistoury. As may be seen, this process is not unlike one employed in some cases by the ancients, and may in a measure be considered as a subcutaneous one. We may readily imagine that the operation, I have just described, is not so dangerous as that recommended by Professor Breschet, there being only a thin silver wire running through the scrotum, without the parts being exposed to the contact of the air. The pressure exercised by the wire gives rise to a considerable degree of inflammation, but not until after the formation of coagula in the veins. At the same time, the operation consisting in the mediate ligature of the vessels, after drawing them aside, there is less danger of wounding them, than when immediate ligature is attempted to be applied. After this operation, there is a slight *engorgement* of the part on which the ligature has been placed, and which sometimes forms a tumour as large as the testicle itself; but, in general, this disappears 7 or 8 days after the removal of the wire, leaving a small hardened spot at the locality occupied by the veins, and which persists somewhat longer. Of all the operations hitherto proposed, this method is the easiest, and the most harmless; the facts that I have observed prove this beyond a doubt. Perhaps, relapses are as frequent after this method, as from that proposed by Professor Breschet; and this is probably because the veins are not completely obliterated, or because their cavity is re-formed after the absorption of the clots of blood contained in their interior. This circumstance led me to place two ligatures, one near the pubis, the other somewhat lower; the superior one was first tightened, and the inferior, some time after. Relapses were here less frequent; but the length of the veins allows the testis to remain in a prolapsed state, which is one of the most frequent causes of relapse. I, therefore, determined not only to divide the varicose veins, but likewise to shorten them; and I obtained this end, by twisting them around two silver wires, like a cable around the capstern.

Twisting of the Veins of the Spermatic Chord.—A wire is first passed under the veins as already described, being bent; the vessels are then pushed back, and a second wire is passed before them, going in and coming out by the same openings in the skin; the two wires are then straightened as much as possible. This done, the wires are twisted; at first the torsion acts only on the wires, and the veins are comprised in a sort of ring formed by the two: but by continuing, the ring gradually diminishes in size, and finally the veins are rolled round the wires, as the eable around the capstern. Now, as the veins are fixed superiorly, and, on the other hand, are attached inferiorly to the testicle, which is mobile, and may be displaced, in diminishing their length, this organ is consequently drawn upwards, in a direct ratio with the number of turns made with the wires. The laxity of the cellular tissue of these parts facilitates greatly this result. To terminate the operation, the two ends are tied over the veins, in the same way as before described, and the constriction performed by means of the sound.

There is, then, in this method: 1° twisting the veins on the silver wires; 2° constriction of the former; and 3° their division in different places, more or less numerous, according to the number of turns the operator gives to the wires. It is desirable to allow the wire to divide the skin, as well as the veins, because, in so doing, the chances of a relapse are much less, by reason of the section of the tegumentary veins. Finally, in the ordinary subcutaneous ligature, the principal veins of the chord only are divided, in supposing the operation to be successful; whilst with the modification I propose, not only the larger veins are included, but likewise a great many sub-cutaneous ones, which escape in the other methods. Now, when varicocele is of long standing, and is complicated with superficial varicose veins, these ought always to be comprized in the part of the skin which is to be divided.

PART III.—In this division, the author relates six cases, selected from numerous others, in support of his method.

Mr. Maeord has submitted to us some specimens of his "Transparent Waterproof Isinglass Plaster," which appears to us to involve an improvement, and fully to merit the praises which we see some eminent surgeons have already given it.

Obituary.—On the 16th instant, George Andrew Stuart, of Inchbreck, M.D. and F.R.S.—At Bathgate, Mr. William Nicol, Surgeon.

SLEEP WAKING, OR SECOND CONSCIOUSNESS.

By H. BROOKES, Esq.

(Continued from page 222.)

My primary object, in these papers, has not been the discussion of Mesmeric facts or principles, but to shew that a particular mental state—that of *Second Consciousness*—results from a certain abnormal condition of the brain and nervous system; that condition being generally manifested in some one or other of the forms of hysteria, epilepsy, catalepsy, sleep-walking, delirium, or insanity: and a review of the cases detailed in the preceding papers, will exhibit the following as the general or occasional characteristics of that state; viz.:—

1st. Their perception (or non-perception, in a more or less perfect degree) of their personal identity, and of their previous knowledge and acquirements.

2nd. A state of partial or complete insensibility to all impressions on the external senses.

3rd. Predominant activity in one or more of the cerebral organs, the others remaining in a state of torpor; or, increased energy in all the cerebral organs, giving to the mental manifestations a corresponding superiority over those of the normal state, with the possession of partial or complete power over the voluntary muscles.

4th. The special cognizance of particular sounds—certain trains of conversation—or the voices of particular persons; whilst insensible to all other impressions.

5th. The perception of visual, auditory, and other impressions, otherwise than through the ordinary organs of sense.

6th. The perception of disease, and its nature, in themselves and others—prognosis of its changes and duration, and knowledge of its appropriate remedies.

These, be it observed, are the characteristics and powers exhibited in cases which are usually denominated those of *natural*, in contra-distinction to those of *artificial* or *induced* sleep-waking, and I will now (without stopping to enquire whether such a state *can be induced Mesmerically*, or by any or what other means, or in what cases,) assume that *the* state, called Mesmeric Sleep-Waking, can be induced by some means, and in some cases, and proceed to shew that the characteristics and powers of that state, are precisely analogous to those of the former: the limits of this paper, however, will not permit me to cite cases in illustration; nor, perhaps, for the object in view, will that be necessary.

And, firstly, I may remark that the induction of Mesmeric Sleep-Waking is frequently (especially if the operator be inexperienced, or due care and caution be not observed,) attended by spasmodic convulsions and irregular actions in the nervous system, analogous to those observed in the milder forms of hysteria and epilepsy, and by a similar condition in the muscular system to that exhibited in the disease called catalepsy.

Generally, on first waking into Second Consciousness, the patient has no cognizance of the identity of himself, in that state, with himself in the normal state; and possesses none, or but little, of the knowledge he had acquired in that state. He knows not his own name or person, or the name or person of the operator, or others around: yet he perceives his individuality, and understands the language addressed to him. To the question, "Who are you?" he usually answers, "Why, *me*:" and to the further question, "Who is me?" or, "What is your name?" he says, "I don't know," or, "I don't know what you mean." On being pressed, however, he may remember or recognize his own name, person, and personal qualifications, *as those of another person*, not identical with himself; and will speak of *him*, and of *his* thoughts, feelings, and conduct, as those of another, and in terms sometimes of approval, but generally in terms of disapproval or condemnation. By degrees, however, and aided by a judicious questioning on the part of the operator, he may be led to recognize the identity of himself, in his state of Second Consciousness,

with himself in his normal state; and may recover his previously acquired knowledge; and as he becomes familiar with these, it sometimes becomes exceedingly interesting, and instructive, too, to observe him compare and contrast his different feelings, thoughts, and opinions, respecting various matters, in the two states. In the greater number of cases, however, the personal identity is perceived at first, or the perception of it is more easily and rapidly acquired.

Secondly.—In perfect cases of Mesmeric Sleep-Waking, there is *complete torpidity, or insensibility in all the senses;* the most intense glare of light thrown upon the eye—the loudest report at the ear—the strongest odour to the nostrils—or the severest inflictions (pinching, pricking, laceration, or burning,) applied to the skin, will produce no sensation. I have not space to quote any of the very numerous tests which have been had recourse to by individual and associated investigators, to prove this point; and can only advert to the numerous surgical operations which have been undergone, during this state, without pain, both in this country, in France, and in other parts of the world. But I may make a passing remark on the estimation in which some of our modern philosophers seem to regard these latter facts. These gentlemen do not seem to consider that insensibility to pain is a negative state, and that no single fact, nor any number or series of facts, can demonstrate it positively to any party, except the party himself. Each case, therefore, merely furnishes a certain number or series of probabilities; and only in so far as these probabilities, individually or collectively, preponderate over the probabilities or mere possibilities to which they are opposed, can they be said to prove it. Under ordinary circumstances, a certain infliction produces pain of a certain kind and degree, which pain is manifested by the sufferer by certain well-known symptoms, or by certain other indications, evidencing the desire and endeavour on his part to controul or suppress those symptoms: if, under other circumstances, a similar infliction is made, *and none of those symptoms, nor any of those other indications, are present*, it is a fair and reasonable inference that the pain was not suffered; if the patient admits he did not feel it, the inference is so far confirmed: but the patient *might* have felt the pain, and *might* have suppressed the ordinary manifestations, and *might* have falsely stated that he did not,—and hence it becomes a question, how far all or any of these *mere possibilities* were *probable;* and in these respects different opinions may be held by different parties, in regard to the whole or any of the individual cases.

In perfect cases, I have said this insensibility exists; and in the classification of Mesmeric phenomena which I have adopted, I have deemed it an essential to constitute *perfect Sleep-Waking*, because of the distinct physiological condition it indicates. In the arrangement of such numerous and variable phenomena, it is convenient to consider a certain class of them as constituting a certain stage, or state, under a distinctive appellation; so that, taking that as a type or standard, the character of individual cases may be easily ascertained by their approximation to, or departure from, that type. Complete insensibility, therefore, exists in *perfect Sleep-Waking;* but there are some cases in which Second Consciousness, and all its other usual concomitants, are manifested, but in which one or more of the senses continues excitable. The auditory organ is the one which most frequently remains so; but I have never known or heard of any genuine case in which *all* the senses have been active in Second Consciousness.

Thirdly.—The Mesmeric Sleep-Waker possesses more or less power over the voluntary muscles; sometimes, over those of the voice only; in others, over those of the head, neck, and upper extremities also; and, in others, complete command over the whole. In some, the mental powers are weak and slowly manifested, and the range of thought exceedingly limited; in others, some few only of the cerebral organs appear to be in a state of excitability—perhaps, undue excitability—and to have rapid transitions from this to a state of repose,—the mental manifestations, of course, indicating more or less strongly a state of dreamy stupor or delirium. In some cases, however, the lower propensities only seem to remain in a state of torpor or partial quiescence, and the whole mental energies are concentrated on the moral and intellectual powers. In such cases, the most ignorant and unlettered, in the normal state, frequently exhibit a purity and elevation of sentiment, a vigour of conception, a profundity of judgment, and powers of eloquence, perfectly surprising, and such as would do honour to the best endowed and the highest educated members of society. I have often heard discourses, arguments, and discussions of this kind, continued for hours together, with unfailing energy, by parties who, in a normal state, would have been incapable of keeping up a conversation on such subjects, even for a few minutes.

Fourthly.—One of the commonest and best authenticated of mesmeric phenomena, is the special perception of the particular voice of the operator, or of those placed in relation with them, whilst utterly deaf to all other voices, and, indeed, all other sounds. They feel his presence—recognise, and are pleased by his contact, or proximity, and in the most profound state of insensibility to all other sounds, may hear and recognise his slightest whisper. Like the two ladies, previously mentioned, his voice is like the voice of their infants to them. It is a very beautiful and interesting phenomenon, and one, which, from its very simplicity, is in some cases, doubly valuable, as a test. It differs somewhat, perhaps, from the special perception noticed in the other cases, but it is strikingly analogous in character, and the difference is, perhaps, only in the greater degree of perfection in which it is developed and observed.

Fifthly.—Vision, without the eyes, &c.; a few, and but a few cases, have manifested this extraordinary power, in such a manner as to enable us to verify the reality of the cases previously noticed. Every fact, however, adds to the mass of evidence previously existing, and constitutes an additional claim upon the philosophical enquirer.

For myself, I have long ceased to regard vision, without the eyes, as *wonderful*, or as *inexplicable*, or, at least, as *more* wonderful, or *more* inexplicable, than vision with the eyes, and a thousand other things, with which every moment of our lives renders us, more or less, familiar. What is Sensation? What Perception—Visual perception?—and how is it obtained? Ask this of the parties who are usually most loud in *argument* upon the subject, and they then soon find, what more considerate enquirers had discovered before, viz. that very little is known about them. Our perceptions, through all our senses, appear to be derived from a kind of touch—the contact of the perypheral termination of the nerves of special sense, with the things or substances from which the impression is derived, or with some medium between them. We feel and taste by contact with the substances themselves; smell by contact with their odorous partioles; hear by contact with the vibrating atmosphere, and see by contact with the rays of light: the latter was very beautifully and lucidly illustrated by the talented writer on "The Truths and Falsehoods of Liebig," in your number of the 8th inst., and it is equally true of the others. The brain is capable of being influenced by all the substances and properties which act upon its special senses or feelers, but in its ordinary state, it receives certain special impressions (say of light, for instance,) through the special organ adapted to receive and transmit *them* and *them only*, (the eye); but it does not, therefore, follow, that in an altered condition of the brain itself, or of the optic nerve, it may not be capable of receiving such impressions through the medium of some other nerve, although that other nerve, in the normal state, may be the nerve of some other and different sensation. In the lowest order of animated beings, the organs of special sense do not exist, and yet, as an eminent physiologist recently observes, "there is good reason to believe, that they have a diffused sensibility to the agents which excite the sensations to which they respectively minister, being sensible, for instance, to the influence of light, though they do not see objects." At all events, the evidence is strong enough to make out a case demanding further investigation, which it is incumbent upon every candid physiologist to institute, and follow up. I admit it is difficult to make satisfactory or conclusive observations in cases where the power is alleged to be manifested, in or near the line of ordinary vision, from the extreme and extraordinary difficulty there is in effectually occluding vision by the eye. I should, therefore, advise the most reluctant reliance in such cases, especially if the slightest evidence appears of a disposition in the patient to deceive, and none at all where that disposition is palpable and unmistakable. When the new power of vision is removed from the ordinary axis, there is much less difficulty, as where the party sees objects, &c., by the sides and back part of the head. Professor Rostan had a patient who told him the hour and minutes on a watch held several inches from the back of the head, and that although *the fingers of the watch were repeatedly altered by M. Ferrus, and the watch again presented to the back of her head, without their previously looking at it.* Facts like these are of a different character to many of the so-called facts in clairvoyance, and they demand a different reception.

Sixthly.—The diagnosis of disease, &c., is a power which a few, and a still more limited number of Mesmeric Sleep-Wakers, have manifested, and in those a great difference is observable, in regard to the extent and accuracy of its range, and the intelligence with which it is accompanied. In some cases, there appears to be simply a perception, or consciousness of the nature of their own affliction, without the power, accurately and intelligibly, to describe it, although they may be able to prognosticate the recurrence of its paroxysms for days, weeks, or even months to come, prevising the very day, hour, and minute of their accession, their character, and duration. In others, a slight degree of intelligence beyond this appears, and they may describe, with more or less clearness and precision, the circumstances, or remedial means which may prevent or modify the paroxysms, or cure the disease. In some cases, the patient appears to see, or to have a perception analogous to visual perception of the particular part of the organism in which the disease is located, and will describe its state, or condition, and appearance, *as if from visual observation*, and prognosticate the concurrent changes in those and the attendant symptoms, during the future progress, or decline of the disease; and powers, to this extent, may be manifested, in regard to their own diseases, without the manifestation of any such powers, in regard to the diseases of other persons, though usually they will exhibit equal intelligence, in regard to those of their mesmeriser.

In other cases, however, a similar knowledge will be exhibited of the diseases of other persons placed *en rapport* with them; but in reference to these, the same difference is observable in the extent, and perfection of it; some exhibiting, simply a general *notion* of the nature of the disease; others describing accurately its particular nature, locality, causes, symptoms, proximate and remote, and its appropriate remedies, and others pointing out the particular part of the organism in which it is located, and describing, *as if from visual observation*, the precise state and condition of that part, its causes and duration, and the agencies calculated to modify and remove it, with the attendant variations in the appearances and symptoms.

The extraordinary facility, the astonishing and minute accuracy, and the sublime intelligence with which revelations of this kind have sometimes been made, have given to many the abiding impression of the exercise of supernatural or spiritual power, and the power of prophecy; whilst others, regarding the influence which the simple facts have exercised over such minds, more than the simple facts themselves, have set down the over-credulous observer as the dupe of his own infatuation, and the facts themselves as unworthy delusions; and yet it is not difficult for the reflective observer to perceive, that these apparently supernatural powers differ *in degree* only, and not in *kind*. from the partial and ill-examined manifestations which have been occasionally developed by disease: that difference, *in degree*, being perfectly appreciable, as naturally

and consistently flowing from the more favorable circumstances under which they are developed, and the superior intelligence with which they are observed, educated, and perfected. Nor are we compelled to believe they are supernatural: all human knowledge is dependent upon sensation, and all the observations I have been able to make—and I have personally observed innumerable and most indubitable manifestations of them—leave no doubt on my mind, that this knowledge, also, is derived through the same medium—*sensation*, though truly of a most exalted kind. These powers, in regard to the diseases of others, are easily demonstrated when they are known to exist. In a most important case, reported by the Commissioners of the Royal Academy of Medicine at Paris, the accuracy of the sleep-waker was confirmed, in every particular, *by a post-mortem examination*, and the celebrated Georget was so satisfied on this subject, that he emphatically declares his belief, that "no *perfect* medicine exists, but that of the sleep-waker, *in everything which concerns themselves*, and that advantage may be derived from their admirable instinct in the case of other patients."

In conclusion, I trust I may be permitted to hope, that the views, presented in these papers, may at least induce a more complete investigation of the facts to which they relate, and leave the less excuse to those who so greatly misunderstand or misrepresent them.

PENCILLINGS OF EMINENT MEDICAL MEN.

PARENT DUCHATELET.

(To the Editor of the 'Medical Times.')

Sir,—Having seen in your journal, occasional sketches of some of our eminent medical men, I offer the following.

JOHN WATERS, M.D., M.R.C.S. (E.)
62, Torrington Square.

Alexander John Baptist Parent Duchatelet was born at Paris in Sept. 1790; his father was engaged in a Government office, which, combined with some private property, rendered their circumstances independent. Previous to the revolution, his family was rich, but, in 1792, they retired to a country-seat, called the "Chatelet," which is situated about a league from Montargis. Parent lived there during the whole of his infancy. Being the eldest of 10 children, nothing was omitted towards perfecting his education; the most rigid principles of virtue were instilled into his infant mind—example begot a habit, which made him love it. His first instruction was not, however, as complete as might be desired; the revolution, which burst forth with all its horrors, and subverted all order, would have deprived him of the opportunity of acquiring all knowledge of those essential branches towards his education, had not the young Parent found in his family, instructors capable of directing him; and thus a life, which otherwise might have passed away without shedding its lustre on science, was preserved as a light and example for futurity. Whilst still a child, he was habitually grave, and gave early evidences of his love for collections of birds and insects: he devoted himself to study, because he thought he might thereby become a support to his family. He was but sixteen when his father sent him to Paris, where he completed his studies in a short time, and, in obedience to the wishes of his parents, as well as the desire of being useful to his fellow beings, he embraced the study of medicine. Received Doctor in Medicine in 1814, he determined to practise his profession in the metropolis, which he followed for some years; but many considerations induced him to abandon it. Medicine at that period did not afford him the degree of certainty which he desired: assertions which were given to him as incontestable truths were not borne out at the bed-side—theories that were applauded, could not support the experimental proof to which he submitted them. Parent was not sceptical; but to convince him he required proofs. The numerical method was not then employed in medicine as at present; yet by it, he made many researches on inflammation of the arachnoid,—a disease then little known, and upon which he published a very remarkable treatise. Notwithstanding the merit of this work, and the approbation which it received from the medical world, Parent thought lightly of it: he forgot the "utile" it contained, and only viewed its fancied imperfections. Being nominated Physician of the Philanthropic Society, he fulfilled his duty with a religious devotion, and although retired from practice, he never denied his services to the poor. His thoughts being turned in another direction, he now made the acquaintance of Hallé, and asked his advice. Hallé, who already had observed the merit of Parent, engaged him to pursue the study of Hygiene; henceforth opened for Parent a new career—a career demanding a long, laborious, painful, disgusting, and dangerous labour; but sure in its results, and which would profit the sciences, industry, agriculture, and was to become a blessing to populations. This was the vocation of Parent! He devoted himself to it—he died in it!

From the year 1821 to 1836, his time was devoted to Hygiene, not a day passed, (I may say, one hour), without being absorbed in his favourite study: the memoirs which he wrote on that science, amount to 29. He left, moreover, completely finished, his remarkable and curious work on the "Prostitution of the City of Paris." His first memoir on Hygiene is entitled, "Recherches pour decouvrir le cause d'accidens developpes en mer, a bord d'un batiment chargé de poudrette." A cargo of poudrette had been sent from Montfaucon to Guadaloupe, and during the voyage half of the crew died, and the other half arrived in a state of the most deplorable health. Hallé was applied to on the subject, and it was the first time that such a subject was propounded. Hallé was pressed for an answer; but, knowing that his reply was vague, he engaged Parent to investigate this point of Hygiene. Thus was the opportunity given to Parent of becoming acquainted with Montfaucon. Notwithstanding the horrible aspect, the insupportable odour of this depot, where are assembled, all the filth and offal of Paris, our investigator was not deterred: he visited the sewers, interrogated the masters and workmen; and on the question which he resolved to examine, he wished to know all, and he knew all! This poudrette fermented, particularly when transported into a warmer climate, and the exhalations which were evolved from this moistened putrescency, poisoned the crew. How prevent a similar occurrence? The poudrette should be removed to enrich the exhausted and arid soil of the Colonies; but how to do so without danger? For the gases that are emanated are very fœtid, and the action of which on the respiratory organs, if continued for a long time, proves fatal. Parent satisfied this want—lime was the antidote he adopted, which prevented the fermentation—chemically united with the noxious gases, and thus rendered its removal innocuous. The following year he read a memoir before the Academy of Medicine, relative to the salubrity and manufacturing industry of the city of Paris: about the same time appeared his Essay on the Cloacæ of Paris, its connection with public health, and the medical topography of that city. To compose this essay, (as he has the modesty to call it,) his researches were indefatigable, he wished to see everything, and frequently traversed the sewers of Paris; he assisted at the labours of the workmen, questioned them separately, visited them in their homes to acquire a more perfect knowledge of his subject, and thus further the grand object he had in view. The diseases, he says, occasioned by the sojourn in the sewers, are few in number, the most formidable is asphyxia: opbthalmia, rheumatism are prevalent: he says, that cutaneous affections, ulceration of the legs, are not counted among the number of the diseases to which the workmen are subject; they even consider the water from these sinks as a good application against wounds, ulcers, and chronic eruptions: there is, however, a disease aggravated in its nature, and often fatal, "syphilis." Parent's observations on this subject have not left the slightest doubt. On the causes of asphyxia, its nature, the precautions necessary to prevent it—the improvements to be made in drainage—the advantage and inconvenience of passing currents of hydrogen gas, &c., Parent gives a host of new and lucid details, abounding with interest. Some years after the publication of these researches, he had an ample opportunity of reducing to practice their utility, when directing the obstructed drain of Amelot, which stupendous work he completely achieved.

We must not be astonished that Parent had not the repugnance which these places naturally excite: I should say that he liked them! Not being able to extricate himself from a fête given at the Hotel-de-Ville. he recalled his preceding evenings, so usefully employed, and said, in a low tone, to a friend who accompanied him: "I would prefer a hundred times better to visit a drain than come to this reunion, I shall not be seen here again;" and he kept his word. At the reorganization of the School of Medicine in 1823, Duchatelet was named Aggrégé: he accepted this place, which he had not sought for, but he never lectured; his timidity prevented his speaking in public: this timidity was so great, that, at the examinations, when it came to his turn to interrogate, he trembled: the timidity of the candidate seemed to be communicated to him. With such a sensitive disposition, his want of success in this department is not to be deplored; fortunately for science, for the interests of his fellow-beings, he was appointed one of the "Conseil de Salubrité," in which three months before his death, he was elected vice-president. His reports to the society are numerous, nothing escaped him—the words "often," "sometimes," are never found among his curious notes: the numerical method was the one adopted, nothing could equal the severity of this method; to discover truth, was for him a second religion. What precision in the facts he relates! what clearness in his ideas! what force in his conclusions! If we consider the great number, and importance of the facts with which he has enriched Hygiene, the numberless errors he removed—we may say, from him dates, for this science, a new era. His next treatise was on the influence which tobacco and its preparations have on the health. I cannot, in this short sketch, include all the works of Duchatelet; these works cannot be enumerated: in a few words, they all bear the seal and genius of Parent! A last work, more important than these I have mentioned, curious in its details, and peculiar in its character, was on the point of publication, when Parent was taken ill. It was entitled, "The Prostitution of the City of Paris;" to undertake it, required more than courage—it required for its vast completion the purest sense of rectitude, and moreover, it required the supporting consciousness of his principles and unflinching austerity of morals and manner. This idea must forcibly strike us, when we consider the abodes of vice and wretchedness to which his visits were continually directed, and whence he returned uncontaminated. He numbered, I may say, the links of a chain of vice never counted before—he analysed the darkest recesses where infamy was to be found, and his unwearying labours during eight years in this arduous and painful duty, have given rise to "one" of the most original of works—a work which reflects alike credit to his head and heart: he has given us a work, which, in his own words, was needed: he has given impartially, praise and blame—he need not blush for what his pen has traced—and, free from prejudices, he has done more than ever was attempted before for science—the good of his kind—and for the unfortunate class, which furnished him with so many subjects of study and meditation. To the more zealous advancement of Hygiene, his practice was abandoned; however, he continued to visit the poor; these always had a claim on his cares. A service was given to him at La Pitié Hospital, which he discharged with the greatest regularity; he was filled with charity and love for his fellow-creatures; his life was a continual sacrifice—an unceasing self-denial. Notwithstanding his extraordinary application, his health continued good until the 19th Feb. 1836, when having carried his labours too far, he was suddenly seized with arachnitis, which assumed the most serious character: pneumonic symptoms also shewed themselves. His friends, Messrs. Louis and Andral, pronounced his case hopeless. Parent had exhausted his life. He died at Paris,

March 7, 1836, aged 45. May his memory be honoured! He had that which all wise men estimate,—"true science and virtue."

TRANSACTIONS OF LEARNED SOCIETIES.

ROYAL MEDICAL AND CHIRURGICAL SOCIETY, June 11. Mr. Stanley, President, in the chair.—The following papers were read:—

Two cases of tubular expectoration from the bronchi in the adult; by James Reid, M.D., communicated by Sir James Clark, Bart.—The author commences by observing, that there are few cases of this disease placed on record, either by foreign authors, or those of our country. Dr. Watson, in his lately published lectures, has mentioned two cases, (one of which is detailed in this paper,) and remarks, that no similar ones had before fallen under his notice. The first case recorded by Dr. Reid, was that of a lady, aged twenty-eight, who had an attack of bronchitis in December, 1836, which yielded to the usual means, leaving behind, however, a chronic cough. In February, 1837, after having suffered severely from a sense of suffocation, she coughed up, with froth and mucus tinged with blood, several arborescent membranous substances, resembling casts of the minute bronchial tubes. This substance continued to be expectorated for several days, to the great relief of the breathing. She had a recurrence of these attacks five or six times, at intervals, varying from one to six weeks; the patient became emaciated, her general health suffered, and there was great dyspnœa. A residence in Devon restored her, but on her return to London, in October, she had an attack of dyspnœa, much more severe than the former ones. This was followed by the expectoration of the arborescent substance, in much larger quantity, and of a firmer consistence than before. A discharge of blood always accompanied it, but never to much extent. The patient had no return of the complaint after this, but died in December, 1841, of a disease unconnected with the chest. The second case was that of a robust healthy man, in the prime of life, who had complained for two years of uneasy sensations about the throat and fauces, and of there being something which he wished to cough up. In April, 1840, he had a violent paroxysm of coughing, lasting for half an hour, after which the voice remained husky, and there was a ringing cough, and a sense of uneasiness at the upper part of the sternum. He recovered from these symptoms, but had occasionally cough and expectoration of mucus. In February, 1841, a sudden, and rather profuse attack of hæmoptysis came on, with effort; it was, however, soon followed by a convulsive cough, when arborescent flesh-like substances were brought up, with great relief. The patient was bled to fainting, on the first occurrence of the hæmorrhage, and a moderate antiphlogistic treatment adopted. He soon recovered, but the hæmorrhage recurred, and several portions of tubular substance, resembling plastic casts of the extreme bronchial tubes, were coughed up. On December the 19th, 1841, this patient had another attack of slight hæmorrhage, followed by the expectoration of a large quantity of the tubular substance, and on four or five occasions, during the subsequent ten days, there was a return of the hæmorrhage, and various portions of tubular substance of different sizes were coughed up. In this attack, the treatment was not so active as before; expectorants, a light diet, and cooling drinks, were found sufficient. Up to the present time, (nearly two years,) there has not been any return of the disease. The author dwells, at some length, on the general character of the disease in question. He thinks the cause of it may be, most probably, a specific chronic inflammation of the mucous membrane, altering the natural secretion, and replacing it by one similar to that produced by serous membranes. The prognosis, he considers, may generally be favourable, provided there be no complication, and also, that the two larger bronchi be not simultaneously affected. Cases are alluded to from Tulpius, Morgagni, and De Haen, in which there was complication, with hthisis, peripneumonia, and pleurisy, &c. He concludes by some observations on the treatment, and remarks, that rigorous discipline does not seem necessary, and thinks he fell into this error in his second case. He believes, that general bleeding will seldom be required, and that only when there is congestion of the lungs. Mercury and iodine proved of little service in his cases, and he should, in future, be disposed to rely more on mild expectorants, and a light diet, than on active treatment.

Dr. Copland observed that the author of the paper, in the commencement of his communication, had stated that the disease of which he treated had not been alluded to by other writers, thereby leading to the supposition that it was a new complaint. This, however, was not the case: it had been fully discussed by British writers in works on diseases of the bronchi, nor were cases thereof of unfrequent occurrence. Several instances had been recorded in the journals, and drawings of tubular expectoration had been published. He had had several cases referred to him, while he was the editor of a medical journal, and since the article on the bronchi had been published in his Dictionary, several more had been brought under his notice. He mentioned these facts, as he did not think it ought to go forth to the world from that Society, that this disease was to be regarded as something new, or else as a complaint the nature of which had been much neglected by the profession.

Dr. Cursham exhibited a preparation of this disease, which was sent by Mr. Bainbridge, and called upon that gentleman to furnish the particulars of the case.

Mr. Bainbridge stated that the specimen of the formation of false membranes which he had exhibited, was taken from a young woman, who was very near her confinement. She was seen by him at the latter end of February last, when her breathing was loud; inspiration crowing; cough constant, dry, and ringing; pulse 100, strong; face flushed and turgid. He bled her largely directly, leeched the larynx, applied a blister, and gave calomel and tartarized antimony every three hours. The blister was dressed with the strong mercurial ointment, which the patient was also directed to rub in. The next day labour came on, and she was delivered in a few hours of a dead child. The day after that, there being symptoms of impending suffocation, the tartar-emetic and ipecacuanha wines were freely exhibited, but ineffectually. The larynx was freely leeched, and another blister applied, but she died suddenly the same evening, while sucking an orange. The *post-mortem* examination shewed a large effusion of serum and pus in the right pleural cavity, with effused lymph over the lung, which was hepatized. The rima glottidis was blocked up with orange-seeds and pieces of orange. The larynx was lined with a continuous false membrane throughout its whole extent, and the adventitious structure was also found in the most minute bronchi on the right side, but on the left in the larger tubes only. The mucous membrane, beneath, was much injected. A similar case, in a boy, five years old, occurred a short time since in his (Mr. Bainbridge's) practice, and a portion of the false membrane was examined in a microscope by him and Dr. Williams, of St. Thomas's Hospital, but they could only discover that there were not any vessels or fibres formed in it. Dr. Hodgkin had another portion for more minute examination, but he had not yet heard the result.

Mr. Lloyd mentioned a case of tubular expectoration which had occurred in St. Bartholomew's Hospital, under the care of Dr. Powell, in which the symptoms were not acute, nor were there any general constitutional symptoms, such as might have been expected. The patient, after a long residence in the hospital, was relieved, but not cured, and when she was discharged she still expectorated the tubes from time to time. She afterwards became a gratuitous patient at Mr. Lloyd's house, and was watched very carefully for a certain period, when she ceased her attendance, and was lost sight of for eight or nine years, after which she again consulted him for the same complaint, and was relieved by the treatment that was adopted. Since that time he (Mr. Lloyd) has not seen her. Another patient that was in the hospital used to pass these tubes of false membrane by the bowels, and sometimes ejected them by vomiting, and this went on for a great length of time. In that instance, there did not exist any symptoms of disease in the bowels, and he was of opinion that these tubes were brought up from the bronchi during a fit of coughing, and afterwards swallowed. He thought that cases, such as had been narrated, were not at all uncommon.

Dr. Hocken narrated a case which he had attended with Mr. Whilbourne, where the exudation was confined to certain portions of the mouth, and intestinal canal, and which was apparently caused by small doses of calomel and opium. The patient was an hysterical woman, and had been in delicate health for some time previously. When seen by Dr. Hocken, she complained of deep-seated pain in the hypogastric region, increased on firm pressure, and an inability to pass any urine. She had also a discharge of mucus and blood from the vagina. The cervix uteri was tumid and exceedingly sensitive, and there were present general symptoms of ill-health. The urine was drawn off by the catheter, leeches applied to the seat of pain, a turpentine enema ordered, and small doses of calomel and opium. The next day, the uterine symptoms were removed, but the patient complained of pain in the mouth, and there was an increased flow of saliva; and, by the day after, the greater part of the mouth was covered with a thick, firm, false membrane, of a yellowish-brown colour, the mucous membrane beneath being highly injected. Several portions of a whitish, opaque membrane were also passed by the bowels. This state passed off under simple remedies, but the patient remained in a delicate condition for some time after.

Dr. A. P. Stuart had seen the effusion of false membranes in the bronchi in the bodies of persons who had died from fever, complicating pneumonia.

Dr. Webster enquired if Dr. Reid were present, as he was desirous of ascertaining the *post-mortem* appearances in the first case that was narrated, as he understood that patient had died since of some other complaint.

Dr. Aldis mentioned that he had attended a child at the Surrey Dispensary, who died of suffocation, and, on examination of the body after death, he found several warty excrescences in the larynx.

On the introduction of the solution of lead into the bladder for the decomposition of phosphatic calculi; by S. Elliott Hoskins, M.D., F.R.S., communicated by W. Prout, M.D., F.R.S.

The object of this paper was to illustrate, by the details of six cases, the benefits which may be expected to arise from injecting weak solutions of certain salts of lead into the bladder, for the decomposition of phosphatic calculi, on principles explained by the author, in a paper communicated last year to the Royal Society. These salts act in destroying the concretions by a process of double decomposition, whereby the active agent of the decomponent is liberated gradually, and neutralized by the earthy basis of the calculus, before it can come in contact with the living tissues, and the solutions are, therefore, easily borne as injections by the coats of the bladder. The salt which he first employed was the nitro-saccharate of lead, but he has since substituted the acetate; and he describes the particular mode of using it. The experience of the cases which he records, establishes, he thinks, two facts; first, that the presence of the injection is tolerated by the bladder, and that it even acts as a sedative, besides coagulating the mucus so abundantly formed in these cases into short curdy flakes, easily passed through the urethra; and, secondly, that a chemical action takes place on the calculi. He believes that while surgical operation is inadmissible, this plan of treatment will be of avail for relief, if not for cure; for smoothing away asperities, and removing the outward phosphatic coats of calculi, so as to bring them within the range of the crushed forceps; in short, for partial, if not for entire disintegration. The latter he thinks is more likely to happen

when layers, composed of the urates or oxalates, are bound together by phosphatic cement. He also directs particular attention to one of the cases, where a considerable quantity of calcareous matter was removed from the prostatic portion of the urethra, by the injection acting on calculi which were found lodged in that part.

Mr. Solly observed that the solution of Dr. Hoskins was not always so unirritating as it was represented to be. He had tried it in one case, which was certainly a very aggravated one. The bladder was very much diseased, and the urine contained a great deal of mucus and the phosphates. The patient had previously undergone the operation of lithotrity ten times. The case in fact was one in which nothing but the desire to relieve the man of his sufferings could have induced him to operate; prior to doing so however, he used Dr. Hoskins' solution, having first communicated with him on the subject. He commenced by injecting plain water into the bladder by the double canula, and did not produce any irritation; he then employed the solution of lead for four or five days, but it caused so much irritation he was obliged to leave it off. The man then had nitric acid administered to him, by which he had always obtained relief previously, and with the same result: afterwards he, (Mr. Solly) operated in the usual way, and the man did perfectly well. He was quite cured when he left the hospital, and is now pursuing his usual avocation as an itinerant brush-seller.

Mr. Lloyd said that he was acquainted with the patient whose case had been narrated by Mr. Solly, and he regarded it as a very unfavorable one for the employment of the injection, inasmuch as the bladder was in a very irritable state, and nothing could be injected into that viscus without producing irritation. The calculus had been crushed on two or three occasions, but fresh concretions of the triple phosphate formed, and mucus and blood were passed with the urine. It was a very unfavourable case altogether, and its successful termination reflected great credit on Mr. Solly.

Mr. Solly remarked that the man had been under his care for two or three months altogether, part of the time at the dispensary, and part at the hospital, and during that time no blood was passed with the urine, but principally mucus. He extracted three calculi by the operation.

Dr. Willis would have been pleased to have found that the results of Dr. Hoskins' experiments were more definitive; but the solution appeared at all events to be innocuous, since in Mr. Solly's case it had got the bladder into such a state, as to render it fit for the operation for the extraction of the stone.

Mr. Solly here explained that, on the contrary, the use of the injection had caused considerable vesical irritation.

Dr. Willis had misunderstood the nature of the case which had been narrated. He thought however that the solution was not without use, but as its value appeared to be restricted to cases of the deposit of phosphates, there would still remain a large number of uric acid and other calculi for the removal of which a remedy would be required. He would not however despair even with regard to them. A Polish or Hungarian nobleman, he was not certain which, had discovered that a certain earth called lithium could combine with uric acid, and this might perhaps prove a medium, for attacking the uric acid calculi, for which we have not at present any solvent. With regard to litbotrity, when it was first proposed, it was said that there was not any case which terminated fatally. All the patients recovered. and no relapses took place. The eyes of the profession had been opened since to its true value, and it is now regarded as applicable chiefly when the bladder is healthy, and the calculus small.

Mr. Charles Hawkins observed that his eyes had been opened to its true value, by having seen during the last few years, many such cases which had been treated successfully in the private practice of Sir B. C. Brodie. With regard to this operation being confined to cases where the calculus is small, in many of the cases to which he had alluded, large stones were broken up, and the operation had been done also in cases in which the bladder was so diseased that lithotomy was deemed inadvisable. In one case where there was considerable phosphatic deposit, the patient had not been able to pass any water for two years without the use of the catheter, and the urine was loaded with mucus; immediate relief was afforded by the operation, and the patient, who had not previously left his bed for many months, rallied, and was able to go into society. The phosphatic deposit again formed, reproducing the former symptoms, which were again relieved by the operation. In old persons, who have enlarged prostates, small fragments remaining after lithotrity, may form the nucleus of calculi. He recollected the case of an old gentleman, between sixty and seventy years of age, who had a triple phosphate calculus, which was removed, but the urine still contained a quantity of ropy mucus. The bladder was examined, but nothing was detected; nitric acid solution was injected into the viscus for about three weeks though the double gold canula, with the effect of producing some amendment in the amount of phosphatic deposit, and the gentleman left town. The symptoms increased in severity, and he accordingly returned, was sounded, and a calculus was discovered, which on removal, was found to have a small fragment for its nucleus, a much smaller piece than he (Mr. Charles Hawkins) had often seen discharged by the urethra. With regard to the value of the operation of lithotrity, he had seen about sixty cases within the last few years, and there was hardly a case which had not proved successful. In one however—a very bad case—the patient died before all the fragments could be removed from the bladder, not being able to bear the operative proceeding. He, (Mr. Charles Hawkins) had only seen two cases within the last three years to which the operation, might not be considered applicable; in one of these the operation was commenced, and then left off, and in both instances the patients died. One of them had malignant disease of the rectum, and the other had a large oxalate of lime calculus, the most difficult of all calculi for removal by this operation, as it breaks very sharply, and the fragments cause great pain in passing. He thought that if the lead solution could remove and prevent the secretion of mucus, it would be a very valuable preparation.

Mr, Bransby B. Cooper was of opinion, that Dr. Hoskins' solution might be of service in relieving irritability of the bladder, but that lithotomy or lithotrity would be required afterwards. With regard to these operations, he had had considerable experience, and he was not inclined to look upon the latter proceeding so favourably as Mr. Charles Hawkins. The propriety of selecting a case for that operation depended entirely on the capacity possessed by the bladder for containing six or eight ounces of fluid, and of retaining that quantity while the lithotrite was used. Should the fluid escape during the operation, there would be danger of wounding the mucous membrane of the bladder. In cases of the oxalate of lime calculus, he believed that patients suffered less than with the phosphatic variety, notwithstanding the hardness and great weight of the concretion, but he should not have recourse to lithotrity for such a calculus, on account of its brittleness and angularity of fracture. He had cut one hundred and ten persons for stone, and of these he had found the oxalate of lime calculus afford the most successful results and the most rapid recoveries.

Mr. C. Hawkins had not seen any case,in which injecting the bladder gradually, with care and time, for about a month or six weeks, had not enabled that viscus to retain sufficient fluid to allow of the operation being performed. The only case in which it could not be done, was one of the oxalate of lime calculus; the patient was afterwards operated on by lithotomy, and died.

ETHNOLOGICAL SOCIETY, May 19th.—Sir Charles Malcolm, President, in the chair.

Lord Francis Egerton, M.P., James Heywood, Esq., and W. D. Child, Esq., were elected members.

A paper "On the Intellectual Character of the Esquimaux," by Dr. King, the Secretary, was read, being the last of a series of three papers laid before the Society, forming a complete history of this arctic family. The data upon which Vitruvius, Lord Kames, Herder, and Pritchard, have displayed great learning, and much ingenious reasoning, the author pronounced to be altogether false. Of the general disposition of the Esquimaux, all who have visited them speak in the most favorable terms. Their intelligence, compared with the neighbouring red men, is described as of a high order, evinced in their social habits among themselves and with foreigners, in their marriage ceremonies, in the education of their children, in their funeral rites, in their arts, manufactures, and their commercial relations. The estimation in which women are held is much higher than is usual in uncivilized life; and young couples are frequently seen, with an air of tenderness, rubbing noses, their favorite mark of affection. The Esquimaux are polygamists, but they rarely have more than two wives, and only one if she has issue; and the women have the same privilege as to the number of husbands. At Igloolik and Borthia, cousins are allowed to marry, but a man will not wed two sisters; while at Greenland, marriage between cousins is rare. Two instances occurred at Iglolik of the father and son being married to sisters. A son-in-law or daughter-in-law does not consider a father-in-law, or mother-in-law in the light of relations. If a boy (or a girl) although in no way related, have been brought up in the same family, they are looked upon as brother and sister, and are not allowed to marry. When there are no children, it is considered a reproach to both parties, but the poor woman generally gets the worst of it, except she is a wise woman, and then she obtains another husband, and has another chance.

SOMNAMBULISM.

A young gentleman, known as Alexis the Somnambulist, has just arrived from Paris, under the care of M. Marcellet, and was exhibited yesterday, for the first time (we believe) in London, at the residence of Dr. Elliotson. Alexis has for some period excited much interest in Paris by the wonderful powers of *clairvoyance* which he manifests, whilst in a state of magnetic sleep. Through the kindness of Dr. Elliotson, a large number of ladies, and scientific and distinguished persons, had an opportunity yesterday of witnessing M. Marcellet's experiments. It is but just to Dr. Elliotson to observe, that previously to the commencement of the experiment, he stated that he did not hold himself at all responsible for what M. Marcellet advanced. Knowing M. Marcellet to be a gentleman of undoubted respectability, Dr. Elliotson permitted him to hold his first levee in Conduit-street, taking no part whatever in the proceedings. Without admitting that we have become believers in the possibility of producing such a condition as that known by the name of *clairvoyance*, we must nevertheless honestly confess that we have been much staggered by what we saw, after M. Marcellet had thrown his patient into the magnetic state, and exhibited the tetanic spasm or rigidity of the muscles of the arms and legs which usually accompanies this condition of the nervous system. Preparatory to the phenomena of *clairvoyance* being shewn, the patient's eyes were bandaged. We pledge ourselves that we did this effectually. To see, in the ordinary sense of the word, a ray of light, was physically impossible. Two large pieces of wool were placed over each eye, and above this were bound with great care two linen handkerchiefs, folded several times. Thus blindfolded, he was placed at a table, and commenced playing *ecarte* with a strange gentleman in the room. It was, indeed, wonderful to see with what accuracy he played, not only knowing every suit he had in his own hands, but, by a species of divination, being able to detect the condition of his opponent's hand. Several persons played with him, and among others Dr. Jerden, who, however, was fortunate enough to beat the Somnambulist. To exhibit the man's extraordinary powers, a large book of plates, nearly two inches in thickness, was placed between Alexis and his opponent, and notwithstanding this physical impediment, the Somnambulist was able to tell the person, with whom he was playing, the cards he held in his hand. It may be said there was collusion. We know such was not the case. Alexis then had a letter placed

in his hands by Colonel Gurwood, with the view of ascertaining whether he was competent to make out the name of the party who had written the letter. It appears that Col. Gurwood had placed himself in communication with Alexis, some time back, in Paris, in order to discover whether he had it in his power to give him any hint by which to enable him to find out the residence of a French soldier, whose life Colonel Gurwood had saved during the siege of Badajoz. Alexis during the magnetic state gave Col. Gurwood some valuable information on the subject of his inquiry, and, acting upon this, he was fortunate enough to find not only the name of the person, but his place of abode. Colonel Gurwood wrote to the soldier, and the letter which he placed folded in Alexis' hands was the answer which he had received. Alexis, after a little examination, wrote down the person's name, and told Colonel Gurwood the purport of the letter which he held in his hand. He made, certainly, one mistake in the final letter of the person's name; but this did not, in the slightest degree, detract from his extraordinary penetration. Another gentleman, who had not seen Alexis previously (Colonel Gardener, we believe), asked the Somnambulist to describe his residence. This he did with great accuracy, telling him the number of pictures he had in his drawing-room, their peculiar position, and the subject of the pictures. Watches were then placed in his hand, and, by merely feeling on the back of the case for a few minutes, he pointed out, with one exception, the exact position of the hour and minute hands. A large book of plates was subsequently held to the back of his head, and to the amazement of every person in the room, Alexis was able to describe the various prints to which his attention was directed.

We have thus endeavoured faithfully to record the facts which we witnessed this day. It is our belief that the experiments were performed fairly, and that in no single instance did anything like collusion exist. We do not pretend to account for the strange, the wonderful phenomena which this youth certainly manifested. Of course there were many present who refused to admit the possibility of any person seeing under such circumstances. One gentleman, more incredulous than the rest, declared most emphatically that Alexis was able to see down his nose—an hypothesis, we must confess, at variance with all our anatomical and physiological knowledge. With his eyes almost hermetically sealed, he was able to read a book taken from among a number of works on the table. Independently of this, a handkerchief twice folded was placed over the printed page of a large volume, and through this the somnambulist was able to read with facility. We have thus endeavoured faithfully to record the experiments performed this day. We draw no conclusion from the facts: we confess they are mysterious and inexplicable—beyond our comprehension. Let those who are disposed to be sceptical examine the matter for themselves; they will, we understand, have frequent opportunities of doing so.—*Times.*

REPORT OF THE COLERAINE UNION WORKHOUSE HOSPITAL.

To the Editor of the 'Medical Times.'

SIR,—I have the pleasure of enclosing the Report of the Coleraine Union Workourse Hospital, for the year ending, 25th March, 1844. Should you consider it worthy of a place in your Journal, your inserting it will oblige,

Your obedient Servant,

THOS. H. BABINGTON, A.B., M.B.,
Licentiate Royal College of Surgeons, Ireland,
Medical Officer, Coleraine Union Workhouse.
Coleraine, Ireland, June 20, 1844,

It appears from the Registry Book of the Workhouse, that 363 paupers were in the house on the 25th March, 1843, that 309 were admitted to 25th March, 1844. Making a total of 672 relieved in the year.

The ages of the persons admitted are classed in he following table:—

No. I.

* Infants Under.	From 2 Years.	From 2 to 5	From 5 to 10	From 10 to 20	From 20 to 30	From 30 to 40	From 40 to 50	From 50 to 60	From 60 to 70	From 70 to 80	From 80 to 90	From 90 to 100	Total
* 29		17	40	58	30	33	21	17	28	19	15	2	309

Of the whole number admitted into the workhouse, 253 received relief in the hospital, labouring under the diseases enumerated in table

No. II.

Fever	6
Hooping Cough	1
Chicken Pox	5
Diseases of the Skin	43
" of Lungs, &c.	26
" of Stomach, Bowels, and Organs of Digestion	52
" of Heart	2
" of Eyes	29
" of Ear	3
" of Brain and Nervous System	6
" of Females	4
Midwifery Cases	2
Accidents	5
Abscess	15
Abortion	2
Cancer of the Breast	2
Influenza	11
Infantile Fever	3
Diseases of the Joints	3
Rheumatism	3
Retention of Urine	1
Scrofula	4
Quinsy	6
Venereal Diseases	5
General Debility from Old Age, &c.	15
Total	253
Patients remaining under treatment, 25th March, 1843	33
Admitted from 25th March, 1843, to 25th March, 1844	253
Total	286

A Summary of the above is set forth in table

No. III.

Discharged Cured	174
Relieved	5
Left the House	14
Died	43
	236
Remaining under treatment, 25 Mar. 1844	50

As in last year's report, the mortality occurred chiefly amongst the very aged, as will be seen on looking over table

No. IV.

AGES OF 43 PERSONS WHO DIED IN COLERAINE UNION WORKHOUSE, FROM 25TH MARCH, 1843, TO 25TH MARCH, 1844.

Under 2 years.	From 2 to 5.	From 5 to 10.	From 10 to 20.	From 20 to 30.	From 30 to 40.	From 40 to 50.	From 50 to 60.	From 60 to 70.	From 70 to 80.	From 80 to 90.	From 90 to 100	Total.
1	0	2	0	4	1	2	3	3	10	11	6	43

This table also presents a strong contradiction to the statement put forth very prominently before both the profession and the public, that the mortality amongst the young children in the workhouses in Ireland is very great.

A few remarks on the list of diseases may not be out of place. It is to be observed, that we have had very little fever, or other infectious disease, amongst the inmates of the workhouse, during the past year.

Of the 26 cases of diseases of the lungs and organs of respiration, there were fifteen cases of chronic bronchitis, ten cases of phthisis, and one of pleuritis. The bronchitic affections very prevalent, and often terminating fatally amongst the aged.

The affections of the organs of digestion, were chiefly acute dyspepsia and diarrhœa, the latter occurring most frequently amongst the inmates advanced in life, and in such cases, generally proved fatal.

Two cases of disease of the heart presented themselves; one, ossification of the valves, terminated suddenly; the other, aneurism of the arch of aorta. The patient, in this case, left the house. I have consequently lost sight of him.

During the past year, I have not met with one case of dropsy amongst the inmates of the workhouse, which is somewhat strange; and from the opening of the workhouse to the present time, I have only met with one case of renal disease, with anasarea. The only reason I can assign for this is, that the class of patients I have to deal with, are chiefly of the agricultural population, who live in pure air, and have not the weakened and diseased urinary and digestive organs so frequently met with in large towns, where the working classes and artizans are more addicted to the use of spirituous liquors.

The diseases of the eyes occurred chiefly amongst the young female children, and were principally catarrhal inflammations of the conjunctiva.

The remaining cases mentioned in the report, with two exceptions, are not possessed of any interest, such as to require a more extended notice.

One of the midwifery cases I wish briefly to relate.

The patient, deaf and dumb, aged 28, pregnant of her first child, was 72 hours in labour. Pelvis large and well formed, presentation natural; no urgent symptoms to justify interference. The child was still-born, uterus contracted firmly, the placenta was retained for 45 minutes, there was no hæmorrhage. I removed the placenta, which I found partially detached, and lying partly in the vagina.

There was no hæmorrhage after the removal of the placenta, and the uterus remained firmly contracted.

In about 30 minutes from the removal of the placenta, the patient was attacked with very hurried breathing, jactitation, vomited some fluid she had taken a few minutes previously, and expired almost immediately.

I made a *post-mortem* examination of the body, seven hours after death, in the presence of two medical brethren, to whom I related the case. The abdomen was much distended with gas. The uterus was firmly contracted, and quite empty. We minutely examined the body, and could find no lesion in any organ to explain the cause of death. I have searched many midwifery works on the subject; in all I find sudden death after delivery mentioned as sometimes occurring, but I am still in ignorance of the cause.

Perhaps some of your correspondents could throw some light on the subject.

The case of retention of urine is the other I wish to mention.

It was of several days standing, and occurred in a man, aged 81. All attempts to relieve him by the catheter having failed, I had a consultation with one of my brethren, when we determined on performing paracentesis vesicæ above the pubis. The operation was performed without difficulty (it is unnecessary to enter into the details); we had not a single bad symptom afterwards. In about a month, urine flowed by the urethra; I closed up the opening above the pubis, which healed speedily. The patient survived the operation several months.

The forty-three deaths which occurred were from the following diseases, and occurred chiefly amongst the very old:—

Phthisis and bronchitis	10
Diarrhœa	8
Fever	1
Midwifery case	1
Erysipelas of head	1
General debility from age	14
Paralysis	5
Compound fracture of leg	1
Disease of heart	1
Ulceration of colon	1
Total	43

P. S.—I much fear this report has extended to rather too great a length, but perhaps to some of your readers it may not be devoid of interest,

T. H. B.

* Similar tables for year ending, 25th March, 1843, were published in the *Medical Times*, No. 235, March 23rd, 1844.

HIGHLAND HYDROPATHY.

To the Editor of the "Medical Times.,'

My Dear Sir,—The following, extracted from a work upon the manners and customs of the Highlanders previous to the year 1730, bears so obviously upon the practice of hydropathy, that I thought you might like to have it for your paper. The author says :—

"But there is one thing that, at first thought, might seem very extraordinary, of which I have been credibly assured; that, when the Highlanders are constrained to lie among the hills, in cold, dry, windy weather, they sometimes soak the plaid in some river or bourne, and, then, holding up a corner of it a little above their heads, they turn themselves round and round, till they are enveloped in the whole mantle. Then they lay themselves down on the heath, upon the leeward side of some hill, where the wet and the warmth of their bodies make *a steam* like that of a boiling kettle. The wet, they say, keeps them warm, by thickening the stuff, and keeping the wind from penetrating."

It must be the recollection of some such custom that led to the following anecdote, related to me, very lately, during a visit to the Highlands :—A friend of my host's, who had been afflicted with an obstinate cold, was obliged, one evening, to stop for shelter at the farm, having been caught in a severe storm. He was thoroughly drenched; but, instead of accepting the bed that was instantly offered him, requested the loan of a cloak, in which he enveloped himself, wringing wet as he was; and, in spite of all remonstrances, seated himself before the fire, and remained there all night. The family retired, labouring under the most fearful apprehensions; but, upon rising next morning, found, to their astonishment, not only that no mischief had accrued, from the rashness and obduracy of their guest, but that a perfect cure had been effected.

Yours, faithfully,

J. S. Knowles.

Abington Glebe, Barrington's Bridge, Limerick,
June 21st, 1844.

P.S.—The title of the book whence I have copied the *extract*, is—"Letters from a Gentleman in the North of Scotland to his Friend in London, containing a description of a Capital Town in that Northern Country, with an account of some uncommon Customs of the Inhabitants, &c. London: Printed for S. Birt, in Ave-Maria-Lane, M.DCCLIV.*

[We may take this opportunity, to us a very proud one, of stating what is not generally known, that the writer, whose dramatic genius has more nearly equalled Shakspeare, than that of any other man that has illumined British literature, and who has produced more plays holding permanent possession of the stage, than any other British author, is, like not a few other of our literary celebrities, a member of our profession, (a veritable M.D.,) the endeared friend of Jenner, Willan, and the yet surviving Dr. Young, by all of whom that glorious poetic power which we now all admire, was fully foreseen and duly appreciated.]—Ed.

PERISCOPE OF THE WEEK.

Unusual dislocation.—Mr. Spender describes two cases under this title, in one of which there was a dislocation of the sternal extremity of the clavicle backwards, which was readily reduced, and a cure effected by appropriate bandaging. The other case was one of dislocation of the carpal extremity of the arm inwards, and was attended with some unpleasant results, inasmuch as there remained some stiffening of the fingers, and diminution of their powers, as well as an unnatural appearance at the joint.

Abscess under the dura mater.—[This and the 13 following articles comprise the contents worth notice in the last two numbers of the *Lancet*.] Mr. Liston says that a man came under his care in the Edinburgh hospital, who had fallen down and hurt the back part of his head. He did very well for some weeks: he then had an attack of shivering; he complained of an uneasy feeling about his head; there was drowsiness, feverish excitement, and confusion, together with violent convulsions, and, along with all this, there was a puffy swelling at the back of the head. It was clear he would die if no attempt was made to relieve him. Mr. Liston cut down upon the puffy swelling, and trephined him, but found the dura mater beneath healthy and sound. He died two or three days afterwards, and on examination, there was discovered an abscess on the opposite side of the cranium, under the dura mater.

Trephining.—Mr. Liston says the circumstances in which a trephine is employed now-a-days, are these:—first, to allow matter collected under the cranium to escape, and blood compressing the brain; secondly, to remove splinters of bone in cases of compound fracture; thirdly, in order to relieve the symptoms of oppressed brain, when a portion of bone is lying much beneath its proper level, and causing deep coma, and other serious symptoms of compression; and fourthly, to remove foreign bodies.

The specific gravity of urine.—Mr. Day has ascertained that the table given by Becquerel in his "Semeiotique des Urines," the professed object of which is to give the amount of the solid residue in one thousand parts of urine, from the simple knowledge of the specific gravity, is not to be relied on. From some of his experiments, he was at first led to believe that Becquerel's statements were correct; but in his subsequent analysis, he found an amount of error that could not well be passed over. He observes, that if all the various constituents of the urine possessed the same specific gravity, or even if, without possessing the same specific gravity, the different constituents of the solid residue were always associated in the same relative proportions to each other; and, if, further, no abnormal constituents (albumen, sugar, pus, etc.), ever presented themselves, we should not experience any difficulty in the establishment of a formula, which would express a constant relationship between the specific gravity and the amount of solid residue in a known quantity of urine. As, however, these conditions do not occur in the urine, it is clearly impossible to construct a formula which will give, mathematically, accurate results.

Large doses of nitrate of potash, and sulphate of quinine in rheumatism.—Dr. Bennett traces back the exhibition of large doses of nitrate of potash in the treatment of rheumatism, to the middle of the last century, when it was employed by Dr. Brocklesby, and other physicians, who gave as much as one or two ounces in the course of the four-and-twenty hours. It has since been occasionally administered by several Italian and French physicians, and the practice was afterwards revived by M. Gendrin, who was followed by M. Martin Solon. The cases in which Dr. Bennett has found the nitrate of potash to be the most successful, are those of acute rheumatic fever; in chronic rheumatism, it appears to be of little avail. M. Gendrin generally begins with four drachms in the twenty-four hours with an adult female, and six drachms with an adult male, and rapidly increases the dose to eight, ten, or twelve drachms, seldom carrying it further. The nitre must be given dissolved in a large quantity of weak lemonade, or barley-water, properly sweetened, in the proportion of about four drachms of nitre to a pint and a half of gruel. This solution should be the only beverage, to ensure its being drank by the patient. There is great tolerance of it in the great majority of cases, when thus administered. Sometimes, however, the ingestion of the solution at first occasions slight vomiting, but this Dr. Bennett has always observed soon to give way on merely continuing its use. M. Martin Solon states, that in these cases he has found that the addition of a little syrup of poppies effectually arrests the vomiting. During the first twenty-four or thirty-six hours, very little change is produced in the state of the patient; but, generally speaking, about that time, sometimes a little later, the pulse diminishes in strength and in number, and that without any perceptible change in the patient's condition. M. Martin Solon says that the quantity of the urine is seldom, if ever increased, but Dr. Bennett has seen many cases in which the renal secretion has been decidedly increased. Abundant diaphoresis occasionally sets in on the second or third day, which, however, is not regarded by M. Solon as the effect of the remedy, but as a symptom of the disease. He believes that nitre acts merely as a sedative on the circulation. Dr. Bennett agrees in the belief in the sedative action of the nitre, but also considers its influence on the secretion of the kidneys and skin of service in the removal of the disease. As the general febrile symptoms subside, the local inflammation also diminishes, and if the ingestion of the salt is continued, there is scarcely ever any relapse. A cure is generally completed by the tenth or twelfth day, but the tongue almost always continues white and loaded, and the appetite bad, as long as the nitre is administered. M. Martin Solon has analysed the urine of patients to whom nitrate of potash has been thus largely administered, and he states that he has always found all the salt he has given in that secretion. Cases occasionally occur in which nitre does not produce any effect whatever, the disease continuing to progress, or, at least, not diminishing under its influence. If such be the case after the medicine has been given for four or five days, it must be changed. Heart disease has been very rare in cases of rheumatism treated by the exhibition of large doses of nitre. Dr. Bennett saw the sulphate of quinine exhibited in the practice of M. Emery, at the St. Louis hospital, in large doses, such as from fifteen to forty-five grains in the twenty-four hours, even until, in a large proportion of the cases, toxic effects were produced; and yet no benefit was derived, the disease continuing to make progress, as if nothing had been done. The same conclusion has also been arrived at by M. Monneret, who also reports unfavourably of the treatment of rheumatism by nitrate of potash.

Statistics of phthisis.—Dr. Boyd gives the results of the examination of two hundred and six cases of pulmonary phthisis made within the last three years. Of these, 132 were males and 74 females; the respective ages were,—under 11 years, 18 males, 9 females—from 17 to 60, 93 males, 50 females—and 60 upwards, 21 males, 15 females; the males thus exceeding the females in the proportion of 17 to 10. No case of phthisis occurred between the ages of 11 and 17 years. The period of life most obnoxious to the disease has been from 30 to 50 years, and the period most exempt under 20 years, in both sexes. The average duration of life in males was 39.1-12th years; in females, 39.7-12th years. The duration of illness was, on the average,—among 56 male adults, 11½ months; and among 20 female adults, 10 months, previous to admission from the first accession of cough. The duration of the disease from its commencement to its termination was about twelvemonths in both sexes. Of 49 male patients, the majority followed out-door employment; and of 16 female adults, the majority had in-door occupation. The very young and very old were inmates of the workhouse. The mortality has been greatest among males in May, among females in October; least among males in October, and among females in July; in both sexes least in the summer quarter. Tubercular cavities were found in the upper lobes in both lungs in one-half, in the left lung only in one-fifth, and in the right only in one-sixth; and tubercles without cavities in one-eighth of the cases. Where cavities and tubercles existed in both lungs, the left was usually the more diseased. The complications of phthisis were an increased quantity of fluid in the ventricles of the brain, congestion, or an exsanguineous state or softening of these organs, opacity of the arachnoid, apoplectic clot, tumours connected with the membranes, pleuritic adhesions, chronic pneumonia, acute pneumonia or pleuritis, gangrene of the lung, pneumo-thorax, scrophulous glands, patent foramen ovale, aneurism of the aorta, ulceration or extreme redness of the mucous membrane of the intestines, enlarged and tuberculous mesenteric

* Published many years after the letters were written, as one of the latest of them bears date, 2nd October, 172—.

glands, fatty liver, tubercles or adherent peritoneum, tuberculous spleen, liver, kidneys and renal capsules, waxy appearance of liver, tumours of the uterus, cancer of that organ, carcinomatous mass in the abdomen, osseous matter in the mesentery, and ulceration of the cartilages of the knee-joint. Among the children there were also hæmoptysis, hooping-cough, measles, diarrhœa, and convulsions. Hæmoptysis, dropsy, paralysis, convulsions, and delirium, also occurred among the adults.

Cause of Albuminuria.—Mr. Ross lays claim to the priority of the discovery that albuminuria is an invariable consequence of a suppression of the functions of the skin, by means of the application of varnish. He grounds his claim on the following statement published by him some time since in a paper on typhus :—"From these facts I have been led to conclude that the presence of albumen depends primarily on the disturbance of the functions of the skin, &c.;" and again, "but whenever the natural office of the skin is much impeded, there will be a determination of albumen to the kidneys, and this principle will be occasioually excreted by these organs in its undecomposed state."

Rupture of the bladder. — A stout-built creole, 27 years of age, was admitted into the London Hospital, under Mr. Scott, presenting symptoms of peritonitis following an injury to the abdomen, caused by a man, with whom he was fighting, falling with all his weight upon him. His principal symptom, in additiou to great abdominal pain and distress, was an incapability of emptying the bladder. Fifty-two ounces of brownish fluid, commixed with blood, and of the odour of urine, were drawn off by an instrument. The man was then in a sinking state, and died eighteen hours after admission, three days and seventeen hours after the injury. On examining the body, indications of recent peritonitis were found, as well as an oblique rupture at the posterior aspect of the bladder.

Ulcer of the duodenum.—A girl, 15 years of age, was admitted under Mr. Luke, with an extensive burn of the upper part of the body. Fevcrish symptoms set in, followed by great exhaustion and pain, referred to the seat of the burn, and occasional severe pain in the epigastrium and bowels. The day before she died, fourteen days after the injury, she vomited a large quantity of black fluid of a tarry appearance, and passed a similar fluid by the bowels. On examination of the body, the stomach and intestines were found distended with the same dusky, blackish fluid, and at the posterior part of the duodenum, there existed an ulcer about the size of a shilling, which had involved all the coats of the gut. It was situate about a third of an inch from the pylorus. The anterior aspect of the pancreas was partly involved, and across its inner third, a rather large vessel, with an open mouth, was observed running downwards and inwards, and which had been the source of the hæmorrhage.

Varicocele treated by compression.—A tall thin man was treated at the London Hospital by Mr. Curling successfully, for varicocele, by compression, the instrument used to effect that object, being the moc-main truss, so applied as to compress the spermatic veins at the external abdominal ring. In another case, considerable relief was afforded by the use of the same apparatus.

Atropine.—Mr. Lloyd Bullock objects to the use of atropine, as recommended by Mr. Cooper, inasmuch as spirit of wine is required for its solution ; and he recommends, on the contrary, the profession to make a trial of the neutral salts of atropine, which are soluble in distilled water.

Prolapse of the cord.—Dr. J. Hall Davis was called in consultation to a midwifery case, in which, on examination, he found a prolapsion of of the funis, and the head presenting high up, resting on the os pubis. He performed the operation of version, bringing down one of the feet, to which he attached a tape noose in order to have a better purchase while making traction. A living child was born, and both mother and child did well. The case does not present any remarkable features, nor does another which is also published by Dr. J. H. Davis, in which the death of the child occurred prior to his being in attendance. The pulsation of the funis had then ceased four hours. Craniotomy was performed, and the placenta removed without difficulty. The mother, at the date of the report, was doing well. With respect to the treatof prolapsion of the funis, Dr. J. H. Davis observes that when it first occurs after the rupture of the membranes, if the orifice of the uterus be sufficiently dilated to admit the introduction of the hand, and the relaxed and healthy state of the vagina and os externum, and the capacity of the pelvis render it probable that the child may be readily brought down through the genital passage, then no time should be lost in passing the hand through the uterine orifice, and by the presenting head before it is engaged in the brim of the pelvis, and iu performing the operation of turning. This plan he considers to be preferable to all others when the head remains moveable upon the brim of the pelvis, but if it be engaged within it, then it is neither easy nor safe. Under such circumstances various plans for replacing the cord over the head have been suggested, which may succeed in some few instances, but if unsuccessful, and the hand has descended deeply into the pelvis, and the pulsations of the cord are vigorous, the parts being soft and dilatable, and the second stage of labour has been always quick on previous occasions, then it would be better not to interfere further than by placing the cord in the neighbourhood of the sacro-iliac junctures, where there would be probably less pressure, in the hope that the labour would be speedily completed. If on the other hand the cord pulsates feebly, or has just ceased to do so, the patient must be delivered by the forceps, provided the os uteri be fully or almost fully dilated, and the cord be not subjected to pressure between the blade and the head. When the os uteri is rigid, especially if the genital canal be in the same state, the best plan in Dr. J. H. Davis's opinion is to abstract blood freely to relieve the rigid condition, and then to give the secale cornutum, delivery being hastened by the use of the forceps if judged requisite.

Excision of the teeth.—Dr. Smethurst narrates a case where excision of a tooth, a natural one being pivoted on the fang, was followed by violent inflammation and suppuration of the injured part, attended with œdema of the whole head and face, and of the interior of the mouth and tongue, so that the patient was in danger of suffocation. Intense febrile excitement was also present. Bleeding, calomel, and acetate of morphia relieved the attack, and, after a time, the pivoted tooth could be removed, when a discharge of pus and blood took place, with considerable relief. Ultimately the health was restored, and the lost tooth made good with a real one fixed with gold wires, which did not occasion any inconvenience whatever.

Tubercles of the lungs in a child.—Dr. Cassels attended a child, three years of age, at the Chorlton-upon-Medloch Dispensary, who presented symptoms of phthisis, with purulent expectoration, cavernous respiration and pectoriloquy ; of which the boy ultimately died. On examining the body, the upper part of the right lung was found thickly studded throughout with hard semi-transparent miliary tubercles ; crude cheesy tubercles were collected in clusters in the middle lobe, while a large cavern containing a drachm of purulent matter was found in the lower lobe. The upper part of the left lung was tubercular ; and the bronchial and mesenteric glands were diseased.

Ovariotomy.—M. Cherveau in the *Journal des Connaissances Medico-Chirurgicales* for this month, gives, what he conceives, to be the statistics on this disputed subject. He states the number of operations to have been 65 ; out of these 42 were successful : 23, therefore died. Of these last, 16 had the tumour removed ; in six, the peritoneum only was laid open—in one, the uterus was removed.

Erratum.—In page 240, first col., for *teria gr. j. hora ex aquæ*, read *tertia quaqua hora ex aqua.*—(The prescription escaped revision.)

GOSSIP OF THE WEEK.

Apothecaries' Hall.—Gentlemen admitted Members on 20th June, 1844. William Butler Young, William Newman Walker, Alfred Eccles, James Edmund Huxley, Thomas Shuttleworth Butler, William Watson, William Walker Kemp.

Royal College of Surgeons.—Gentlemen admitted Members on 21st June, 1844. H. Gibson, P. A. Jackson, H. Deane, E. Deane, E. Tegart, J. P. Perinton, J. R. M. Lewis, J. Hughes, G. L. Shine.

Appointments.—1st foot.—Assistant Surgeon, William M'Carthy, M.D., from the Staff, to be Assistant Surgeon; Vice Robertson promoted.

26th foot.—Staff Surgeon of the Second Class, John Stewart, to be Surgeon; Vice Bell appointed to the Staff.

Hospital Staff.—Assistant Staff Surgeon, John Charles Cameron, M.D., to be Staff Surgeon of the Second Class; Vice Rumley deceased. Assistant Surgeon, George Gordon Robertson, M.D., from the 1st foot, to be Staff Surgeon of the Second Class; Vice Nugent deceased.

Promotion—Deputy Medical Inspector of Hospitals.—John Liddell to be Medical Inspector of Hospitals at Greenwich; Vice Dodson resigned.

Appointment—Deputy Medical Inspector of Hospitals.—Gilbert King, of Bermuda, to the Haslar; Vice Liddell promoted.

Surgeon, C. H. Fuller, to be Surgeon Superintendant of the Agincourt convict ship.

Obituary.—At Ludlow, Richard Wakefield, Esq., Surgeon of that place, aged 57 years.

A numerous audience assembled, on Tuesday last, at the Royal College of Physicians, to hear the Annual Oration in honour of the discoverer of the circulation of the blood. Among those present, were some of the most eminent medical and scientific men of the metropolis, a few of the nobility, &c. Dr. Ogle, Professor of Medicine at the University of Oxford, delivered the Harveian Oration. The learned orator was frequently applauded, particularly when dilating on the excellencies of the late Sir H. Halford. The object of Dr. Ogle was to establish the great utility of classical literature, to those engaged in the study and practice of medicine. It disciplined the mind, and fitted it for the graver and more active pursuits of life. As an excellent and appropriate illustration, Dr. Ogle cited, among many others, the case of Sir H. Halford. In this instance, we saw, he said, in combination, the man of letters, the elegant scholar, the courtier, and the successful physician. In the course of his oration, Dr, Ogle spoke highly of the medical, classical, and general attainments of Dr. Paris, the President of the College, as well as of the high position of the other distinguished physicians officially connected with this Institution.

Metropolitan Mortality for the Week ending Saturday, June 22.

Causes of Death.	Total.	Average of 5 Springs.	Average of 5 Years.
All Causes	920	883	946
Zymotic, or Epidemic, Endemic, and Contagious Diseases	226	161	178
Sporadic Diseases—			
Dropsy, Cancer, and other Diseases of uncertain or variable Seat	87	105	111
Diseases of the Brain, Spinal Marrow, Nerves, and Senses.	151	152	157
Diseases of the Lungs, and of the other Organs of Respiration	233	269	286
Diseases of the Heart, and Blood-vessels	24	21	21
Diseases of the Stomach, Liver, and other Organs of Digestion	87	61	69
Diseases of the Kidneys, &c...	1	5	5
Childbirth, Diseases of the Uterus, &c.	8	9	10
Rheumatism, Diseases of the Bones, Joints, &c.	7	6	6
Diseases of the Skin, Cellular Tissues, &c.	...	1	1
Old Age	46	64	71
Violence, Privation, Cold, and Intemperance	48	25	26

Extraction of a foreign body from the knee, terminating fatally. In the Transactions of the Medical Society of Dijon, a case is recorded by Dr. Bachelot, where he extracted an osteiform body from the left knee of a patient, the operation being followed by fatal inflammation of the joint. After death, the synovial membrane presented evidence of phlogosis ; pus was effused, and one of the semilunar cartilages was ulcerated. It is possible the knee was not in a healthy state prior to the extraction.

Cynara in acute rheumatism.—Mr. Copeman confirms the statements made by Dr. Baddeley and others, of the value of the cynara in the treatment of acute rheumatism.

SUMMARY.

ANATOMICAL RESEARCHES ON THE ELECTRICAL ORGAN OF THE TORPEDO, BY A. J. J. LE LAMBALLE, &c. &c. &c.. .. .. : 271

Midwifery Statistics 273

Chronic-choroido-iritis; Spurious Cataract; Keratonyxis; Artificial Pupil 273

Extract of Rhatany in the Treatment of Fissure of the Anus, Dangerous in a Tuberculous Patient 273

CLINICAL LECTURES ON SOME IMPORTANT POINTS OF SURGERY, BY SIR B C. BRODIE, BART.:—

LECTURE XII.—Diseases of the Male Urethra, (continued) —Inflammation of the Urethra behind the Stricture—Gristly Indurations of the Membrane—Enlargement of the Prostate Gland a Cause of Stricture, and vice versa —Irritable State of the Bladder induced by this Enlargement—Distension of this Viscus produced by the same Cause—Diseased State of its Mucous Secretion—Formation of Calculi—Ulceration of the Mucous Membrane—Thickening of the Muscular Coats—Hernia of the Mucous Lining of the Bladder—Secondary Diseases of the Kidneys—Dangers attending this Condition—Cases in Illustration 274

CLINICAL LECTURES ON MEDICINE; Delivered at the Great Charity Hospital, at Berlin, by DR. SCHONLEIN, first Physician to the King of Prussia:—

LECTURE XV.—Hepatic and Splenic Symptoms—Attacks of Shivering—Inflammation of the Hepatic Veins—Pneumonic Phenomena—Their Relation to the Inflammation of the Veins—Collapse—Death—Sectio 275

LECTURES ON THE THEORY AND PRACTICE OF MEDICINE, BY DR. C. J. B. WILLIAMS, M.D., F.R.S.:—

Disease of the Arterial Tubes, Aneurism, &c.—Signs of Arteritis—Dilatation of the Aorta—Its Symptoms and Consequences—This Morbid Condition produced by Hypertrophy of the Heart, as well as Disease of its Valves, and vice versa—Signs of Aneurism of the Aorta—Its usual situation—Modes of distinguishing it from other Diseases —Prognosis of these Affections—Their Treatment 277

ON THE EFFECTS OF DIET ON THE FŒTUS IN UTERO, BY DR. C. CLAY 279

EXPERIMENTAL RESEARCHES ON THE EXISTENCE OF METALLIC MERCURY IN THE BLOOD AND OTHER VESSELS, BY DR. OSTERTEN 279

ON THE MORBID TENDENCIES OF THE LIVER, BY PROFESSOR SCHULTZ 281

Lardaceous Scirrhoma of the Lung, involving the First Rib, Clavicle, &c.. 281

Internal Hernia 281

PARISIAN INTELLIGENCE:—

Professor Velpeau on Diseases of the Eye.—Symptoms of Pseudo-Cataracta; Complication of true Cataracta, Amaurosis, Glaucoma and Cancer 282

Dr. Faivre on a Foreign Body in the Bronchi, Expulsed Spontaneously 282

Professor Berard on Imperforate Anus 282

On Hæmatocele produced by Effusion External to the Tunica Vaginalis, by M. Gosselin 283

Obituary 283

Candidates for the Vacant Place at the Academy of Medicine 283

Proceedings of the Academy of Sciences, June 24th 283

Proceedings of the Academy of Medicine, June 25th 284

TO CORRESPONDENTS 284

LEADERS:—

GEOFFROY ST. HILAIRE AND FRENCH ENCOURAGEMENT OF SCIENCE 284

A MEDICAL EPIC POEM, BY AN ENGLISH PHYSICIAN 286

THE CLAIRVOYANCE OF ALEXIS, BY T. P. HEALEY, ESQUIRE 286

THE TRUTHS AND FALSEHOODS OF THE THEORIES OF LIEBIG, WITH NEW VIEWS ON SOME IMPORTANT POINTS OF ORGANIC CHEMISTRY AND PHYSIOLOGY 287

REVIEW OF THE REVIEWER OF LIEBIG, BY KIRBY O'SULLIVAN, ESQ 29

REMEDY FOR HYDROPHOBIA, BY MR. GRATTAN .. 29

THE LATE CASE OF HYDROPHOBIA 29

REPORT of BRIDEWELL DISPENSARY, for the Year ending April, 1844, BY DR. O'CONNELL, PHYSICIAN .. 29

THE APOTHECARIES' SOCIETY 291

THE SOMNAMBULENT STATE 29

HINDOO PRACTICE OF MESMERISM 29

THE BOHEMIAN REMEDY 29

THE TRUE ENEMY TO THE MEDICAL PROFESSION .. 29

TRANSACTIONS OF LEARNED SOCIETIES:—

Royal Medical and Chirurgical Society 294

Observations on the Recorded Cases of Operation for the Extraction of Ovarian Cysts. By Benj. Phillips, F.R.S.

Cases of Mollities Ossium, with Observations. By S. Solly, Esq., F.R.S.

Case of Acute Retinitis, caused by the Use of the Microscope, By William White Cooper Esq.

Some Statistical Records of the Progress of the Asiatic Cholera over the Globe. By S. W. T. Merriman, M.D.

An Account of the Dissection of a Cyst containing Seminal Fluid. By James Paget, Esq.

A few Remarks upon the Origin and Treatment of Syphilis, and upon the Extraordinary Prevalence of the Disease in the East, as compared with the West Indies, with the Marked Influence of Famine in extending its Ravages. By John Clark, M.D.

Case of Fistulous Communication between the Intestinum Ilium, and Urinary Bladder, Simulating Stone in the Bladder. By W. C. Worthington, Esq.

HOSPITAL REPORTS:—

Westminster Hospital 297

Disease of the Tricuspid Valve 298

A SELECT PRACTICAL FORMULARY 298

DRUG PRICE LIST 298

ANATOMICAL RESEARCHES ON THE ELECTRICAL ORGAN OF THE TORPEDO.

By A. J. JOBERT DE LAMBALLE, D.M.P., M.A.M, Officer of the Legion of Honour, Consulting Surgeon to His Majesty the King of the French, Chief Surgeon of the Hospital St. Louis, &c. &c.

[THIS paper is under the consideration of a commission of one of the French Royal Societies, and now appears, through the kindness of the author, for the first time in print.]

History.—The electrical properties of the torpedo were not unknown to the naturalists of antiquity, for we find them mentioned by Hippocrates (On Internal Diseases); and at a later period, Aristotle (History of Animals, lib. 3, cap. 37), Plato, Athenœus, Theophrastus, Pliny (History of the World, lib. 32, p. 6), Plutarch, Appien, Dioscorides, Galen, Paulus Ægineta, Avicenna, Aëtius, and many others, described them more or less accurately, but without seeking to discover the nature of the organ which produced these miraculous results. It was not until the middle of the seventeenth century, that F. Redi (*Esderienze Interno a Diverse Casa Naturali*, Florence, 1671) gave the first anatomical description of the electrical organ of the torpedo. But as no important discovery can be completed at once, but only by degrees, this work, notwithstanding the celebrity of its author, can now only be considered as an historical document. Redi saw, it is true, the prismatic columns which form the apparatus, but he thought that they were muscles, and described them under the name of *musculi-falcati*, on account of the resemblance they had to a scythe, and concluded that the commotions were produced by the contraction of the muscles. Lorenzini, his pupil, professed the same opinion in a pamphlet (*Osservazionni Interno alle Torpedii*, 1678,) and it is said that Steno gave a drawing of the apparatus but without describing it; in his epistle, *De Anatomi Ragæ*, we meet with nothing relative to this subject. The researches of some natural philosophers, and among the number, of Réaumur (Mem. Accad. des Sciences, Paris, *Observations sur la Torpille*, 1714), attracted the attention of anatomists to this subject. Notwithstanding, upwards of a century passed between the researches of Redi and those of J. Hunter, which appeared in 1773, and were inserted in the Philosophical Transactions that year, p. 481. In this memoir, J. Hunter described and gave a drawing of the apparatus of the torpedo, remarkable for the period in which it appeared, and which was followed by almost all the authors who wrote after him on this subject. The form, position, and *rapport* of the electrical apparatus is described in a general manner; but inexact in many particulars. Hunter points out the existence of two aponeurotic layers—the one superficial, the other deep-seated; this latter sending into the interior of the organ a great number of thin and strong filaments. He called the prisms, perpendicular columns, and directed attention to the presence of partitions, dividing them into several horizontal planes. He lays great stress on the tendinous fibres which cross obliquely between, and here and there completely surround, the columns. "Each column is fixed," says Hunter, "to its neighbour by a non-elastic fibre, passing directly from one to the other." The form of these columns is hexagonal, pentagonal, or quadrangular, and, in the real torpedo, Hunter counted as many as 1182. "It is in the horizontal spaces contained in the columns, that the peculiar liquid is to be found. The partitions which form them are constituted by very transparent and very vascular membranes, &c. The divisions of the arteries seem to be analogous in number and in distribution to that of the nerves."

After this description, in itself very remarkable, Hunter directed his attention to the origin and mode of distribution of the nervous system.

The nerves which penetrate and ramify in the electrical organ, are branches of three large trunks which arise from the posterior and lateral portion of the brain. "The first, at its origin, goes round the cartilage of the cranium, sends some filaments to the first division of the gills, and to the anterior part of the head, after which it enters the organs, and is distributed to all its anterior portion." "The second enters the gills, between the first and second opening, and after having given off a small branch, penetrates and ramifies in almost all the central portions of the organ." "The third divides itself into two branches, which penetrate the electrical organ, after passing through the gills; one between the second and third opening, the other between the third and fourth, furnishing in passing a small filament to the gill itself. These nerves having once entered the organ, are distributed in all directions between the columns, and are terminated by very small filaments."

As this memoir was the model followed by the different authors who succeeded Hunter; I will briefly relate the principal points enumerated therein:—1° a general description of the organ; 2° a special description, in which the apparatus is considered as formed of hollow columns, divided into several parts, and filled with a liquid. The partitions are formed by the fibrous prolongations of the aponeurosis, which surrounds the apparatus. The extraordinary mode of distribution of the tendinous fibres is accurately described; but of their nature, Hunter evidently formed an erroneous opinion; for he thought they were arteries; but, as to the nerves, he clearly indicated their origin, the mode of their distribution, and of their termination in the organ. Finally, he added two plates, in which the structure of the apparatus and its various parts are represented.

In 1774, Walsh gave a *résumé* of the observations he had made in the Isle of Rê, and by their publication in his work on the electric organ of the torpedo, he contributed greatly to the propagation of the ideas emitted by Hunter. In 1777, Lacépède (*Histoire des Animaux*, tom. 2), published a description of the apparatus of the torpedo; but his work is merely an incomplete reproduction of Hunter's ideas. In 1782, Broussonet (*Mem. Acad. Sciences*), and in 1785, Alex. Monro (*The Structure and Physiology of Fishes*), recalled attention to some of these facts. In 1792, Galvani studied the same subject in respect to the electric phenomena.

It was M. E. Geoffrey St. Hilaire, who, in 1804, in the first volume of the *Annales du Museum d'Histoire Naturelle* (*ancienne serie*, p. 392) recommenced these anatomical researches. His object, in this work, was less to controvert the facts announced by Hunter, than to seek in the other electric fishes for an organ analogous to that of the torpedo. He compares, in his memoir, the peculiar nervous organs of the *raja torpedo*, with those of the *gymnotus electricus* and *silurus electricus*. It is, therefore, not astonishing that no new anatomical fact is developed. The author accepted, almost without control, all Hunter's ideas; but certain details and observations, not mentioned by the English anatomist, are to be found in the general description of the external aspect of the apparatus. As to the prismatic columns, he says that they are tubes full of a substance which, by chemical analysis, he found to be composed of gelatine and albumine: a circumstance already announced by Lacépède.

The texture of the tubes, according to M. Geoffroy St. Hilaire, is aponeurotic, and they are united together by means of a loose net-work, formed of tendinous fibres, which surround them on all sides; finally, these are inclosed in an aponeurosis placed immediately under the skin. The apparatus receives nerves remarkable for their size, which arise by four principal trunks, and are distributed by numerous filaments to the tubes in which they terminate. As may be seen, the only difference is in the number of nervous trunks arising from the brain, while, as to the mode of distribution and termination, M. Geoffroy St. Hilaire repeats the ideas of his predecessor.

It must be added, however, that M. Geoffroy St. Hilaire studied likewise the skin and subjacent glandular apparatus in the different fishes which

he examined, but by an inattention which our ulterior description will render evident, he published the following phrase: "In the torpedo, all the tubes are completely closed, not only *by the skin*, which is not perforated in *any spot*, but likewise by aponeuroses." According to M. Geoffroy St. Hilaire, the electrical organ of the torpedo is a real tactile organ, analogous to that of sight or hearing, in which the nerves ramify, as in these organs, in the midst of a gelatinous mucus. The origin of the nerves in the brain, according to the same author, is from the eighth pair.

In 1810, Jacopi (*Elementi de Filiologia i Nosocomia Comparata*) gave a description of these organs. In 1819, the *Dict. d'Histoire Naturelle*, published by Deterville, inserted in the 34h volume, Lacépède's article in an abridged form. In 1820, M. H. Cloquet (*Dict. d s Sciences Med.*, vol. 43, p. 654, art. *poisson*) gave a *résumé* of our knowledge on the torpedo, and on the anatomy of its electrical organ. We find, there, the description of the exterior aponeurosis, of the hollow and divided tubes, full of a mucous liquid, of numerous arteries and veins, and of the extreme division and termination of the nerves, proceeding from the eighth pair. These details are but the reproduction of those already published by M. Geoffroy St. Hilaire.

In 1832, John Davy (*Philos. Trans.*, 1st part) published a long and interesting memoir on the electric phenomena offered by the torpedo, as well as the result of a microscopical examination of a portion of a prismatic tube with a lens. He recognized no regular form; the whole appeared to him to be a homogeneous mass, crossed in different directions by some fibres, probably of a nervous nature. In some other cases, after having plunged the electric organs in boiling water, he saw them contract suddenly; and the tubes, previously pentagonal and hexagonal, became circular. In the experiments which he made at Rome, he observed that the tubes were fibrous and lamellated. (*Becquerel, Traité de l'Electricité*, tome 4. p. 269.)

In 1834, Carus published his Elementary Treatise on Comparative Anatomy, which was translated, in 1837, by M. Jourdain. We find in it (*tome* 1er, p. 392) the following information on the electrical organ of the torpedo. The structure of the apparatus has, according to this author, the greatest analogy with the muscles of fishes. The electrical organs are always composed of a great number of layers, cells, or columns, separated by aponeurotic partitions, and containing a pretty thick gelatinous liquid. A great number of nerves (but few blood-vessels) are distributed to the cells. The nerves are extremely large, compared to the organs they supply, and they belong to the *trigemini* and *par vagum*, all of which offer in these fishes a considerable volume, corresponding to the development of several parts of the brain. The electrical organ is connected with the fins. Carus, in his *Tabulæ Illustrantes*. (*Cahier* 1st, pl. 2. fig. 8, 9, 10) gave plates describing the electrical organ of the torpedo, conformable to the ideas which he had formed. With the exception of the *origin* of the *nerves*, destined to the apparatus, he did not advance a step the anatomy of the electrical organ of the torpedo.

These were the different works which had appeared when M. Becquerel published, in 1836, his Treatise on Magnetism and Electricity; and, in his fourth volume, recapitulated the researches of J. Hunter, J. Davy, M. E. Geoffroy St. Hilaire, adding an extract of those made by Professor Breschet, which then appeared for the first time. From these last the following conclusions may be drawn: —1° The prismatic bodies are separated from each other by a tissue composed of cells, smaller and smaller, which contain a tissue perfectly similar to that forming the prisms.—2° The whole organ is enveloped by a membrane of a fibrous nature.—3° From the internal surface of this membrane, partitions arise, also of a fibrous nature, and in their interior an immense number of nervous filaments are distributed.—4° These fibrous partitions form alveolæ similar to those of a honeycomb, and belong to two prisms.—5° It is at the points where these partitions are united—that is to say, where two or three touch each other—that the nerves and vessels are united.—6° A few nervous filaments pierce the partitions near their angles, and terminate in the prisms, which are not of a nervous nature. If we divide the partition longitudinally, and place it so as to expose one of the faces of the prism, a number of transverse lines are seen on it, united together by a very fine and transparent cellular tissue, forming a homogeneous and amorphous mass, in which lines, somewhat more opaque than the rest, and supposed to be nervous, are to be distinguished.—7° The mucous system of the torpedo consists of several groups of glauds, placed principally around the electrical organs, at different depths under the skin; and of large transparent vessels, of various lengths and sizes, which open on the skin, so as to emit the thick mucus secreted by the glands destined to lubricate the surface of the body.

I have here given an exact and detailed recapitulation of the opinions of Professor Breschet, because his position in the scientific world gives them greater weight; and because, as will soon be seen, they differ essentially from my own researches. It may likewise be remarked, how much, in certain parts, they disagree with those of Hunter and M. Geoffroy St. Hilaire. To these researches of Professor Breschet, M. Becquerel joined two plates, representing the general disposition of the interior of the electrical apparatus of the torpedo; but he says nothing concerning the origin of the nerves.

M. Valenciennes, in the *Annales du Museum d'Histoire Naturelle*, studied the anatomy of the electric organ of certain fishes: but he occupied himself especially with that of the *silurus*, and added nothing to what had been said before him, on the *torpedo*.

M. de Blainville, in his *Physiologie Comparée*, spoke also of this remarkable apparatus. He does not admit (public lecture) that the electric lobes are distinct from the cerebellum; and gave (p. 180, of M. Matteucci) a comparative table of the muscular contraction and the electrical discharge, and from which he admits the existence of the three following elements:—1° A substance *sui generis*.—2° A proportionate nerve, arising from the anterior part of the spinal marrow.—3° A proportionate vascularity.

M. Flourens had not an opportunity of examining the torpedo. What, on his authority, M. Matteucci called the electrical lobe, is nothing more than the fourth or respiratory lobe. (V. Gavarret.) At different times, M. Matteucci communicated, to the Academy of Sciences, curious researches on the electric phenomena of the torpedo; but without giving any new detail on the structure of the organ.

Professor Gavarret, in his thesis, at a late *Concours*, (*Lois Générales de l'Electricité Dynamique*, in 4to., p. 92) reproduced a short historical notice on this subject, and gave a succinct description of the apparatus of the torpedo, which is a recapitulation of Hunter's, Geoffroy St. Hilaire's, and especially Professor Breschet's opinions. No new fact.

M. Paul Savi who published M. Matteucci's work, (*Traité des Phenomènes electro-physiologiques des animaux*) followed by his *Etudes Anatomiques sur le systéme nerveux et sur l'organe électrique de la Torpille*, gave certain details, of which the following is an abridgment. The author, after enumerating the names of those who had devoted their attention to the study of this subject, thus expresses himself on the general description of the apparatus. "These organs are found in the anterior part of the torpedo; they are formed by a reunion of vertical prisms situated between the skin of the back and that of the abdomen. Very large and numerous nerves, arising from the fifth and the eighth pairs, and abundant blood-vessels, penetrate into these organs, after crossing the gills, are distributed in every direction, and disappear entirely; so that the nervous system of the organ is connected only with the brain, and the vascular system with the heart. The only affinities, therefore, which the organ offers (with the neighbouring parts, are those of contact and situation." M. Savi then proceeds:—1st. to examine the intimate structure of the electrical organ. (p. 283.) They are covered, as well superiorly as inferiorly, with a common tegument similar to that which envelopes all the other parts of the body. On removing this te ment, we perceive a strong aponeurotic la formed by fibres crossing each other, and whic attached to the walls of the cavity containing organ. Each of these small columns, which fo the apparatus, is itself contained *in a peculiar ca* composed likewise by an aponeurotic tissue, si lar to that which covers the organ superiorly a inferiorly: the only difference being that it thinner. The substance of which each column composed, resembles, at first sight, a gelatin mucus. It is of a dirty white shade, diap nous, and appears homogenous, when exami with the naked eye. With the microscope, it seen to be formed of an infinity of thin membra or diaphragms, placed one over the other, tra versely to the axis of the small columns. Eac these diaphragms is united, by its edges only those situated above and below it; and tween them, we find a small quantity of a lim liquid, or humour, on examining an animal cently killed. The *aponeurotic tunica* of each pri is formed by a great number of thin filaments, hollow, and thinner than the elementary nerv fibres. 2° To give a long and minute descript of the composition of the tunicæ, of the colum and of the prisms themselves, which adhere firm to the interior of the capsule in which they enclosed, and from which they cannot be remov without employing a certain degree of violen of the *firm adherence* of the prisms with each oth &c. &c. But the idea he has formed of the str ture of the *tunicæ* is founded on facts so *vague*, so unconnected, that he declares himself, that hardly dares expose it. Be this, however, as may, it is evident, that each prism has its o peculiar tunic, by which it is separated from neighbouring one, since it is between these tuni that the large venous trunks enter, and that ramification of the blood-vessels takes place. prisms are kept in their normal position by t aponeuroses: the one superior, the other inferi which envelop them on all sides; each prism s ports, in a similar way, the horizontal diaphra placed in the interior. As to the origin of nerves, setting aside the precise spot they ar from in the brain, M. Savi says: that the brar which is distributed to the anterior part of the ap ratus, arises from the lateral lobe of the cerebell (third eucephalic lobe of Carus), in which s the root of the eighth pair is to be found; t some roots originate in the medulla oblonga *with three other very distinct branches.* These l arise in the electrical lobes, which he conside with Jacopi, as formed by a peculiar developm of the cineritious substance, situated between cerebellum and the medulla oblongata, in the rho boidal sinus. They are the nerves of the eigh pair. M. Flourens calls them respiratory nerv *em delle chiaze*, and from their colour, *lobo pagliar* (straw-coloured lobes); but he does not consi them as having any connection, at their orig with the electric nerves. 3° To give an exact scription of the *rapports* and structure of the el tric lobes. With a microscope, he found them be composed of a granular substance, analogous the *grey amorphous substance*, which M. Mandl l described as forming the cortical part of the bra Finally, he found globules similar to the ganglio ary globules, discovered by Ehrenberg, and served, that all the rectilinear fibres ended in loo in the interior of the electric lobes. 4° To descri with care all that is relative to the distribution the nerves of the eighth pair. If a vertical transverse section of the medulla oblongata made, at the spot where the nerves of the eighth p seem to come out or penetrate into it, it is se that the roots do not enter its substance, but cr the lateral pyramids, pass under the posterior on and penetrate the electric lobes, in which they distributed in all directions. He admits, notwi standing, that a certain number of fibres take th origin in the bottom of the rhomboidal sinus, fr whence they proceed to the electric lobes. It is the interior of these last, that the branch of fifth pair, which is distributed to the anterior p tion of the electrical organ, takes its origin; whi the other roots of this nerve, which are not d tined to the apparatus, arise from the lateral lob of the cerebellum.

Thus, to give a *resumé* of the foregoing: it may be concluded, that the torpedo possesses a special nervous lobe, placed behind the cerebellum, above the medulla oblongata, and which has been called the electrical lobe. From thence arise:—a root of the nerves of the fifth pair: three large trunks belonging to the eighth pair; all of which are distributed and ramify in the electric apparatus. Before going any further, I must observe, that M. le Blainville, in his lectures, does not admit, as distinct from the cerebellum, this fifth lobe, already described by M. Matteucci, and which M. Savi has studied with more attention than any of his predecessors; but we must not be surprised to find his distinction in an anatomical work, destined to demonstrate, by facts, the electric theory of M. Matteucci.

M. Savi next studied the nerves arising from the brain; but I omit, as foreign to my subject, all except the fifth and eighth pairs. Fifth pair—It is composed of two branches, which seem to be united into one, at the point where they issue from the cranium: the first, very voluminous, peculiar to the torpedo, is distributed to the anterior portion of the apparatus: the second is what generally constitutes the fifth pair, and is distributed to the numerous *mucous follicles* situated in front of the head, and which, by their ramification, form what the author calls *nervous follicles* (1st., 2nd., and 3rd. series), placed beside the nostrils. The first branch is divided into two filaments: the one *anterior*, which is distributed to the anterior part of the snout; the other *posterior*, which goes to the apex of the electric organ itself, following a direction almost parallel to the axis of the body. No peculiar anastomosis is to be met with. *Eighth pair*—(par vagum).—On issuing from the cranium, it is divided into six trunks: the four first ramify in the electric organ; the fifth goes to the stomach. M. Savi described on the surface of the eighth pair a series of ganglions, but says nothing of the *neurilemma*, nor of the filaments which are distributed into its interior. The principal difference which M. S. seeks to establish, between the different roots of the par vagum, and which are distributed to the electric organ, or the neighbouring parts, is, that the electric branches present no ganglions. The passage of the trunks through the gills is similar to that already described by Hunter. The sixth trunk constitutes the recurrent nerve, and is distributed to the back and all the tail. These observations tend to prove that the electric nerves are deprived, exteriorly, of ganglions, and end in lobes of a peculiar nature, which are nothing more than central ganglions.

And, now, let me examine the mode of distribution and of termination of the nerves in the electric apparatus. They penetrate between the prisms, decreasing gradually in breadth, and increasing in length, under the form of a ribbon, so as to distribute their filaments on all the diaphragms, of which the prisms are composed. M. S. confesses that he could never discover how the nervous filaments passed on each of these diaphragms, but he saw, perfectly, that not a single branch penetrated the prisms, it being only the elementary fibres of the nerves which were distributed to them. In order to study their mode of distribution, he placed *an isolated diaphragm under the microscope, and he remarked that it took place under the form of meshes.* The filaments detach themselves from the branches at right angles, are ramified in the organ, bifurcating constantly, and are contained between the two membranes which, by their union, form a diaphragm. Their shape is in general hexagonal, but their sides are not of equal dimensions. As to the mode in which the filaments, from centrifugal become centripetal, M. S. *declares that the difficulties he experienced in the study of this subject, prevent his publishing facts sufficiently proved by observation.* He thinks, notwithstanding, that if certain facts led him to admit that the termination of the nerves is peripheric, it is not impossible that, in a special organ, they have also a peculiar mode of termination. This is the conclusion of the author on the most striking points of the anatomy of the electric organ of the torpedo.

M. Savi describes, likewise, the vascular ramifications on the surface of the diaphragms apparent to the naked eye, whether injected or not. When the organ is divided, numerous capillary vessels are to be seen, crossing each other in all directions, whence it may be concluded that the number sent to the organ is immense. Finally, he terminates his work by the description of the muciparous organs placed at the anterior part of the snout and nostrils; but these have no direct affinity with the electric apparatus, since they exist in all the *rajæ* and the *squali*; whereas the apparatus which forms the object of this memoir is not present. His principal ideas are exposed in a series of plates.

M. Matteucci adds a note which embraces, in a few lines, the principal facts discovered by M. Savi. He lays particular stress on the composition of the prisms, which are formed by cells, full of a solution of albumen, and on the walls of which the blood-vessels and nerves are distributed. He also points out the termination in loops of the nervous filaments, in the electric lobe, and in the component parts of the apparatus. It may here be remarked, that it is impossible to come to this conclusion, on reading the work published by M. Savi, whose researches are so *hypothetical*, that, in order to explain his theory, he found this arrangement of the fibres necessary. It is evident, however, that he did not observe it in the organs themselves, as will be proved by my researches, described in this memoir.

As to the priority of the discovery: M. Savi's work appeared on the 24th. of January, and *I* addressed a sealed note to the Academy of Sciences on the *6th. of January* 1844, in which I pointed out this termination in loops. But in order to render complete justice to this anatomist, I will give the substance of his work:—1st. Origin of the electric nerves in the electric lobes—(a fact previously asserted by Hunter, Carus, and M. Flourens). 2° They come from the fifth and eighth pairs (almost all the authors have mentioned the eighth pair, while Carus laid stress on the fifth). 3° The number of branches is the same as described by Hunter. 4° The apparatus is disposed in prismatic columns, separated into several parts by small diaphragms, which are filled with a gelatinous liquid, and formed by peculiar aponeurotic divisions—(all the authors since Hunter have refuted this allegation); but M. Savi does not say, positively, that the walls of the prisms are a prolongation of the internal surface of the aponeurosis, which covers the organ, and as to the diaphragms already described by Hunter, he only increased the number. 5° Like his predecessors, he describes numerous blood-vessels in the apparatus. 6° All that is really new, are his researches on the contested origin of the nervous filaments in the lobes, and on their mode of termination in the apparatus. 7° Finally. M. Matteucci (*loc. cit.*, p. 170,) expresses himself, thus, on the part of the brain, from which the nerves originate:—"The last lobe of the brain, which may be considered as a peculiar lobe added to the medulla oblongata, is that from which originate the nerves distributed in the organ." He calls it the "*electrical lobe.*"

(To be continued.)

MIDWIFERY STATISTICS.—Of one hundred and seven cases of labour, which occurred in the lying-in department of the Philadelphia Hospital, under Dr. G. H. Beaumont, one hundred and three were head presentations, and four breech presentations: hæmorrhage occurred in two cases before delivery, and in one afterwards: the placenta was retained in one case, convulsions took place in two, delivery was effected by the forceps in two; and seven cases terminated fatally—six by puerperal peritonitis, and one by typhus fever,

CHRONIC-CHOROIDO-IRITIS: SPURIOUS CATARACT: KERATONYXIS: ARTIFICIAL PUPIL.—Under this four-fold title Mr. Dalrymple reports a case from the London Ophthalmic Hospital, in which on admission, there was found chronic internal inflammation of the right eye, with an irregular strongly-contracted pupil, adherent to an opaque capsule. The iris was plane and rigidly stretched, its fibres radiating in marked lines towards the pupil; it had lost its proper colour, and was of a greenish hue. The left eye was sympathetically inflamed. The first thing to be done in this state was, the removal of the chronic inflammatory condition, which was effected by a course of small doses of the bichloride of mercury, with infusion of gentian or sarsaparilla, together with counter-irritation to the brow and temples, and the occasional application of belladonna. This latter, however, was not considered to be of any service. The gums were kept gently sore for several mouths. The next thing to be done was to remove the obstruction in the pupil by the operation of keratonyxis, prior to making an artificial pupil. This was effected by keratonyxis, repeated on six different occasions. The last operation was followed by some iritic inflammation, which was subdued by leeches and mercurials. The cold weather having set in, all further proceedings were postponed to the spring, when the lens was found to be nearly entirely absorbed, and the needle was used only once again, the complete removal of that body being thereby effected. An artificial pupil was next made, but it was shut up by a dense white and opaque capsule, which, when an attempt was afterwards made to extract it with a pair of delicate forceps, was found to be encrusted with calcareous matter, and the vitreous humour being quite fluid, the operation was abandoned; a curved needle being introduced through the cornea at a subsequent date, and the calcareous capsule brought into the anterior chamber out of the field of vision, where it became adherent in a few days to the outer and under part of the anterior chamber, leaving a round, black and ample pupil. The patient after this series of operations was enabled to read small print with the aid of convex glasses, and to pursue all the ordinary avocations of life.

EXTRACT OF RHATANY IN THE TREATMENT OF FISSURE OF THE ANUS, DANGEROUS IN A TUBERCULOUS PATIENT. M. Putignat was attending a lady who had pleurisy, followed by the formation of false membranes and of tubercles, and who was afterwards affected with fissure of the anus, to cure which, injections of the decoction of rhatany were prescribed, and with success, but all the symptoms of phthisis were speedily developed. After a few days' treatment, these symptoms disappeared, and the fissure formed again at the anus, which was again treated by the decoction of rhatany, and cured. The symptoms of phthisis returned, became aggravated, and the patient sank. In this case it was the physician, and not the rhatany, that was in fault. Experience at least should have taught him not to repeat the use of the rhatany, when the phthisical symptoms supervened on the first cure of the fissure, and disappeared when the latter returned

Loss of Language concurrent on a Lesion of the anterior Lobe of the Brain.—Dr. Turchetti narrates in the *Annal. Univ. de Med.*, the case of a man, 50 years old, in whose face a musket, loaded with shot, was discharged. He immediately fell, losing all sensation, but shortly after recovered himself, with complete possession of his intellectual faculties. The tongue, though slightly wounded at its point, retained perfect senses of touch and taste, with mobility: deglutition was easy; but *the patient wholly lost the power of speech.* In a few days the man's wounds healed; no bad symptoms remained, except the loss of speech, and he was pronounced well; when, on the ninth day, he suddenly lost his faculties, was seized with trembling, stupor, and, finally, coma, and in 26 hours died. On examination, it appeared that one of the large leaden shot had penetrated the cranial cavity; and the hole, which had been enlarged by the trepanning operation performed just before death, let out, before section of the bone, a quantity of inodorous thick pus—the detritus of cerebral matter. The left anterior lobule was completely disorganised.

Gentlemen admitted Members of the Royal College of Surgeons, on Fridary, June 28th:—J. M'Mahon, B. E. Brodhurst, P. D. Moffat, J. K. Lewis, D. R. Shanahan, J. H. T. Bailey, J. Ryan, W. Priest, E. Pilkington, M. P. Foley.

Gentlemen admitted Members of the Apothecary's Hall, 27th June:—Francis Robt. Trumper, John Edw. Smyth, Chas. David Arnot, F. J. Freeland.

A COURSE OF CLINICAL LECTURES ON SOME IMPORTANT POINTS OF SURGERY.

Delivered at St. George's Hospital, by Sir Benjamin C. Brodie, Bart.

Lecture XIII.

Diseases of the Male Urethra. (*Continued.*)—The last lecture was occupied in explaining the pathology of strictures of the membranous part of the canal, and the difference between the spasmodic and the permanent stricture, — how the latter is always more or less complicated with the former—and the symptoms which they produce. I also told you, retention of urine sometimes caused the bladder or urethra to give way, thus allowing the urine to escape into the perinæum and surrounding parts, and terminating in abscess of a serious character. In cases of long-standing stricture of the urethra, you will sometimes have abscesses form external to the bladder, just as I have explained to you; they occasionally form external to the urethra. A man was brought to this hospital who had permanent stricture of some years' standing; there was a tumour above the pubes; it was opened, and a quantity of matter escaped. This man died; and, on examination, it was found that the mucous membrane of the bladder had suppurated, and the urine, escaping into the surrounding parts, had produced this large abscess, as well as several of smaller size. The urinary organs are all so intimately connected, that, whenever one part is diseased, the others become to a greater or less extent affected also; but this I shall explain to you more fully hereafter. Some time ago, an officer who had been in the East Indies, placed himself under my care for stricture of the urethra. With some difficulty, I passed a moderate sized bougie for him, and afterwards taught him to pass it himself; but, when the stricture was cured, there remained a considerable tumour in the perinæum. About a year after this he died, if I remember rightly, of inflammation of the membranes of the brain; and, as I was anxious to learn the cause of this tumour, I examined it, and found it to consist of a hard gristly substance, and which I believe to have been formed by the constant pressure of the urine on the parts immediately behind the stricture, and this is not an uncommon occurrence. Sometimes, when the urethra has given way behind the stricture, and the urine has escaped into the perinæum, the tumour extending as far as the corpus spongiosum, you will have the gristly substance form there also, from the same cause.

Another result of this disease is inflammation of the urethra behind the stricture; the lining membrane loses its natural organization, becomes thickened; spots of lymph are deposited in different parts of it, which become organized, and in this manner little gristly indurations are formed in the urethra. This should always be borne in mind, as you will meet with it repeatedly in the treatment of this disease, and if you do not know what it is, you may be very much troubled. If, in such a case as this, you attempt to pass a catheter, you feel it passing over something like pieces of cat-gut. These are less perceptible to the sight; still they are sufficiently so not to escape attention. In old cases of stricture, the urethra becomes narrowed in front of the stricture; this is easily explained; in consequence of the stricture, the stream is very narrow, and, therefore, the urethra is not dilated to its full size, the result of which is that it gradually contracts.

On a former occasion, I told you enlargement of the prostate gland was one of those changes which mark the progress of old age; I should have mentioned that such persons as have enlarged prostate from any cause when young, are more liable than others to have stricture in old age; so, also, those persons who have stricture when young are not unfrequently the subject of an enlarged prostate in old age. Enlarged glands are generally produced by disease of the prostate. In old standing cases of stricture, abscesses frequently form in the prostate and burst into the bladder or rectum, and sometimes into the urethra or perinæum. These are found only in very old cases, and are a very serious complication of the disease. I told you, one of the symptoms is an irritable state of the bladder, so that the patient is continually wanting to make water; it is evident in these cases that the sensibility of the bladder is increased, as the patient wants to make water when there is scarcely any in the bladder; and if this state of things is not remedied, the bladder will actually contract so as not to be capable of holding more than two or three ounces; but if the disease be cured, it will attain its natural size again. Then, again, you will meet with cases where the bladder never empties itself; this occurs when the stricture occupies a considerable portion of the canal, and the proper muscles are not sufficient to overcome the resistance; in short, they cannot fully compress the bladder. When this occurs, the bladder becomes distended so as, perhaps, to contain a quart of urine; but you will observe in such cases, that there is always an involuntary dribbling of water—the patient wets his bed at night, and his small clothes in the day. If a patient has these symptoms, you may be pretty sure the bladder is loaded. I don't say that there are no exceptions to this rule, but certainly they are of rare occurrence. In either of these cases, whether there be too great contraction from constant irritation, or too little contraction from want of power in the muscles which compress it, I say, in either case, there will be chronic inflammation of its mucous or lining membrane; and if you examine it after death, you will find it of a dark colour, from excessive vascularity, so much so, that in some instances there is scarcely a point where it is not filled with blood. The mucous membrane is thickened and velvety, and secretes a thick, ropy, adhesive mucus, which falls to the bottom of the chamber-pot like bird-lime, and it is alkaline, though, at the same time, the urine may be acid. If it be only in small quantities, it will turn turmeric paper brown, whilst the urine reddens litmus. But if this mucus be secreted in large quantities, it renders the urine alkaline, fœtid and ammoniacal. Sometimes it contains streaks of white matter, or phosphate of lime, which you know enters into the formation of fusible calculus. Phosphate of lime, then, is not secreted from the urine, but from this mucus. From this cause, old persons become liable to stone in the bladder. This phosphate of lime, mixing with the mucus, becomes first of the consistency of soft mortar, but afterwards concretes into hard calculous masses This state of the disease aggravates the patient's symptoms very much. None suffer more than those who get chronic inflammation of the mucous membrane of the bladder, with a disposition to form this secretion, because it produces constant pain over the pubes, and an almost unremitting desire to make water. This distress is increased by the secretion stopping up the narrow passage through the stricture, which it is bad enough to drive the urine through; how much more, then, this viscid mucus; in short, the muscles of the abdomen and bladder are quite incapable of doing it, and, therefore, complete retention is the consequence. Nor is it any easy matter to avoid this by the catheter, for you can only pass a small one, and the eyes of the instrument are immediately choked up with this secretion. Sometimes, under these circumstances, the mucous membrane ulcerates, and it is dissected from the muscular fibres cleaner than you could do it with the scalpel; and when this occurs, there is excessive pain; the urine becomes of a dark colour and tinged with blood, and this to such an extent as to be deposited in the form of a coffee-coloured sediment. Whenever ulceration takes place, there is likely to be bleeding from the small vessels. This may be such as only to tinge the urine, or in such quantities as to form the deposit I have just mentioned. But ulceration of the lining membrane of the bladder is rare, and only occurs in cases of very long standing.

Another more frequent change in this membrane is, that spots of lymph are deposited upon it, to which the phosphate of lime adheres, sometimes only here and there, whilst at other times nearly the whole surface is covered. Observe, it is the phosphate of lime which is deposited, no other earthy matter presenting such an appearance. You will sometimes see, after lithotomy, the edges of the wound covered with earthy matter, which is precisely similar to that which lines the bladder in the cases of which I have been speaking. After the operation, the patient has inflammation of the mucous membrane of the bladder, and this secretion is deposited on the edges of the wound more freely than elsewhere, as might be expected. If, under these circumstances, the state of the bladder be relieved, the crust of earthy matter may separate; but I never knew a case do well in which this deposition had taken place. In most cases of stricture of the urethra, the muscular coats of the bladder are increased in thickness, according to that well-known law in the animal economy, by which muscles increase in thickness in proportion as they are employed. In the preparations on the table, you see a number of small cells between the muscular fibres; they are formed in this way:—A person has a stricture of long standing, which he has neglected; he attempts to make water; little or none escapes; he strains violently, and the water acts again on the muscular tunic of the bladder, forcing its fasciculi apart, and pushing the mucous membrane between them. In this instance, these are very small, being in an incipient state; but they increase very rapidly, and may attain a very considerable size. I recollect seeing one case, in which a pouch of this kind was formed between the bladder and rectum, and which attained a size greater than even the bladder itself; and in another case, there was one which would hold half a-pint, and several others, each capable of holding several ounces. But the secondary diseases produced by stricture are not confined to the bladder. The mucous linings of the urethra and pelvis of the kidney are all continuations of the same, and the affection may extend along these from the bladder, producing inflammation and thickening of the membrane; nor is it limited to the pelvis of the kidney; for you find the lining membrane of the infundibula in the same state, and also secreting this ropy mucus; so that you will sometimes find the pelvis of the kidney completely filled with it, and here, as in the bladder, you will have the formation of the phosphate of lime. A kidney, otherwise healthy, may generate a calculus composed of lithic acid, or oxalate of lime, but it is only in a diseased state that it generates the phosphate of lime. If a patient has a violent pain in the loins, followed by a similar pain in the groin and testicle, it is symptomatic of a calculus passing down the ureters; and if this is voided, and you find it to be composed, not of lithic acid or oxalate of lime, but of the phosphate, you may rest assured he has disease of the kidney. Some time ago, a gentleman voided an oxalate of lime calculus; shortly after he voided another, which I found to consist of the phosphate of lime, and he died. The irritation produced by the oxalate calculus had produced disease of the mucous membrane, and this produced organic disease of the kidneys, which was the cause of his death, the affection having extended to the glandular substance of the kidney. On examination of the kidney after death, you will find it of a darker colour, and softer than usual; it is spongy, so that you can push your finger through it easily. You will also find the adipose substance surrounding the kidneys, taking a firm adhesion to the capsule; so that you take out the kidney, and leave the capsule (which appears to lose its adhesion to that body) sticking to the suet in the loins. This is what takes place at the onset of the disease; but if it goes on, the kidney becomes enlarged, and assumes a lobulated appearance, and abscesses form in different parts of its solid structure. In old and neglected cases, then you have all this complication of disease:—the bladder increased in muscularity, its mucous membrane thickened, and pouches formed by it between the muscular fasciculi, inflammations and thickening, with dilatation, of the ureters, the same extending to the pelvis and infundibula of the kidney, and abscesses forming in its glandular substance. All these changes cannot take place in such an important organ, without a fresh set of symptoms being produced, totally different from those which are produced in the early stages of the disease. Then you have great pain above the pubes, for diseases of the bladder always produce this pain, and so do diseases of the kidney; in fact, this is more characteristic than pain in the loins; it may be on both, or, in some cases, only on one side, and of great severity. When the urine is voided it is stinking, offensive, and ammoniacal; the skin

omes hot, the pulse small and weak, the tongue red and dry, and afterwards of a brown colour. e patient, perhaps, has occasional shiverings, is guid, incapable of exertion; he says he will try do something, perhaps look over his accounts, he fails in the attempt; and I have known per- ssit the whole morning with their books before n, but scarcely look at them. Then he gets ressed and low spirited, his stomach gives way, oses his appetite, and whenever he attempts to e food, it makes him sick, and he vomits. The patient I saw before coming here to-day, was old gentleman with disease of the kidneys, ether with enlarged prostate gland, and for the forty-eight hours he has been lying in bed tinually sick, and bringing up a greenish fluid; this is a common symptom; nearly all persons, h the disease of which I last spoke, suffer more ess from this symptom. I should have added, , when this disease is once thoroughly es- ished, the patient never recovers, and not un- uently dies suddenly. Often, when you think r patient safe, you will be sent for suddenly, you will find your patient dying. In some es, the patient has cerebral effusion; then shiver- come on, and his physical powers are reduced so low an ebb that reaction cannot be again ited; he never gets the hot fit, but dies in a e of collapse.

will mention a case which occurred in own practice, showing how necessary it is be extremely careful in all these cases. A leman called on me who was suffering from standing stricture, which he got first in the st Indies. With some difficulty, I passed a eter for him, but this brought on shivering, and as sent for to come and see him at his hotel, from the symptoms I then observed, I was led elieve he had disease of the kidneys; he never rely recovered from the shivering, but died; although the body was not examined, I have doubt there was disease of the kidneys. ther patient had small stones in the bladder; tracted one with the forceps, and in so doing ed the urethra a good deal; it was followed hivering; reaction in this case was established, he partially recovered, but after a few days as seized with violent pain in the loins, and r symptoms of diseased kidney, and he died. examination, we found that what had raised idney to increased action, was the shivering ueed by the extraction of the calculus. These s show how necessary it is to be extremely ious at all times, and how little is sufficient to oy the patient's life. I told you, on a former sion, the bladder may become dilated; when occurs, it is generally accompanied with in- mation of the mucous membrane; but the di- ion extends up the kidney, the glandular ture becomes dilated, and after death you find e a thin layer of membrane forming a kind of In this case, it was some disease of the is of the kidney; but stricture of the urethra, ased prostate, or any of these things, may pro- this state of the kidney, and when thus en- ed, it may be felt like a tumour in the abdo- , and sometimes may attain a very considerable It is a curious fact that, when one kidney only affected, the other will take on an increased n, thus answering the place of two. In old s of stricture, you will frequently find the kid- on one side wasted, hardly anything being whilst that on the opposite side will be double proper size; but it is probable this dilatation s on to ultimate wasting of the kidney. The dular structure is so thinned as to be incapable erforming its proper functions, then wastes , and becomes of no service; the wasting is ndent upon the same principle as the wasting e female breast, or of a muscle, when not em- ed.

have said that in the diseases of the kid- the patient may have shiverings; but this ptom may occur in stricture of the urethra, the kidneys are not affected, especially if patient has been residing in a hot climate; but all have occasion to speak more fully upon subject in our next lecture.

CLINICAL LECTURES ON MEDICINE,

Delivered at the GREAT CHARITY HOSPITAL, Berlin, by Dr. SCHÖNLEIN, first Physician to the King of Prussia, founder of the Natural System of Medicine in Germany, and Professor of Pathology and Therapeutics in the University of Berlin.

Prepared from the German expressly for "The Medical Times."

LECTURE XV.

Hepatic and Splenic Symptoms. — Attacks of Shivering. — Inflammation of the Hepatic Veins.—Pneumonic Phenomena.—Their Relation to the Inflammation of the Veins.—Collapse.—Death.—Sectio.

July 1st, 1842.—Caroline Schulz, wife of a navigator, thirty-three years of age. The patient had been ill for five weeks, previous to which she always enjoyed good health. She attributed the cause of her malady to a violent fit of anger, immediately after which she was seized with pain in the region of the liver, nausea, and vomiting; an intense icterus also made its appearance simultaneously with these symptoms. A medical man, who was called in, readily succeeded in removing the icterus; but, on its disappearance, an acute tearing pain took place on the opposite side, in the situation of the spleen, extending itself upwards towards the shoulder. On examining the abdomen, we felt the spleen projecting below the false ribs, moveable, and very susceptible to pressure; the pain, however, is not limited to this locality, although it is felt there most intensely by the patient, but it also extends itself towards the linea alba, and as far as the right hypochondrium, where pressure towards the lower margin or the fossa of the liver is particularly painful. The abdomen is certainly rather distended, but soft. To this we must add the following symptoms:—Skin still of a dirty yellow colour; taste slimy and disagreeable; tongue covered with a yellowish brown coat, which begins to be dry; heaviness of the head, with oppressive pain over the forehead; nausea, but no more vomiting; diarrhœa is present, which, however, is not to be considered as a morbid symptom, but as the effect of the medicine, since the patient has used an infusion of senna for some time, in consequence of costiveness; bleeding of the nose has taken place, which must be regarded as a morbid symptom. You also observed this in a former patient whose spleen was diseased, and where a characteristic epistaxis from the left nostril returned at every increase of the affection. To these local symptoms, affecting the grandular organs of the chylopoietic system, we must add a series of febrile phenomena. Among these, some are permanent, while others take place in paroxysms: the latter forming the difficult part of the diagnosis in this case. The permanent symptoms may be enumerated as follows:—Pulse soft, moderately full (100 per minute), less frequent in the evening; skin moist, but intensely hot; we have not yet had an opportunity of observing the urine; the tongue is brown, rather dry. The intercurrent symptoms made their appearance some days ago, namely: violent attacks of shivering, which the patient describes as very painful, and lasting for some time.

I have already mentioned that one part of the diagnosis is manifest, while the other is rather obscure. The former is exhibited by symptoms of inflammation of the whole of the biliary organs, especially the spleen and the liver in its lower or concave part. We also find some signs which seem to belong to inflammation of the portal system; this part of the diagnosis is still obscure. The direction of the pain, from the spleen across the vena portæ, towards the liver, where this vessel joins the latter organ; the splenic and hepatic phenomena; and, finally, the attacks of shivering, form very suspicious circumstances.

Prescription. — Inunction of grey mercurial ointment in the upper region of the abdomen; for internal use, a saline with aqua lauro-cerasi.

July 2nd.—We find in this patient a series of phenomena, which leave no doubt respecting the affection of the liver and the spleen:—the originating cause, the phenomena immediately following it, the jaundice, the intense pain in the region of the liver, and subsequently in the spleen, the distension of this organ, and the disturbance in the functions of the digestive organs, are arguments which set this question at rest. On the other hand, there is a second series of phenomena, the explanation of which is not so easy, namely: the attacks of shivering intercurrent with the fever, which returned almost every day, but at uncertain intervals; also the pain in the central line of the body, between the ensiform cartilage and the navel, which is somewhat intense; these phenomena seem to indicate an affection of the vena portæ, with commencing suppuration.

We had a case of inflammation of the vena portæ in this hospital, about two years ago, in which the subsequent post-mortem examination perfectly confirmed our diagnosis; this disease has undoubtedly been met with on dissection in former cases, but it had never been detected during life. The number of cases of this disease (although only recognized after death) has very considerably increased of late years. Both French and German physicians have enumerated such cases, but they have never before been diagnosed during life. Indeed, I am of opinion that this disease happens very frequently, and that many cases of the so-termed *intermittens erratica* of the ancients, which so often had a fatal termination, originated in a chronic inflammation of the portal vein.

We have again had one of the attacks of shivering before mentioned; it took place during the night, being very violent, and of about an hour's duration; during its continuance the extremities trembled considerably, and the pulse was contracted; it disappeared gradually, and was followed by heat, but there was no trace of the critical phenomena usually met with in phlebitis. There are, moreover, one or two doubtful points in connection with this case. 1stly, The state of the stools, which in this form of disease are generally blackish, tar-like, and sometimes mixed with blood; the diarrhœa in our patient may, however, be the consequence of the medicine taken. 2ndly, Another dubious circumstance consists in the urine, which is by no means of a dark colour, resembling that in jaundice. But it might be said that the affection in this case principally limits itself to a certain portion of the vena portæ, towards the spleen, and that the urine only assumes the former quality with the progression of the disease, when the whole extent of the system is affected (and which, as proved by Mohr's observations in the Julius Hospital, may only take place after the lapse of four or six weeks). The other phenomena are almost the same as we found them yesterday; pulse 100 per minute, and soft; the patient coughs a little, but the sound on percussion is normal everywhere; a trifling mucous rattle is heard only at some isolated localities. The treatment remains the same.

July 4.—Few changes have taken place since yesterday in the symptoms of the disease, but those changes which have occurred by no means indicate a retrogression of the affection. The circumstance of the pain in the region of the spleen and in the central line of the abdomen being somewhat slighter to-day, cannot be considered very favourable, especially as the pain on the concave surface of the liver has again become more intense, and has the characteristic extension towards the right shoulder. The functional disturbance in the digestive organs (tongue covered with a brownish fur, disagreeable taste, diarrhœa) continues in the same degree. With regard to the febrile symptoms, repeated attacks of shivering have taken place; these attacks occur at irregular periods, and, within the last few days, have evidently increased in rapid succession. Formerly there was an interval of nearly twenty-four hours between them; now there are scarcely any: a fresh attack of shivering ensuing very soon after the previous one is over. There is something peculiar attending these attacks, namely: that, whilst the patient is perfectly agitated by an internal sensation of shivering, and whilst she gnashes her teeth from cold, the skin exhibits a totally reverse condition—an intense burning heat. These paroxysms are not followed by sweating, which must remove any suspicion as to the existence of ague. Another phenomenon, moreover, is presented by this patient, which we certainly observed before, but which now appears to us to be of greater importance. We formerly considered the attacks of

coughing to be founded merely upon simple bronchial congestion, but we are now very much inclined to connect it with the inflammation of the veins; for we know that deposits of purulent matter readily take place in the tissue of the lungs, and that inflammation is developed in consequence. The earlier physicians were also acquainted with the fact, that in cases of inflammation of the veins of the lower extremities abscesses in the lungs and liver very readily took place. The examination of the chest has hitherto only afforded a slight mucous râle at isolated localities. We shall renew the investigation so soon as the violent attack of shivering is over.

Prescription.—Infus. cort. chinæ (℥ij), ℥iv; ol. oliv., ℥ss; gummi mim., ℥ij; syrup. papav., ℥j. Mix. A tablespoonful to be taken every hour. The mercurial ointment to be continued.

July 5th.—The paroxysm of shivering, yesterday, which we had an opportunity of observing during our visit, continued till the afternoon. After a pause of between eight and nine hours, that is to say, during the night, another attack of shivering took place, which only subsided towards morning. We now, during the period of remission, find the patient to be extremely weak and exhausted. Three watery stools have taken place during the last twenty-four hours. We mentioned our fears yesterday, with regard to the state of the respiratory organs, lest a circumscribed, or as the ancients called it, a metastatical, inflammation of the lungs might have taken place, besides mere bronchial irritation; and we also stated that a minute investigation of the chest alone, by means of auscultation, could decide this. But it might be difficult, even by this means, to discover the inflammation at its commencement; for, if a nucleus of matter be depesited in only a small part of the lung, from which the inflammation shall extend itself, the commencement would be too small, the changes caused by it too trifling in extent, especially if this part should be in the central region of the lung—remote from the peripheral surface, for the stethoscope to detect it with any degree of certainty. Our subsequent examination of the chest, in this case, has shown that a dry crepitation, tolerably limited, is distinctly audible in the lower lobe of the right lung. On account of this, we instituted a moderate venesection, when the oppression of the chest increased last night. The blood extracted, which you see here, has formed a gelatinous and loose coagulum, and is somewhat buffed.

July 6th.—An attack of shivering recurred this morning at four o'clock; it was not, however, so violent as the former ones. The symptoms of secondary pneumonia have now made their appearance more distinctly, not only manifesting themselves, in a greater oppression of the chest, a more violent cough, and expectoration of bloody sputa, but also by a dry crepitation, which is heard in the lower part of the right lung. As these symptoms had increased last night, a venesection, to six ounces, was again instituted, and cupping glasses were applied to the lower part of the right side, without, however, producing any considerable abatement. On the contrary, the continued fever has now assumed a more typhoid character: pulse small, uneven, from 110 to 128 per minute; the brown tongue has become drier; clammy perspirations, alternating with a hot skin. The diarrhœa continues. The phenomena of the affection of the spleen have quite disappeared, but the pain along the centre of the abdomen still continues.

Prescription.—Infus. cort. chinæ (℥ij), ℥iv; mucilag. gummi, ℥j; aq. chlorat., ℥vj; tinct. opii., gtt. viij; syrup alth., ℥j. Mix. A tablespoonful to be taken every hour.

July 7th.—The patient was again attacked early this morning by a fit of shivering, of slighter intensity, followed by heat of skin, and a clammy perspiration, which still continues. The local phenomena in the abdomen have moderated very much; the diarrhœa also has ceased; the pneumonic phenomena, however, continue, although the sputa do not contain any more blood. The typhoid symptoms are the same as yesterday. The prescription ordered yesterday to be continued.

July 10th.—An attack of shivering again took place the night before last, and was repeated last night; neither of them were so violent as the former ones. The weariness and debility of the patient have increased. The sensation of pain in the central part of the abdomen is slighter; the affection of the chest undiminished. After an interval of thirty-six hours, some watery stools have again taken place. Instead of the aq. chlorat. we shall prescribe acidum phosphoricum (℥iss.) The other part of the prescription to remain as before. Claret for a beverage.

The *prostratio virium* gradually increased, and death took place on the night of the 11th, after the attacks of shivering had disappeared for the space of twenty-four hours.

July 14th.—We yesterday made the post-mortem examination in this case. We will now briefly repeat the course of the disease. The patient assured us that she had never been unwell before in her life. About four weeks previous to her reception into the hospital, she had thrown herself into a very violent fit of anger, which led to derangement of the biliary system. She then experienced pain in the right hypochondrium, loss of appetite, intense thirst, and some days afterwards an attack of jaundice, with constipation of the bowels. She called in a medical attendant, who prescribed powerful purgative remedies, which removed the jaundice; but her state got worse from day to day, so that she at last applied for admission into this hospital, about five weeks from the commencement of the disease. On examining the patient, we found her in a very emaciated state; the skin of a peculiar dirty yellow colour, similar to that of chlorotic females, but without any characteristic icteric stain. The patient complained of pains in the upper region of the abdomen, which led us to examine this part: it was but little distended, soft; the spleen was swollen, filling up the left hypochondrium; it was soft, but painful towards its *hilum;* the pain extended thence towards the central line of the abdomen, and was most intense between the navel and the ensiform cartilage; from this point it also spread towards the liver (increasing in intensity upon external pressure), running along its lower surface as far as the vena portæ; no intumescence or distention was perceptible in the liver itself. Some days subsequently, the pain also extended itself upwards towards the right shoulder. Beside these local phenomena, the tongue was covered with a yellowish-brown fur; the taste was vitiated; there was an entire loss of appetite; intense thirst; copious stools, which we considered rather as the sequelæ of the former medicinal treatment, and which were of a dark yellow colour, intermixed with mucous masses. The urine usually discharged itself with the stool; we, therefore, had but few opportunities of observing it; it was dark brown, but exhibited no alkaline reaction. A continued violent fever was added to this: pulse soft and small, 100 to 110 per minute; skin burning hot, sometimes dry, at other times covered with clammy perspirations. In the midst of these permanent symptoms of fever, violent attacks of shivering made their appearance. The patient was seized with an internal sensation of shivering, attended with gnashing of the teeth and trembling of the limbs, whilst the skin itself appeared intensely hot. These attacks of shivering were quite irregular in their periods, and equally variable in their duration; some lasted full twelve hours, and others continued for scarcely six hours. These paroxysms were not followed by any critical phenomena. A series of new symptoms exhibited themselves a few days after the reception of the patient into the hospital, at first manifesting themselves in a mild form, but subsequently becoming more intense, namely: symptoms of derangement in the organs of respiration, and which afterwards became so violent, particularly during the night, that they harassed the patient more than anything else; she complained especially of painful cough, with expectoration of a frothy mucus, tinged with blood. We were unable to examine the chest with the requisite accuracy, on account of the debility of the patient. The lower lobe of the right lung, especially the anterior part, presented a mucous rattle, and, mixed with this, was a dry crepitati at a few circumscribed localities.

From the symptoms enumerated, we at or concluded that we had to deal with an inflammati of the veins in the locality of the liver, or, as has been termed in modern times, *pylephlebiti* which was already commencing to run in suppuration; and that, from the subsequ deposit of pus in the tissue of the lung, an infla mation was caused in this organ, and which must, therefore, consider as a consequence of original abdominal complaint.

The treatment, which was certainly adopt without entertaining any hope of success, anticipation of saving the patient, consisted mercurial inunction on the abdomen; gene and local abstractions of blood; and in the e ployment of infus. chinæ, and acids. The pa in the abdomen had almost entirely disappea on the sixth day, under this treatment; the tension of the spleen began to diminish,—and will recollect that the patient ceased to compl of any pain upon repeated external pressure; the pulmonary phenomena, in like proportion, tained a greater intensity, and, at the same ti were combined with an increase of the fever. attacks of shivering became slighter during last few days, and entirely ceased within for eight hours of death; the patient, in fact, su under the debility induced by the disease. following was the result of the post-mort examination:—

The *spleen* was enlarged to nearly twice size, but uncommonly flabby; the splenic ve were greatly dilated, but their walls were changed. It appears evident, from this fa that considerable distension of these veins had one time taken place, but had subsequently minished; the phenomena met with during life of the patient also coincide with this vie There was no change whatever perceptible alo the whole course of the *vena portæ*, not even its main trunk, where the patient had complain of violent pain at her entrance into the hospit the vein was filled with fluid blood; its wa were transparent. Nor was any anomalous cumstance found in its course through the liver to its ultimate ramifications. The liver itself w flabby; commencing *cirrhosis* exhibited itself its anterior part, and in the left lobe. *ductus hepaticus*, from the liver to its junct with the *ductus cysticus*, and, in a less degree, *ductus choledochus*, were distended nearly to size of the intestine; the interior was filled wi a stony concretion, but not so entirely as to p vent bile from flowing through. The *gall-bladd* was contracted, containing but little bile, a externally was united to the stomach. A furth examination of the veins of the abdomen prov the *vena cava inferior* to be quite normal; *vena hepatica*, on the other hand, was discolor to an extent of four inches, at its exit from upper part of the right lobe; its internal surfa was covered with an exudation, and there w at one point, a small coagulum, which enclosed drop of pus. Not far from it, in the substance the liver itself, at its obtuse, right upper margi was a circumscribed abscess, of the size of hen's egg, filled with pus. Besides these phen mena in the abdominal region, the *lungs* we found to be adherent to the *pleuræ*, and son ounces of reddish serum were discovered in bo of their cavities; the lungs, themselves, we rather œdematous, containing characteristic sm deposits of pus, accumulated mostly in the inferi lobe of the right lung; they were, however, al scattered through the left. These abscesses we from the size of a pea to that of a walnut—their co tents here and there mixed with blood; some e hibited a slight degree of surrounding inflammati —the so-termed *sanguineous engorgement.* The was nothing anomalous in the other organs.

After this brief exposition of the anatomic facts, the question presents itself: how far has o diagnosis proved itself correct? This disease ha up to the present time, been but seldom observe and to the best of my knowledge has now, for t first time, been diagnosed (during the life-time

* *Messori* first gave this name to the *inflam matio venæ portarum.*

the patient) in this hospital. The French physicians, as, for instance, *Andral*, have enumerated some cases, but only from post-mortem examinations; *Cruveilhier's* work also contains an observation taken from a post-mortem examination; *Dance* likewise mentions a case; to be brief, the French physicians consider this disease of very rare occurrence. All the cases mentioned give but very deficient diagnostic information. Among the English physicians, I only know of *Stokes* who has mentioned such a case; he found, on a dead body, obliteration of the *vena portæ*, and stated his opinion that this morbid state occurs much more frequently than is supposed, and that many cases of incurable jaundice may, perhaps, originate in it. That able pathological anatomist, *Rokitansky*, certainly treats of inflammation of the portal vein, and of its termination in obliteration and suppuration; but this otherwise excellent investigator treats of it but cursorily, and we must, therefore, suppose that this disease is of but rare occurrence in the great hospital at Vienna. It is due, however, to *Rokitansky* to mention, that he has frequently observed partial obliteration of individual branches of the vein within the liver. I am not of opinion that the inflammation of the portal vein is so very rare a disease; I have witnessed it several times, particularly under two principal forms—the one at Würsburg, and the other in this hospital, two years ago. A case of this disease has also occurred in the Julius Hospital, at Würsburg, more recently, and of which *Mohr* has given a very excellent description; it was the case of a girl, seventeen years of age, whose disease had been considered as *intermittens erratica*. I have already mentioned that most cases of *intermittens erratica*, terminating in death, probably originate in inflammation of the portal vein.

Let us now ask, what is the result of the case before us, on comparing the facts detected during the life of the patient with those found on the post-mortem examination? In the course of the treatment of this patient, we witnessed the gradual disappearance of the local symptoms, upon which we founded our diagnosis; on the other hand, however, we observed the development of the phenomena of reabsorption of pus, and the formation of puriform deposits in the lungs—secondary states which resulted in death. It will be asked, now, why is the whole morbid process to be attributed to the inflammation of the vena portæ, and not to the inflammation of the hepatic veins? I might reply to this, that the hepatic veins form the continuation of the portal vein, as the injections of *Bertin* and *Walter* have proved; but I will not lay too much stress upon this circumstance. I believe that the inflammation of the liver was of subsequent origin, and that it cannot explain the whole complication of symptoms as they occurred during the life of the patient. My reasons for this assertion are the following:—1stly, The extent of the inflammation in the veins of the liver was too limited to enable us to find any explanation in it for the violent phenomena that occurred, and which lasted for so long a period. 2ndly, The products contained in the hepatic vein were of recent formation, whilst the disease itself had lasted full six weeks; it would be an absurdity to consider that, which was evidently of recent origin, as the cause of the former phenomena. 3rdly, The quality of the product of inflammation in the hepatic vein is itself an argument against such a supposition; it was an exudation of lymph that filled up the venous tube, with merely one drop of pus, and that so perfectly enclosed that it could not penetrate further, whereas the post-mortem examination proved deposits of pus in very large quantities. These are the reasons which determine me in considering the inflammation of the *vena hepatica* as only of subsequent origin—a mere consequence and not a cause of the affection. Indeed, I believe that, on tracing the history of the disease, we shall be able to prove, with great degree of probability, the precise period when the purulent metastasis to the liver took place, and simultaneously with it, the inflammation of one branch of the *vena hepatica;* it was, in fact, at that moment when the violent pain made its appearance in the right shoulder, and which disappeared again in the twenty-four hours; it was at that moment, that the deposit took place in the liver, and from the latter only was the *vena hepatica* affected. In addition to the three divisions or periods, which we before made in the course of the disease, we shall now form an intermediate stage, in so far as regards the course which the deposits have taken. We formerly distinguished: 1stly, the phenomena of the local inflammation; 2ndly, those of the transition of the inflammation into suppuration; 3rdly, those of the deposit of pus in the lungs. According to the anatomical lesion, there is now an intermediate act, after the second division, and which comprises the phenomena in the hepatic vein, and in the right lobe of the liver. The abscess found in the latter had quite the character of a metastatic deposit, since the tissue of the liver surrounding it was by no means in a state of inflammation. If inflammation had taken place here, it would only have been the consequence of the decomposition of pus (as in the metastatic abscesses of the lungs). Such deposits of pus we frequently find, also, subsequent to other forms of phlebitis—for instance, as a consequence of wounds of the external veins of the skin, and after amputation. The primary inflammation of the veins may, in these cases, certainly disappear, but the death of the patient is caused by the deposits of pus which take place in the lungs, liver, and brain. The long duration of the affection, its redevelopment, as already observed, during the illness of the patient, and the comparison of the whole group of symptoms with the facts found on the post-mortem examination, furnish a clear proof that a similar action had taken place in the present instance, that is to say: that the primary inflammation of the veins had disappeared, and that the secondary deposits of pus caused the fatal issue. This case, therefore, furnishes, thus far, an important contribution to the history of a form of inflammation as yet but little known.

COURSE OF LECTURES ON THE THEORY AND PRACTICE OF MEDICINE.

Delivered by C. J. B. WILLIAMS, M.D., F.R.S., Professor of the Practice of Medicine, and of Clinical Medicine, at University College.

Disease of the Arterial Tubes, Aneurism, &c.—We have now, gentlemen, to consider the subject of disease of the arteries, including dilatation of the aorta, aneurism, and inflammation of the lining membranes of these vessels. These are diseases of which we have no very distinct practical idea. There are some cases connected with endocarditis, and sometimes with rheumatism, and, from the various signs, it would seem as if, in those cases, the arteries partook of the general inflammation. There is an unusual pulsation in the carotids, an uncommon amount of oppression, feebleness, and local pain. In the acute state, we find after death traces of redness, and membranous deposition in patches, on the lining coat of the aorta. These are cases of extreme rarity. There is a form of arteritis observed to occur in connection with this lesion. Where there is destruction of the aortic valves, there are patches of redness in points, exhibiting slight perforations; depositions of lymph, and of calcareous and osseous matter, are seen, producing various morbid states. The *signs of arteritis* seem to be those of vascular excitement, but are more of a negative than a positive character—for instance: when we examine the region of the heart, we do not find signs of hypertrophy and other states. There is no doubt that the disease of the arteries arises from inflammation—a succession of inflammatory attacks acting on previous derangements—or irregularity in the structure of these tubes, and which, therefore, interferes with their functions.

Now, we first consider acute arteritis. Dilatation of the aorta may be either general or partial. General dilatation of the ascending aorta very frequently accompanies many of the other diseases of the heart, previously mentioned. It is of common occurrence in regurgitant and obstructive disease of the aortic orifice. In a case of this kind you see, in fact, a dilatation of a portion of the aorta, sometimes of the whole extent of the ascending aorta, and of a considerable extent of the descending aorta. There is great irregularity in the coats, which are thickened with patches of matter, white opaque patches, and likewise red patches: the coats of the vessels appearing as if they were inflamed; and there are sometimes plates of osseous matter deposited in the arteries. Sometimes, dilatation of the ascending aorta is found to be uniform without any considerable disease of the coats, but more commonly we find disease of these walls. Frequently, with the thickening and deposition of osseous plates, we find various cracks and fissures of the internal membrane. Sometimes, there is a thickening of the whole aorta accompanying dilatation, and at other times the dilatation is very irregular, in patches, some parts being more dilated than others. The artery may be quite rigid from these various depositions.

Now, the physical signs of the dilatation of the aorta will partly depend upon the fact, whether the dilatation is simple, or accompanied by thickening, irregularity, and inflammatory action. I have met with several instances in which the aorta was dilated, and the signs were merely those of increased pulsation, without any other effect. Increased pulsation in the course of the aorta is very distinct, in proportion to the extent of the pulsation at the region of the heart, towards the top of the sternum, and even higher up than this. It is heard much more distinctly than usual in the carotids; and whenever dilatation of the aorta takes place to any considerable extent, the signs are evident in other parts of the system. Sometimes, the symptoms complained of are those which are referable to the head, or to the heart: noises and singing in the ears, attacks of giddiness, or affections of the vision. In such cases, we may have apoplexy, and even partial paralysis. I have known two cases in which there has been dilatation of the aorta, without any very distinct proofs of the disease, but attended by symptoms of determination of blood to the head. The force of the circulation is directed chiefly to the arteries in the immediate vicinity of the heart—the carotids. This may be unaccompanied by any murmur; but in many cases there is a murmur, not in the dilated aorta, but at the arterial orifice; for, as I mentioned before, dilatation as well as contraction of the arterial orifice will produce a murmur; and so, likewise, dilatation along the course of the artery will produce it, even without any considerable alteration of the orifice. Generally, however, in these cases there is more or less disease of the aortic orifice. The murmur is heard, moreover, not only in its usual situation in the region of the heart—the mid-sternum—but also in the direction of the arteries; and the chief distinction of the dilated state of the aorta is as to the intensity with which the murmur is transmitted to the upper parts of the chest, and to the carotid arteries; all this must be taken in connection with the state of the arterial pulsation. The pulsation in the carotids and large vessels is sometimes disproportionate to the strength of the pulsation at the heart, and this is usually accompanied by a murmur of a distinctive character.

There is another effect sometimes produced by a dilated aorta, when it is accompanied by regurgitant, as well as obstructive, disease of the aortic orifice. The obstructive murmur accompanying the systole is heard in the manner in which I have just described it: very loud indeed; but the second murmur, distinctive of a retrograde action, backwards into the ventricle, is not heard so distinctly as usual. There is this modification of the transmission of the two murmurs, that, although the first is very loud and accompanied by a strong impulse, the second murmur, however loud it may be in the region of the heart, is not heard at all in the arteries in the neck. The explanation of this may be found in the fact, that there is less fulness and tension in the second state, so that the regurgitant murmur is not propagated so readily through the artery. This difference is still more perceptible, where the aortic dilatation is accompanied by much roughness as well as enlargement of the walls. There seems to be, then, a modification of the sound produced by this change in the aorta: a new species of murmur in the rough and enlarged artery. This usually accompanies the first sound only; and, though there may be no obstructive disease in the arterial orifice, there is yet heard a murmur in the arteries above the upper part of

the sternum. This, when it is situated there, and not in the region of the heart, or over the orifice of the ventricle, is really distinctive of some disease in the arteries. Pressure on the artery will produce the murmur, and in that case you will have a persistence of the impulse. The effect of dilatation of the aorta is, as I said before, to transmit the blood with increased force to the head; and you hear a considerable inequality in the force of the pulsation in the two carotids: most commonly the right, or the arteria innominata, is apt to partake of the disease. Whenever there is considerable inequality of this kind, it must be considered as indicative of some disease in these vessels, always bearing in mind that pressure may produce a similar effect. It cannot be disease, however, unless there be a departure from the healthy standard. Aneurism would be productive of this effect. So, also, dilatation of the aorta, accompanied by hypertrophy of the left ventricle; and in that case, the two act on each other. There seems good reason to believe that hypertrophy of the left ventricle is generally the cause of the dilated state of the aorta. A continued succession of violent pulsations and injections of blood from too strong a heart, ultimately tends to enlarge and dilate that part of the artery nearest to it. There is good reason to believe, too, that the heart may become hypertrophied in consequence of disease of the arteries. In the case of ancurism, it is not unlikely that hypertrophy may be caused by this impediment to the passage of the blood. I have before adverted to several changes in the size and capacities of the different vessels, constituting a greater or less impediment to a free circulation. An accumulation of blood in the neighbourhood of the heart, and in the great arteries, or a diminution of the proper elasticity and tonicity of the coats of these vessels, will become in some degree obstacles to the circulation; and, by resisting in a certain degree the impulse of the heart, will stimulate it to increased exertion. I consider however, that, in the long run, these diseases facilitate one another; and there will be some simultaneous disease in the artery attending disease of the heart.

Aneurism, or vascular dilatation (aneurism is the better term), whether the vascular dilatation be of the true kind—of all the coats of the artery—or a false aneurism, by perforation or rupture of one or more of the coats, and the projection of a sac-like tumour through the broken portion,—when it affects the ascending portion of the aorta, or the innominata, is an additional sign, besides those I have already described, of dilatation of the tube. When this sac, or tumour, is quite small, it will cause an increase of the sound transmitted from the heart. There is also increased pulsation, accompanied with this exaggerated loudness of the first sound, in the situation corresponding with the tumour. It is said, too, that in very early stages, this tumour causes some disorder in the general circulation, giving rise to a heaving character of the pulse; I don't think that this can be called a certain sign of incipient aneurism; but, as this disease is connected with an impeded state of the vessels, endocarditis and arteritis may take place. As the tumour increases in size, it produces very distinctive symptoms and signs. Where the tumour is situated close to the heart, the symptoms are less distinct; and it is then, that the symptoms are mixed up with the symptoms of heart-disease, without there being any kind of projecting tumour to enable us to distinguish between them.

It is not so common to find extensive aneurisms formed close to the origin of the aorta, as beyond the ascending portion of this vessel, in the arch itself and in the descending portion. A tumour formed in these situations projects in various ways, but its usual tendency is to project upwards and forwards; and, consequently, a tumour in this situation cannot proceed to any considerable degree, without producing signs of increased pulsation, at a point somewhere near the top of the sternum; usually to the right, where the first bend of the arch is effected: and this is the common situation for aneurism of the aorta to occur in. As the tumour increases in the direction upwards and outwards, it is heard pulsating under the sternum, between the first and second ribs, and their cartilages, and may be felt, too, pretty nearly at that spot, behind the clavicles, and in the hollow behind the sternum. There may be with this, various signs of disordered circulation, from the presence of this sac in the artery—signs of disturbance in the circulation of the head. At the early stage, the dilatation is accompanied by a deposit in the interior of the vessel, and there is with this an increased force of the circulation towards the head; there is an increased pulsation in the carotids, with various symptoms of disturbance: a tendency to giddiness; weakness; often severe headache; noises in the ears; disturbance of vision. The enlargement of the tumour causes pressure on various parts, and with that a variety of symptoms. One of the earliest effects of this pressure is felt on the nerves—as the pneumogastric—causing a variety of symptoms indicative of disturbance in the functions of that nerve. The first effect of this is, a great feeling of dyspnœa and an increased desire to breathe, occurring even when the tumour is very small. There is a disposition to cough, and sometimes even nausea; and occasionally the irritation of this nerve will cause gastrodynia. Sometimes the pressure is felt on the recurrent nerves, or the inferior laryngeal. The symptoms arising from this are, not unfrequently, hoarseness, and a modification of the voice, sometimes even aphonia, or a total loss of voice; or the voice may be heard at times only. Occasionally, spasmodic action is induced, such as *laryngismus stridulus*, which is sometimes very distinct in connection with a tumour pressing on the recurrent nerves. It is remarkable, too, what similarity this may acquire to attacks of acute laryngitis, though the latter comes on usually more gradually; laryngitis, however, does sometimes occur in a sudden form.

It is important to notice how these attacks come on, because the distinction has not been accurately drawn. A person in an advanced stage of this affection will have croupy breathing, with spasm of the glottis, and, after struggling with it for some time, the spasm goes off, and inflammatory symptoms declare themselves. The real fact is, that there is, here, slight inflammatory action induced by the morbid condition of the nerves. The effect of inflammation is to increase the irritability of the glottis, and the result is a tendency to spasm. The pressure of the ancurismal tumour affects also the *brachial plexus*, or the nerves going to supply it; causing pains in various directions, down the arms, &c., of a very uncomfortable character. I remember a patient affected with aneurism of the aorta, who was treated for rheumatism of the right arm. The pressure is sometimes backwards, causing violent pains at the back of the head, and towards the spine, with excruciating pains in the back, and various other parts. This may likewise cause extreme pain in the neck, near the descending *cava*, and *venæ innominatæ*, and particularly the *innominata* of the right side, and produce obstruction in the venous trunks: in some cases, especially where the pressure affects the larger trunks, it may produce œdema. I have seen a person with the upper portion of the body completely œdematous: the pressure affected the veins of the left arm, and the whole of the left side was œdematous, and there was œdema to a very great extent round the neck, from this obstruction in the venous circulation. The pressure may also affect the œsophagus, causing a difficulty in swallowing. This is a symptom of a very distressing nature; and it sometimes becomes the cause of death, the patient actually perishing from want of the power to swallow. It affects the bronchi or the trachea, causing dyspnœa. The pressure, further, may act on the bones and cartilages of the chest, causing a continual aching pain in the clavicle. By and by, these parts become absorbed away, and absorption of the sternum, the ribs, the clavicle, and even of some of the vertebræ, occasionally takes place. The effect of this erosion of the bones causes the pressure to be felt on the spinal marrow, and sometimes paraplegia takes place by rupture of the aneurism, and effusion of blood into the spinal sheath. The pressure affects not only the veins, but the arteries in like manner. The tumour does not impede the action of the whole of the vessels, but it presses on some of them, causing a partial extinction of the pulse. The subclavian artery on one side is, perhaps, found without a pulse, and sometimes the carotid; but this is a matter for clinical demonstration alone. I think I have said enough to illustrate the general pathology of these tumours. Remember that, in addition to these effects of pressure, which are the chief ones manifested, there may be an increased force in the circulation in some branches of the artery, and diminished force in others, indicated by uncomfortable sensations of beating in the head, from the blood transmitted by the enlarged branches leading to these; parts while the rest of the circulation is in a weak state, particularly in the lower extremities. Sometimes apoplexy may be the result of this determination of blood to the head.

Now the *physical signs* are: increased pulsation, the sounds being more perceptible in one spot, either above or under the clavicles, or on one side of the sternum. In some instances, this pulsation is accompanied simply by a double sound. It seems as if it were merely the sound of the heart transferred there;—as if there were two hearts, or if one heart was beating near the top of the sternum, giving sounds corresponding with the sounds of the heart below. It seems to me, in the greater number of cases, that the sound accompanying aneurism is a simple double sound, without any murmur at all; or if any does exist, it is an exceedingly short and slight murmur: it is a double sound, produced apparently by the influence of the blood on the dilated walls of the tumour. It seems to cause an impulse outwards,—a swelling of the tumour at each time; but the second sound is obviously divided, so that, generally speaking, it is not so loud or distinct as the first sound. The second sound is louder in the tumour than over the region of the heart, because the lungs coming between this viscus and the walls of the chest, sound is not so readily propagated over that particular situation. The sound is sometimes accompanied by a grating noise; and when this is the case, the second sound is usually more obscure, for the reason I gave when speaking of dilatation. In some cases, however, there is a very low murmur accompanying the pulsation: a sort of rough sound takes place, chiefly where there are irregularities in the passage of the vessel. In these cases, generally speaking, the second sound is not distinctly heard; it is usually a single sound.

There are in connexion with this, besides the loud sound that is heard in various situations, at the heart, at the top of the sternum, &c., signs of dulness on percussion. As the tumour advances, it pushes aside the lung, and produces various changes. The sound, first of all, is rendered clearer in character and raised in tone; it is distinctly different from that of the opposite side; but, by and by, the tumour comes forward, and presses against the chest, and there is then a perfect dulness in that situation. The tumour may present itself in various localities, from the third rib to the clavicle, on the right of the sternum, if in the ascending aorta; and if in the descending part, it lies to the left of the sternum.

Now, the distinction, where the tumour presents itself, ought not to be very difficult; it is an easy thing to distinguish aneurism of the aorta from every other tumour, if care be taken in investigating the case. We have not so much to do with the double or single character of the sound; but we have rather to notice a certain disproportion between the intensity of the sound and the pulsation in the situation where it is produced, and the character of the sound in the region of the heart. Where a tumour presents itself, of a pulsating character, there can be no doubt. The pulsation must be either that of aneurism, or else of a tumour over the artery, the pulsations of the artery being communicated to the tumour. Now, the distinction here is easy, if care be taken. Both, however, may be accompanied by a murmur, as has been indubitably proved. But, there is this difference:—the artery communicates a pulsation to the tumour only in one direction, while in the pulsation of the artery there is expansion on all sides. Another thing to be taken into account is, that, when an external tumour presses on an artery, it diminishes the pulsations in all the

teries beyond that point; whereas you find, most universally, some of the arteries beyond e aneurismal tumor beating more strongly than sual. They may be blocked up from various uses; but you generally find it to be the case at, where there is a pulsating tumour in the pper part of the chest, attended with a murmur, n see the arteries in the neck beating strongly. it is a solid tumour pressing on the arteries in e neck, instead of beating more strongly, they eat much quicker. The obliteration of the pulse a very uncertain sign; it may be obliterated oth by aneurism and by tumours.

We now come to the consideration of the *prognosis of aneurism of the aorta*. If the signs of nlargement increase, the prognosis will be very nfavourable. There are some few cases on ecord, in which persons have recovered, but enerally aneurism has a fatal termination. It ay, however, be retarded. Death may be caused y rupture into the œsophagus, or into other avities. In the greater number of cases, perhaps, is is not the case, and the fatal result is proced by exhaustion or pressure, and the mischief onnected with it. If this can be retarded by any eans, life may be prolonged to a considerable xtent. The treatment is chiefly that applicable organic disease of the heart, avoiding extremes f any kind; occasional bleedings may be emloyed; but it is not advisable that they should e frequent, nor should any means be adopted hich are likely to increase the fluidity of the lood, which tends to make the heart act with ncreased spasmodic energy. It is a question hether we can entirely remove this disease, ough we may in some degree give relief. It as been thought advisable by some to pass threads hrough the tumour. The diet should be limited, ut nourishing, and the patient should not be llowed to fall into a state of anæmia.

N THE EFFECTS OF DIET ON THE FŒTUS IN UTERO.

y CHARLES CLAY, Member of the Royal College of Physicians, London; Graduate of Edinburgh; Author of "Peritoneal Sections;" and Lecturer on Medical Jurisprudence, &c., Manchester.

(Continued from page 254.)

Any proposition which has for its object the melioration of human suffering, under what is ermed difficult labour, must be one of immense mportance not only to the female concerned, but qually so to the practitioner employed, and, herefore, becomes a question of sufficient interest or general inquiry. The known advantages that ave been observed in the treatment of those emales who had suffered from frequent miscarriages, with the view of prolonging gestation to he full period, by a carefully adapted diet of an bstemious character, with other medical assistnce, rendered it more than probable that a imilar mode of treatment might be brought to bear, so as to have the effect of reducing the olume of the fœtus in utero, and thereby assist hose females whose pelvic structure, or other ircumstances, indicated a tedious and more than usually painful process at the time of labour, particularly if the child had been retained to the full period of gestation, and was of the average, or beyond it, in bulk.

If it could be proved of a certainty that means existed of reducing or increasing the volume of the fœtus in utero, we should have at command an agent of great value towards preventing the many evil consequences, and never-failing accompaniments, of tedious and difficult labour; and, on the other hand, the professional man would be held in no little repute and request, if he could direct mothers in accomplishing (a wish by no means uncommon) the having what is termed a fine child. Unfortunately, however, the proofs towards attaining either of these objects are of so vague and unsatisfactory a character, that no sort of dependence can possibly be placed on them. Nevertheless, the inquiry is a curious one, and not unworthy the reader's attention; I shall, therefore, devote a short space to the subject.

There are scarcely any works on midwifery that treat of this subject independently, and I am obliged to glean my principal information from the branches of "difficult labour and miscarriage."

In the year 1789, however, a paper appeared in the Memoirs of the Medical Society of London, Vol. II., p. 407, by Mr. James Lucas, entitled "Hints on the Management of Women in certain Cases of Pregnancy," the object of which was to draw the attention of the profession more particularly to the subject of this paper. Mr. Lucas, detailing his views of the means, by which he thought it possible to afford greater facilities in difficult labours, to the celebrated Dr. Fothergill, learned from the latter that a similar mode of treatment had been found of considerable advantage in preventing liability to miscarriage. Although I am well aware of the advantages of a well-regulated diet and air, in those cases where there is a tendency to miscarriage, I do not see any strong analogy in that circumstance when compared with the subject which is the more immediate object of these remarks. But to proceed to the observations of Mr. Lucas, who, after some remarks on the efficacy of Dr. Fothergill's plan, to which he adds an illustrative case, proceeds to say: "The reluctance which every practitioner feels, who is under the necessity of having recourse to embryotomy, induced me to reflect on the most probable means of preventing, as far as possible, the exigency of this operation." In the pursuance of this object, the following general statements are noticed:—

1st. That stout healthy women, and such as are accustomed to indulgences in diet, have been observed to have large children, and *vice versâ*. Here the author (Mr. Lucas) quotes a letter from a country practitioner to Dr. Smellie (*vide* Vol. III., p. 55): "I was called to a woman in labour who had been extremely hearty during pregnancy, and was uncommonly big. The child weighed sixteen pounds."

2ndly. In expected tedious cases of labour, an unexpected and happy result has often taken place, in consequence of the child proving small in size, and the head pliable and yielding.

3rdly. Pregnant women frequently retain but little nourishment for some months, without any pernicious effects; and a change from a full to a spare diet, accompanied with an increase of exercise, has been found to reduce corpulency, as well as to assist the cure of many obstinate diseases.

On these propositions I shall hereafter make some remarks, to shew their incorrectness, and liability to lead to erroneous conclusions. But to return to the author:

"These observations led me to suppose that, by an abstemious diet followed by the mother, the growth of the fœtus might be somewhat restrained, and the bones of its head be found more yielding, without its proving injurious to the health either of the mother or child." The author, by his plans of treatment, held out advantages, not only to those whose difficult labours arose from a contracted state of the pelvis, but to others whose pelvic measurements might be good, and even ample, but who were disposed to have extraordinarily large children, and also to those who become pregnant at an advanced period in life, when the parts concerned in parturition are rigid and unyielding. The plan of treatment proposed (which, to be effectual, should be persisted in for some time, and particularly during the latter months of pregnancy, varied a little according to the circumstances of the case,) was the following:—Temperate diet—diminution in quantity—change in quality; increase of exercise; cooling aperients, and occasional loss of a few ounces of blood. When the size of the fœtus is the only matter under consideration, that is: when there is no deformity, a month or two of attention before labour will in general be sufficient; but in cases of deformity or contraction of the pelvis, it is necessary to attend to the line of treatment through the whole routine of pregnancy. A few cases, by way of illustration, are introduced, in some of which the author was disappointed, though the plan was never prejudicial. In cases where distortion is extreme, it is not to be expected that the plans proposed could be of any avail. Such are the general opinions of Mr. Lucas and Dr. Fothergill, in 1789. That the conclusions drawn from them were of too hasty a character, and not sufficiently borne out by well-attested facts, and not sufficiently numerous to warrant general statements to guide future practice, must appear evident on the slightest reflection. Before I comment on the remarks here given by Lucas and Fothergill, or advance my own experience, I will give the opinion of a more modern writer, of considerable celebrity in this department of medicine, and nearly the only one that particularly mentions this subject. Dr. Merriman, in his excellent "Synopsis of Difficult Parturition," p. 169, edit. 1820 after alluding to the proposed plans of "Lucas, &c.," observes: "There can be no doubt, where well-formed women are accustomed to have difficult labours, from the large size of the child, that this method may be occasionally useful; and in a few cases of deformed pelvis, where it is not great, some good might result from it. But the expected benefits seem to be confined within very narrow limits, and, therefore, this plan can only be occasionally useful." Signor Assilini—*Nuovi Stromenti di Ostetricia e loco uso*, 1811—relates a case where abstinence was usefully enjoined, but remarks that no great reliance is to be placed upon it; for women, who constantly reject by vomiting every particle of food they swallow, have, notwithstanding, on many occasions, large children. Dr. Merriman gives some cases to shew that there is but little to expect from diet, and that results the very opposite to those quoted by Lucas, have been frequently observed. *Case I* (p. 299).—Second pregnancy; lost her appetite, became much attenuated, quick pulse, cough, unable to walk; fears were entertained that she would not survive her time of confinement. Yet in this extreme state of debility she went to the full period, and had a *very fine healthy child, much larger than the first*. *Case II.*—The same lady, in a much *better state of health*, and her third pregnancy, had a *much smaller child than the last*. *Case III.*—First pregnancy; took a fancy to eating ginger. The child, when born, was very small and meagre, thin, and discoloured; skin rough and scaly. In subsequent pregnancies, when no liking to ginger existed, her children were large and healthy. *Case IV.*—Second pregnancy; drank gin in large quantities. When the child was born, it was small, thin, wrinkled, ghastly, and belly collapsed; skin of a mahogany colour, hanging in folds. In subsequent pregnancies, there was not the same vitiated taste for gin, and her children were large and healthy. From these cases, Dr. Merriman draws the following conclusions:—"That very slender diet is not always to be depended upon for preventing the growth of the fœtus. It is hardly to be supposed that any healthy woman, with a deformed pelvis, would subject herself to greater abstemiousness than the ill health of the lady, in *Case I.*, obliged her to submit to; yet, in that case, the infant, so far from being deficient in bulk, was really well sized. The ill effects of ardent and heating stimulants on the fœtus are sufficiently apparent, in *Cases III.* and *IV.* These cases likewise tend to prove, what no man who has had opportunities of observation has ever doubted, that the popular doctrine is false and indefensible, which teaches that pregnant women should be allowed to indulge in all the capriciousness and wanton absurdities of their appetites; it being most certain that, however safe and harmless some of the articles of diet longed for may be, others cannot be taken without danger of hurting either the mother or child."

From the evidence here produced, the question at issue appears far from settled. With respect to the three propositions of Mr. Lucas, I will discuss their merits in the order in which they are given:—1st, "that stout healthy women, and such as are accustomed to indulgences in diet, have been observed to have large children, and *vice versâ*." I admit that some cases may be found where extraordinarily large females have large children, and dwarfish females children as diminutive in proportion; but this is by no means a general or common occurrence; indeed, my own practice of many years, with some thousands of cases in midwifery, proves the reverse. I should rather say, that the most frequent occurrences are, that small females have large children, and large females small children; and this is more particularly apparent, if I class them under fat

and lean females. Then, I find that a large majority of fat females have lean, emaciated, children, and that lean, attenuated females, having fine fat children, are equally numerous. An isolated case is quoted from Smellie, Vol. III., p. 55, which I cannot find in my edition of 1779; but as he has given the quotation literally, I have no doubt Mr. Lucas is correct in the assertion, though he has drawn, in my opinion, an erroneous conclusion from it: the words are, "I was called to a woman in labour who had been extremely hearty during pregnancy, and was uncommonly big. The child weighed sixteen pounds." Now, there is nothing whatever in this paragraph to lead to the conclusion that the female was of large stature. The word big evidently applies to her abdomen, a very common expression with the older class of authors to express the size of the abdomen. And a fœtus of sixteen pounds' weight, with its accompaniments, must cause the abdomen to appear extraordinarily large. I recollect Dr. Thatcher, of Edinburgh, exhibiting an enormous child (to his class of students), nearly sixteen pounds in weight, the mother of which was very diminutive. In my own practice, I attended a Mrs. S——, of A., in labour, five times in succession; she was, in every sense of the word, a splendid woman, especially for size and fatness, and a great indulger in affairs of diet; yet the five children I attended her with did not average five pounds; and a near neighbour of the last, whom I attended four times, a small, slender, female, never bore a child of less than from eight to nine pounds. The five infants of Mrs. S. remained puny as long as they suckled, but when weaned, grew fast, and became, ultimately, fine children. Again, Mrs. G——d, a poor woman, the wife of a miner, had had eleven children, the last three of which I attended. The female, Mrs. G., was large to deformity, a great eater, and yet the whole of her progeny were remarkable for being puny and emaciated, so as to be a bye word for the gossips in the neighbourhood—"like G——d's little bits." Another case, Mrs. A., of Hurst, a remarkably small woman, whom I attended many times, had always very fine children. But in respect to diet particularly: I could cite numerous instances of females suffering from excessive vomiting during pregnancy, so much so, that it has often been a matter of wonder how the system was sustained in any degree, and yet these women have had fine children. One or two still more decided cases have fallen under my notice. A very near relative of my own became pregnant, whilst under the influence of consumption; she became attenuated in the extreme, expectorated largely, so debilitated as not to be able to get out of bed, and her diet so trifling that a savoy biscuit or two, in a little milk, or a few grapes, would have been sufficient for twenty-four hours. This was her third pregnancy; at the two former ones, her children were small at birth, though she had good health at those times. When her third labour arrived, she was too weak to be able to sit up, *even in bed*, and it was feared she would die during the efforts of delivery; nevertheless, she was delivered of a very fine boy, much larger than her former ones. The mother died in a few days after. The amount of nourishment taken, for months previous to labour, was so small, that it appeared incredible that any human being could be supported by it. Whilst engaged on this subject, a case has been related to me of a captain's lady, who laboured under constant flooding during pregnancy, and lived on spare diet, and yet had remarkably large children.

With regard to the second proposition, I agree fully. Now, as to the third (a portion of which has already been considered): I come to that part where it is asserted: "that a spare diet, with increase of exercise, has been known to produce corpulency, as well as to assist the cure of many obstinate diseases;" in which opinion I also fully agree, as far as regards the mother, but by no means as regards the child; I believe the statements above given are ample proofs to the contrary; and there are few men of extensive experience but will be able to bear me out in what I have asserted. There is every reason for supposing that the nutriment taken up, and deposited for the support of the maternal system, is different from that conveyed by the circulation through the parent to the fœtus, for the support of the latter; and what will answer the purpose of the one will by no means be advantageous to the other: perhaps I might go further, and say that what is calculated for the one, if carried to excess, disparages the other. Practical experience seems to confirm these views. Every accoucheur knows that the females, most given to breeding, and who have the healthiest offspring, are those of middle stature and spare in body; whilst very stout, fat, females breed but seldom and at long intervals, having generally puny children; also, it is a matter of general observation, that sterility is almost invariably accompanied with large stature and extensive fatty deposit. Here, analogous reasoning assists very materially in the extensive business of breeding domestic animals—the horse, cow, sheep, dog, &c. If they should happen to be too stout, they neither receive the male so successfully, nor, if that is accomplished, is their progeny well sized or even healthy; therefore it becomes not only a matter of necessity, but profit, to keep breeding animals on a spare diet to secure a marketable offspring. Having extended this subject to a greater length than perhaps some may fancy its importance really demands, I shall content myself with what I have now stated. The next subject I propose to examine is, "*What evidence have we towards establishing the supposition, that the pelvic symphisis and ligaments relax or separate during parturition, at the full period of utero-gestation?*"

EXPERIMENTAL RESEARCHES ON THE EXISTENCE OF METALLIC MERCURY IN THE BLOOD AND OTHER ORGANS.

By Dr. OSTERTEN.

(Wunderlich's u. Roser's Archiv.)

[Translated for the MEDICAL TIMES, by SIGISMUND SUTRO, M.D.]

Mercury has previously been found in the blood, urine, saliva, and even in the muscular substance; but to obviate the doubts and objections raised by many, the author performed a series of experiments on cats, and several other animals, subjecting the blood and the different tissues and secretions to microscopical examination, for the purpose of discovering the mercury; for, if mercury enters some of the tissues in its metallic state, how much more readily might it be found in this manner than in its complicated chemical forms, which always presuppose the existence of larger quantities. For these experiments, the author used the grey mercurial ointment, the greatest mercurial globules of which never exceeded 1-70th to 1-80th of a line in diameter, while the smallest were about the 1-1000th of a line in diameter.

(*a*) Within four days, one drachm was given internally to a young cat, and two drachms were rubbed into the lower part of the belly, previously shaved (the head being bandaged). On the second day, the animal became restless and unquiet; this state of uneasiness was more especially manifested subsequently; it trembled, lost all appetite, and evacuated now and then greenish-brown fæces, of a soft consistence, and which contained mercurial globules. On the fifth day, the animal sunk, without having suffered any salivation, or other affection of the mouth. On dissecting the animal, the intestinal organs were found in a normal state; the vena portæ and its branches, as also the vena cava inferior, were distended by dark coagulated blood, in which mercurial globules were found of 1-250th to 1-1000th of a line in diameter; so, also, in the blood of the vena cava superior. The stomach was empty; its mucous membrane strongly furrowed, or corrugated, pale, and covered with a tenacious mucus. At the pyloric orifice, the interior surface of the stomach exhibited a pale red colour, without distinct vascular injection; and here it was covered by a dark, brown-looking substance. This appears under the microscope as a granular mass, devoid of mercurial globules; it almost entirely loses its colour, but is not dissolved by nitric acid. The intestinal canal showed nothing abnormal, with the exception of the inferior extremity of the ileum, which was covered with the same brown substance that was found in the stomach; the same may be said of the cœcum. In these places, mercurial globules were found mixed up with the contents. The mesenteric glands were large, but normal, and contained very little mercury. Liver, normal, not particularly congested with blood; contained a considerable quantity of mercury, which was especially abundant in the liquid green bile. Spleen, normal; many mercurial globules were found in its parenchyma. Kidneys and their appendages healthy, only containing very few mercurial globules; so, also, the urine contained in the bladder (mixed with mucus and epithelial cells). *Thorax:* lungs of a rose-red colour; on the posterior surfaces of the lobes, dirty looking red spots were seen, from one to four lines in thickness, and surrounded by yellowish-white, solid bodies, having almost the appearance of flat vesicles of pus; their size varied from a pin's head to that of a lentil. The contents of these pustules were pretty solid, and were shown under the microscope to be formed of the constituents of common pus, mixed with mercurial globules. The pulmonary tissue, at the points corresponding to these dark-red spots, was distended with blood; it contained a few air vesicles, which floated in water. Pleuræ, heart, and large vessels, normal. Both cavities of the heart contained some few mercurial globules. Mercury was also unsuccessfully sought for in the following parts:—vena cava superior, v. jugularis, carotid arteries, brain, spinal marrow, salivary glands, pancreas. In the villi of the intestinal pituitous membrane, no mercury could be discovered; but it was found in the subcutaneous abdominal integuments (into the epidermis of which the ointment had been rubbed) and even in the layers of the abdominal muscles.

(*b*) In another cat, six drachms of mercurial ointment were rubbed, in the course of six days, into the abdominal integuments; and to a third cat, the same quantity was given internally. They remained pretty well, the appetite only being diminished, particularly with the latter. The excrements were soft, and of a brownish colour. On the seventh day, they were both strangulated, ten hours after the last administration of the mercury. Not a single organ was diseased; the blood of the abdominal veins was coagulated, while that of the vena portæ contained a larger quantity of mercurial globules (from 1-800th to 1-200th of a line in diameter) than that of the vena cava inferior; similar globules were also found in the pancreas, the liver, the bile, the spleen; very few in the urine and the pulmonary tissue; none at all in the kidneys, or supra-renal capsules, the brain, the spinal marrow, the salivary glands, the heart, the arteries, or the vena cava superior. In the third cat, the intestinal canal was found as in that subjected to the first experiment. In the second, mercurial globules were found in the deeper layers of the cutis, and in the vessels of the subcutaneous adipose tissue. The result was similar in a toad, which had eaten two drachms of mercurial ointment within ten days. The following conclusions are to be drawn from the above experiments:—1st, it is established beyond doubt, that mercury penetrates the vascular membranes, not only in an oxidated form, or as a chloride, or in a state of dissolution, as formerly imagined, but likewise in a metallic form. It was, however, remarkable that the mercurial globules were in no instance found in the layers of the epidermis, but only in the deeper-seated tissues of the cutis, near the bulbs of the hairs, and in the little perspiratory ducts; 2nd, metallic mercury may be injurious, either when rubbed into the healthy skin, or taken internally, by its transit through the circulatory apparatus; 3rd, the manner in which mercury, when once introduced into the vascular system, operates, and the chemical changes which it undergoes, have, by the above experiments, been only negatively resolved. With the brilliant metallic globules, the author invariably found black and dull-looking corpuscles, of an irregular, and sometimes indented figure, similar to the microscopical corpuscles of the protoxide of mercury; they were not acted on by alkalies, but were slowly dissolved in concentrated

nitric acid, after having been converted into black molecules. In the urine, the bile, and the gall-bladder, mercurial globules were found unchanged; 4th, small quantities of finely divided mercurial globules may circulate through the capillary vessels, without producing any inflammatory obstruction;—nor does the development of the blood corpuscles seem to be much affected by a short stay of mercury within the vessels; 5th, small quantities of finely divided mercury, when applied to the abdominal integuments, or introduced into the intestinal canal, seem mostly to enter the spleen, the liver, and the kidneys, and to be chiefly excreted by the liver and the kidneys. The author was not able to discover the exact relation between the mercurial molecules and the elementary apparatus of secretion. He never saw mercurial globules in the cells of the liver or in the pancreas, in the corpuscles of the spleen, or in the tubuli of the kidneys (might they not have escaped during the dissection?) In the salivary glands (of the cats), the author found no mercury, nor was ptyalism induced; the mucous membrane of the mouth, as well as the gums, in no case showed any alteration. On the other hand, he discovered mercurial globules in the saliva and urine of a woman who had been salivated. In an establishment in Paris, it is proved that mercury is excreted through the lacteal glands; for mercurial frictions are there applied to goats and she-asses, and their milk sent to patients. This fact of mercurial excretion, through the secretory organs, recalls to mind a similar discovery of Orfila, concerning arsenic, and may, perhaps, be a cause of the quicker or slower development of salivation in different individuals. This effect arises most readily in those cases, in which the secretion of the glands of the epidermis, of the kidneys, &c., is abnormally diminished; and in obstructed salivation, inflammatory action is very apt to occur.

ON THE MORBID TENDENCIES OF THE LIVER.

By Professor Schultz, of the University of Berlin.

[Translated for the Medical Times by SIGISMUND SUTRO, M.D.]

The tendencies of the liver are intimately connected with its changes of function. It is, hence, necessary to consider the function of the liver in an organic point of view, as this viscus acts so important a part both in the healthy and diseased organism. The function of the liver depends on that of the vena portarum—nay, the liver is to be looked upon as the chief function of the vena portarum, itself. The liver has often been considered as a depurative organ, and the bile as an excrementitious substance. But this notion is uncertain and unsatisfactory, because we neither know the right relation of this purifying process to the sanguineous system, nor the organic purpose of bile in the process of digestion.

The knowledge of the renewing process of the blood is inseparable from the knowledge of the hepatic function. For the latter, through the secretion of bile, operates on the chylification in the intestinal canal. The liver stands in a middle place between the beginning and the end of the formation of blood, and influencing both.

I. The evacuation of bile from the biliary bladder and biliary ducts is sympathetically occasioned by the intestinal movement. We can distinctly see the motions of the bowels transferred sympathetically to the biliary ducts and gall-bladder, if we artificially irritate the entrails of a recently killed animal (*e. g.*, a duck); and we observe that with the accelerated intestinal movement there is accelerated evacuation of bile. On the other hand, with retarded intestinal motion, there is retarded motion of the gall-bladder and biliary ducts. Thus a predisposition to diarrhœa will cause hepatic flux, whilst a predisposition to constipation will produce obstruction, provided the retardation or acceleration are in any degree lasting. Thus, when the intestinal canal of scrofulous children is predisposed to acidity (a state which both weakens the liver and intestinal tube), a tendency to icterus is shown. In obstructions of the liver, when the concentrated bile remains too long in the gall-bladder, biliary calculi and tumours are formed. This is the more possible in the liver, as the vena portarum possesses a plastic power like the arterial vessels. Another morbid state of the liver arises in summer and in tropical countries, by which biliary fever, vomiting, and diarrhœa are produced. This is created by an excessive transformation, in the vena portarum, of watery into bilious blood. To understand this, it must be considered that, for the proper secretion of bile, two things must necessarily exist in the vena portarum—1°, a great quantity of cruor in the broken down blood vesicles; that is: a great proportion of black cruor become unfit for respiration and life. 2°. This cruor, instead of being retained firmly by the blood vesicles, must be dissolved in the plasma of the blood, by which means the plasma of the vena portarum is much more reddened than the plasma of the arterial or venous blood. In passing through the liver, the blood of the vena portarum has the cruor dissolved in its plasma, which is used for the secretion of bile. The cause of this dissolution of cruor in the portal blood is partly the great relaxation of the old bloodless membranes which no longer retain the cruor firmly, and partly in the greater thinness of the portal blood, by which means the cruor is dissolved more easily through the plasma.

We must now examine the conditions which favour the transformation of watery into bilious blood. The conditions are furnished in the diet of man in summer and in the tropical countries; 1°, through the greater quantity of vegetable food; 2°, through the greater quantity of watery beverages taken in summer. Vegetable food forms but small blood vesicles, provided with tender membranes. Thus, all herbivorous animals have smaller and fewer blood vesicles than the carnivorous animals. A greater quantity of water is thus required to dissolve the cruor of the blood of dogs or cats, than of rabbits or sheep; three or four parts of water are sufficient to wash off all colouring matter from the blood vesicles of sheep and rabbits, while five to six, and even more, parts of water are required to wash off the cruor from canine or feline blood. Pigs' blood stands in the middle between that of carnivorous and herbivorous animals. Similar proportions are created in man by a prevalence of vegetable or animal food. The carnivorous vesicles last much longer, because they are more robust than the herbivorous vesicles. Thus, the herbivorous vesicles will die off much sooner, their cruor will be dissolved much earlier; and therefore it is obvious that blood vesicles chiefly formed in man, by the consumption of vegetable food, particularly of raw fruit, so generally taken in summer and in tropical countries, can less resist dissolution; by which means a great tendency to the formation of red plasma is created in the portal vein. Vegetable blood, if I may be allowed this expression, is exceedingly disposed to biliary and hepatic diseases. This is strikingly illustrated in sheep dying so very frequently of icterus and biliary diseases; so that an old sheep can be scarcely found with a healthy liver.

The dilution of blood through any excessive quantity of watery beverages, required by the heat in summer, and in tropical countries, forms the second cause of morbid conditions of the liver. I have shown, elsewhere, that upon an average, by drinking water, from five to six per cent. of water can be carried into the blood, and that this quantity is more than sufficient to dissolve as much cruor as will redden the whole plasma. This effect is first shown in the blood of the portal vein, because the water consumed is absorbed out of the stomach and bowels by the roots of the portal vein, and very little by the lymphatic vessels; so that the blood of the portal vein is first brought into contact with a great quantity of the fluid injested, though later it may be diffused through the whole mass of the blood. The more the state of the blood is relaxed, the less it has the power to excrete the water through the skin or kidneys, and the longer it will remain in the blood, ultimately to exert a cruor-dissolving effect on the whole mass of the blood. Thus, if we have a weak, relaxed state of the herbivorous vesicles, from the consumption of excessive vegetable diet and of considerable quantities of watery fluids, predispositions to biliary and liver diseases are formed. This is especially seen in Europeans sojourning in tropical countries, whose constitutions are not habituated to resist their influence. The liver becomes overcharged with bilious blood, and the biliary secretion first increases, and then, if the morbid condition continue, becomes abnormal in quality, disturbances of course arising in the digestive organs. The bilious state being communicated to the whole mass of the blood, there is general feverish irritation, predisposition to icterus, intermittent and biliary fevers, which at last pass into nervous fevers, for the arteriousness of the blood becomes weakened, the absorption of oxygen in the lungs diminishes, and thus the normal excitement of nervous life is destroyed, whilst a dissolution of its healthy motor power is brought about. The human liver, in summer, and in tropical countries, is reduced to the state of a sheep's liver; and in fact, the study of the sheep's hepatic diseases will teach the same class of maladies in the human subject. These are circumstances perfectly inexplicable according to the dynamic and chemical physiology now in vogue.

Internal Hernia.—The fourth case, published by Dr. Tinniswood, in our Northern contemporary, is that of a boy six years and a half old, who presented symptoms of intense peritonitis, of which he died. The injury was supposed to have been caused by a violent kick on the abdomen, given him by a boy twice his age. On examining the body after death, and cutting through the abdominal integuments, the recti muscles, and the cellular tissue between them and the peritoneum, were found gorged with blood, for some inches above the pubes; at this point, and especially towards the right iliac region, the peritoneum was very dark coloured; its cavity contained about twelve ounces of blood, partially coagulated: the great omentum, which was somewhat discoloured, and attached to the parietes by recent adhesions, did not descend far, and allowed the small intestines to be seen. Above twenty-six inches of the ileum were entirely black and gangrenous, about ten inches of it being strangulated by a loop formed by a diverticulum of the ileum. This irregular process originated from the ileum, about twenty-three inches from the cœcum; it passed across a portion of the mesentery, and ended in a round band, which passed below a layer of the peritoneum to another coil of the intestines, but was not pervious. The pouch itself was about three inches long. About three inches above this pouch, and as far as the caput cœci, the ileum was completely gangrenous: the ileo-cœcal valves and a portion of the cœcum were also involved in the mortification, as was also the processus vermiformis, which was bound down by a recent adhesion; the mesentery going to those parts was loaded with blood in a coagulated state, and on one portion there was adherent a fibrinous coagulum, about the size of a filbert, leaving a roughness when detached, and being probably the place whence the blood was effused into the peritoneal cavity. The other viscera of the abdomen were healthy, with the exception that there were traces of recent inflammation of the peritoneal coat of the small intestines, and of the arch of the colon. Some of the mesenteric glands were rather enlarged.

Aqueous Infusion of Galls as a Test.—This is best prepared, according to M. Pettenkofer, by infusing one part of pounded galls in three to four parts of water, allowing it to stand for several hours, straining, submitting the residue to pressure, adding to the turbid liquid two parts common salt, and separating by filtration the glutinous precipitate which is produced. This liquid retains its transparency and power of precipitating gelatine for years.—Buchn, *Repert., Chem. Gaz.*

Gum Arabic.—Pallme mentions gum arabic as one of the products of Kordofan, and says, "The gum gree (Mimosa nilotica, as it is named in books) merits a different name in Kordofan, for the shape of the tree, the form of its leaves, and even its spines, differ from those of the Mimosa nilotica, which yields, however, only ordinary gum, whereas that obtained in Kordofan is of the finest quality, so that it is erroneously termed gum arabic."—*Pallme's Travels in Kordofan.*

PARISIAN INTELLIGENCE.

(FROM OUR OWN CORRESPONDENT.)

Paris, June 27, 1844.

On Diseases of the Eye. By Professor Velpeau. *Cataracta continued.—Symptoms of pseudo-cataract.*—As I mentioned in my last, this species is produced by phlegmasia, either spontaneous, or accidental; it may, therefore, easily be imagined how a part of the organ, situated before or behind the crystalline lens, will become the seat of an opacity, by the development of a false membrane, or the accumulation of pus. Moreover, this inflammation almost always causes a deformity of the pupil; if it exist before the lens, it gives rise to adherences by which the pupil loses its mobility, is deformed, and diminished in size; if, on the contrary, it is situated on the posterior surface, the opacity is deep-seated, and presents itself under the form of spots, disseminated here and there; the pupil in these cases may sometimes retain its mobility and its form; but at others it is deformed, more or less irregular, motionless to a greater or less extent; finally, it may be adherent to the capsule of the crystalline itself. The diagnosis of cataracta hæmatica is sometimes far more difficult. Thus, an individual receives a blow on the eye, by which an hæmophthalmia is produced. If the effusion of blood take place in the camera anterior, in general it is absorbed; but, in some cases, it produces abnormal adherences and deformation of the pupil. If a layer of blood is fixed on the capsule of the lens, it may give rise to an error of diagnosis, and be taken for cataracta nigra, which last, you must never forget, is extremely uncommon. When the effusion takes place in the camera posterior, it penetrates either the crystalline lens, or the lamellæ of the membrana hyaloïdea, producing an opacity, which constitutes a cataract with a brown tint, and which is oftener taken for glaucoma, than for cataract. By an attentive examination, you will perceive that in glaucoma, the tint is of a greenish brown colour, whereas in this species of cataract, it approaches more to the russet.

Complications.—The complications of true cataract, which present a certain degree of gravity, are: amaurosis, glaucoma, and cancer.—*Amaurosis.* It would seem at first impossible to confound these two disorders, their symptoms being so characteristic; thus in amaurosis, the eye remains transparent; pupil in general large and fixed; sometimes not perfectly circular; when the disease has reached the last stage, vision is abolished, especially if the cause be a disease of the brain. In cataract, on the contrary, there is an evident opacity; the pupil is mobile, circular; the patient sees better in a feeble light, &c. Thus, though it appears that such a mistake is impossible, still I must warn you of the errors you may commit, if you content yourselves with comparing the most prominent symptoms of the two affections. It is true, that, in general, the distinction between amaurosis and cataract is possible, and even easy; but there are some cases, in which they are so like each other, that the shades which characterize them, can be discovered only by a scrupulous and attentive examination. And is not what I here mention, concerning these two diseases of the eye, applicable to numerous other affections, be their nature what it may? It is a well known fact in natural history, that the fundamental characters of two species are sufficient to prevent our confounding them; and yet the last genus of the one presents an appearance and organization, almost identical with the first of the other! Thus, in some species of cataract, the opacity is not white, grey, or of a slate, or russet colour, but almost black: and in amaurosis, the pupil may be perfectly circular and mobile; the posterior part of the eye brown, or of a reddish colour; and sometimes there is a sort of mist behind the pupil. Therefore, as you see, certain signs of cataract are met with in amaurosis and *vice versâ*. Of late days, an ingenious method was proposed to establish the diagnosis. When a lighted candle was placed before the eye in its normal state, three images of the flame were reflected. Sanson, by reason of this phenomenon, proposed the following test: the three images represented, are not in the same direction; the two exterior are in their natural position, the central one, inverted; the anterior is produced by the refraction of the cornea, the two others by the auterior, or posterior, portions of the capsule. Consequently, one, two, or all of these images will disappear, according to the part which is opaque; that is to say, if the opacity is situated in the cornea, nothing is visible; if in the anterior, or posterior, portion of the capsule, or both, only one or two images will be perceived. Finally, if the eye is perfectly transparent and cæcitas complete, but still the three images to be seen, the disease is amaurosis, not cataract. Now, though you ought not to reject this theory, still you must not place unlimited confidence in it; for, you will experience sometimes great difficulty in seeing distinctly these images, notwithstanding the precautions and the experience adopted; it may become a source of error, if you employ it alone. Thus, I saw three images in two patients affected with cataracts (it is true, they were not very distinct, and the cataracts were not very opaque), and only two in a patient affected with amaurosis. I, therefore, repeat, this method may be useful; but it is not a pathognomic sign. It is in the cataracta nigra that it may, perhaps, prove the most advantageous; but in this species, which, as I have already mentioned, is very uncommon, the patient distinguishes light from darkness; which symptom is sufficient to remove all idea of an amaurosis; besides which, on examining the eye very attentively, you will perceive, deeply-seated, something opaque, of a russet brown, or dark brown colour. To resume: I do not think the examination with a light is of any very great utility in a practical point of view; for, if it facilitates the diagnosis in some cases, in others it leads into error. As to the cataracta nigra, although during the last half century, much has been said on this subject, but few surgeons have seen it, and many do not believe in its existence; this, however, cannot at the present day be doubted; and yet, I candidly confess that I do not consider my diagnosis positively certain, ere the lens has been extracted, and examined attentively. One of the most authentic contemporary observations, is that of a patient operated on by Professor Roux. A countrywoman was affected with a double cataract, and the diagnosis between this disease and amaurosis was somewhat dubious; she was, nevertheless, operated on by extraction, and the eye-sight restored. I have had opportunities of observing several similar facts; one of them at the Pitié about ten years ago; the crystalline was extracted, and was as black and as hard as a piece of leather. About twenty analogous facts have been recorded, and among these, at least seven or eight have been authenticated; it is, therefore, positive that cataracta nigra exists.—*Glaucoma.* In diagnosticating these diseases, we should bear in mind the preceding remarks, as glaucoma and amaurosis have a certain analogy; thus the latter is the symptom of an infinity of lesions, and is not an affection of which the nature can be at once pronounced; the former offers the same difficulties, and some authors have considered it as a variety of the latter; yet it must be admitted that cataract may be distinguished more easily from glaucoma than from amaurosis. Thus, the change in the colour of the eye in this affection, that of the vitreous humour, the yellowish-green shade, somewhat similar to that of chlorine, and which exists neither in amaurosis, nor in cataract, prevent your mistaking it for either of these affections.—*Cancer* developes itself very slowly: is of a dark brown, or violet colour; offers constantly some inequalities; sometimes lancinating pains; it is, therefore, impossible to mistake it, except in its commencement. As to the other affections of the eye, they cannot be taken for cataract; thus, no one would mistake the different species of ophthalmia, for an opacity of the crystalline or its capsule; but it is necessary to be acquainted with the lesions of the iris, which sometimes complicate cataract. Thus the pupil, in some cases, is deformed, owing to abnormal adherences; in others, it appears perfectly circular and mobile, and yet these adherences exist: and this is made manifest by examining the eye in a feeble light, or after having rubbed in an ointment containing belladonna; for then the pupil, dilated to a certain extent, becomes deformed and fixed. The mechanism of this phenomenon is easily explained. When the adherences do not extend as far as the free edge of the iris, i.e., that which forms the pupil, this last retains its mobility and its natural form, so long as it is not dilated, or only very little; but so soon as the dilatation extends to the spot at which the adherences are inserted, then the pupil becomes motionless and deformed. It is in such cases, that it assumes the form of trefoil, of a lozenge, of a heart, &c., according to the parts in which the adherences have taken place. It must, therefore, be considered as a general rule, whenever you suppose adherences to exist, to produce dilatation of the pupil; besides which, it enables you to form a better judgment as to the state of the deep-seated parts, and to see whether cataract really exists or not—and if so, of what species. These facts established, I will, in my next lecture, examine the various operations proposed for the cure of cataract.

On a foreign body in the bronchi, expulsed spontaneously. The following case was communicated by Dr. Faivre at a late meeting of the *Societé Medicale d'Emulation.* I was called in the middle of the night, to see Mrs. B.; on my arrival I found her affected with violent coughing of a convulsive character; face red and injected; intense cephalalgia; breathing difficult. She mentioned that, while undressing, she had put a small button in her mouth, and that during inspiration, she felt it enter into the respiratory organs. On passing the glottis, suffocation appeared imminent; fortunately it did not long remain there, but descended into the trachea, and during an effort, in which the patient leant to the right side, it left the median line and became motionless, at about half an inch to the right of the sternum. Nothing peculiar was remarked by auscultation; and an emetic having produced no change in its position, though copious vomiting took place, I ordered the patient to lay quiet on the left side, in the hopes that, by degrees, the button would gradually be expulsed. In fact, twenty four hours after, she felt it change its position and approach the trachea; when there, it produced violent attacks of coughing; finally, in one still more severe than the rest, it was expulsed, and all that now remains is a slight pain behind the sternum, and hoarseness.

On imperforate anus. By Professor A. Berard. There are two kinds of deformities of the anus, frequently met with, viz.: imperforation, owing to the termination of the rectum in a cul-de-sac, or from its non-existence; and an abnormal opening, that is to say, in a part different from its natural one. This last offers considerable varieties, and some are incompatible with life; the most frequent is that in which the rectum opens into the vagina, and which does not prove fatal. In the present instance, the patient, a young girl, aged 10 years, presents none of these anomalies, but one which is normal in certain animals: in short, a real *cloaca.* The rectum, instead of being separated from the vagina, and ending at the anus before the coccyx, is terminated at the posterior commissure of the vulva, in an opening common to it, the bladder, and the vagina. This species is not a cause of death, but it constitutes, from the absence of the sphincter ani, an inconvenience; because the fæces, not being retained, flow out as they reach the inferior portion of the intestine, and irritate the parts.

What is to be done here? Have any means been recommended to cure such an infirmity? Experience teaches us little or nothing. It is a practical question, which offers considerable difficulty, for none of the methods proposed for artificial anus are applicable here. In cases of imperforation, two methods have been employed; that of Littré, which consists in making an incision above one of the groins, and after fixing a portion of the intestine by a few stitches, to divide it and form an artificial anus; and that of Callisen, who made the opening in the left lumbar region, along the edge of the quadratus lumborum muscle. Evidently these methods, however useful they may be in cases where the rectum does not exist, are not applicable here. I will, therefore, examine whether it be possible to make an artificial anus, in its natural place. To accomplish this, M. Amussat proposes operating as follows: an incision, like a T or

X, must be made just before the coccyx, in the normal seat of the anus; and the cul-du-sac of the rectum being brought down to the opening thus made, and perforated, is kept in place by several stitches. This method is advantageous: inasmuch as the organization of the tissues, throughout the whole extent of the artificial opening, is in perfect conformity with the functions it has to perform; and as the muscular coat of the intestine replaces the constrictor ani, when this muscle is wanting, which circumstance is generally the case. But this operation, though offering every chance of success, is not, and I regret it much, applicable in the present instance; and to prove this, I need only recapitulate the peculiarities of the case to you. It is well known to every one who has studied the anatomy of the parts, that the rectum and vagina, united superiorly, separate at an acute angle as they descend, the latter bending forwards, whilst the former is directed towards the concavity of the sacrum, so as to leave between the two a triangular space, the summit of which is formed by their union, and the base by the perinæum. Now, instead of this disposition, in our patient, the rectum remains adherent to the vagina, and terminates in a common opening. In order therefore to perform this operation, the rectum must be detached from the vagina throughout its whole extent; this, it is true, might be obtained, if the adherence was simply formed by a loose cellular tissue; but unfortunately, the union is so firm, that it would be impossible and imprudent to seek to separate them. Consequently this idea must be abandoned. The following operation has been advised in similar cases: divide, from before backwards, the whole extent of the perinæum, from the abnormal opening to the coccyx; keep the posterior part of the incision from healing, by means of a pledget of lint introduced between its edges; finally, bring about the reunion of its anterior portion. This method might perhaps succeed; but in the first place, the authority of experience is wanting; and secondly, it is very difficult to obtain the union of the anterior portion of the incision, whether we employ the suture or not. Finally, there is another method which, in my opinion, is preferable, though perhaps not entirely free from objection. It consists in introducing just before the coccyx a pointed bistoury, and pushing it straight up, so as to attain the rectum above the spot where it deviates in order to follow the direction of the vagina; we shall thus form a Y turned upside down, one branch being composed by the upper part of the rectum, and the two others by the inferior portion of that intestine, and the artificial canal formed by the bistuory. This last is to be prevented from reuniting; and, until the cicatrization is complete, the inferior portion of the rectum is not touched; but when this is obtained, appropriate measures must be employed to cause its obliteration. Certain difficulties exist in the operation itself, but these are but of secondary importance; what is far more essential, is to obtain the obliteration of the anterior branch, and to keep the posterior one open. This is no very easy matter, because the former possesses muscular fibres and a mucous membrane, both of which are wanting in the latter. The former difficulty (the obliteration) may be surmounted by escharotics, or the actual cautery; but the latter is not so easily attained, and experience teaches us that the greater number of patients, thus operated on, have fallen victims to the retention of fæces, owing to the retraction of the tissues throughout the whole extent of the artificial canal; and in this case, the danger is great, as the canal will be of considerable length. These are the difficulties and the dangers attendant on this method; and it is only after mature deliberation, and being convinced that it was impossible to bring the rectum to its natural place, that I decided upon performing it.

But another question may here be asked, and which is I think deserving of an answer. Is the operation useful, indeed indispensable? Undoubtedly so, for the following reasons. First, to restore, to their normal state, the organs of generation; and secondly, to put a stop to the constant flowing out of the fæces. In order to ascertain whether the artificial anus about to be made would not offer this inconvenience, since the presence of an internal sphincter was impossible, the rectum ending at a considerable distance from the perinæum, I pressed forcibly on the parts just before the coccyx, and I felt that my finger was energetically pushed back by muscular contractions, which circumstance is of the utmost importance for the successful termination of the operation, and led me to conclude that a sphincter ani existed.—*Operation*: The patient being placed in the customary position, a gorget was introduced into the rectum for about 2½ or 3 inches, that is to say, to the spot where it deviated from its natural course to accompany the vagina; the groove of the instrument being directed backwards. The extremity of the gorget, in the interior of the intestine, was made to press against its inferior wall, so as to cause it to descend as much as possible. This done, a crucial incision was made, just before the coccyx. A straight narrow bistoury was then carried upwards, until it reached the intestine, and entered the groove of the gorget, and finally, in withdrawing the instrument, the incision in the rectum and surrounding parts was enlarged. This operation being terminated, before proceeding any further, it was important to ascertain, beyond a doubt, that the rectum was really divided; and, consequently, an enema was administered by the abnormal anus, and its escape prevented by a finger placed at its orifice. A few seconds had hardly elapsed, ere it was forcibly rejected through the artificial opening, bringing away with it a considerable quantity of fæcal matter, though several purgatives had been administered the previous days. A second enema was then given to empty the rectum and cleanse the wound, and it was returned, as the former, by the artificial opening. A large tent was then introduced as high up as the rectum, so as to prevent the reunion and retraction of the parts divided, and the dressing ended, the little patient was taken back to her bed. Finally, the persons to whose care she was confided, were requested to remove the tent if she expressed a wish to evacuate, in order to facilitate as much as possible the escape of fæces through the artificial opening. No consecutive accidents took place; fæcal matter flowed through the abnormal and artificial anus. Fifteen days have now elapsed since the operation, and everything is going on satisfactorily: no retraction has as yet taken place, but the operation is too recent to permit my asserting that such may not be the case; and consequently, tents are kept constantly introduced, which circumstance prevents my ascertaining if the sphincter ani really exists. Finally, as soon as the cicatrization of the artificial canal is complete, I purpose seeking to obtain the obliteration of the portion of the intestine, henceforth superfluous, by means of caustics or of the actual cautery.

On Hæmatocele Produced by Effusion external to the Tunica Vaginalis. M. L. Gosselin, *prosecteur* at the Faculty of Medicine, has just published the following case, which occurred in the wards of Professor Blandin, at the Hotel Dieu. George L., ætat. 15, servant to a milkman, living in the neighbourhood of Paris, of a good constitution, perceived, about ten days previous to his entry, a tumour, seated in the scrotum, which increased rapidly, but without producing any very great pain; no fever; appetite not diminished. The swelling is situated on the left side, but extends itself slightly to the right; it is pyriform, the large extremity inferiorly, and about the size of a turkey's egg; skin not ecchymosed, but only of a brownish tint; soft, fluctuating; when raised, after shaking it, a *peculiar tremor* is felt, and sometimes seen; pain on pressure; testicle completely distinct; not transparent. In order to ascertain the exact nature of the swelling, a trocar was plunged into it, and through the canula about half a glassful of fluid blood escaped, of a dark red colour. But as the swelling had not emptied itself, an incision of about two inches was made, and several soft clots of blood were removed. A bit of lint was placed in the wound, and a simple dressing applied. No consecutive accidents; the patient left the hospital cured, a fortnight after the operation. This case differs from those published by Professors Velpeau and A. Berard, where the disease was produced by a blow; but here nothing similar occurred; no contusion, nor ecchymosis; in all probability, it was caused by the frictions on the parts, while on horse-back. Among the symptom, there was one which seemed to be characteristic, viz.: the *peculiar tremor* when shaken, probably caused by the clots in the midst of the fluid blood; and, if this is not perceived in hæmatocele of the tunica vaginalis, it is probably because the clots adhere to the serous membrane, or because the latter is too thick.

Obituary.—M. Geoffroy St. Hilaire, Member of the Academy of Sciences, of the Academy of Medicine, and of the Egyptian Institute, Professor at the Faculty of Sciences, &c., departed this life on the 19th inst., aged 72. The obsequies took place on the 22d at St. Medard; the pall bearers were Baron Ch. Dupin, representing the Institute; Professor Dumas, the Academy of Sciences; Dr. Ferrus, the Academy of Medicine; and M. Chevreul, the Professor of the Museum. Among the persons present, were a great many members of the institute, Messrs. Arago, Elie de Beaumont, Ballanche, Couchy, David (d'Angers), Flourens, Victor Hugo, Jomard, Poncelet, &c.; the Professors at the Garden of Plants; a deputation of the *Ecole Normale*, and numerous other distinguished *savants*, foreign or national. Arrived at the cemetery of *Pere la Chaise*, the workmen, attached to the garden, unharnessed the hearse, and carried on their shoulders the remains of one they loved to his last abode. Speeches were then made by Messrs. Chevreul, Dumeril, Dumas, Serres, Pariset, Quinet, and Lakanat. The latter, in an appropriate and eloquent speech, recapitulated the qualities of the deceased, and recalled the fact that 50 years ago he had contributed to nominate Geoffroy, Professor at the Museum.

Candidates for the Vacant Place at the Academy of Medicine.—The Commission, named by the Academy, has presented the following list of candidates for the vacant place in the section of operative surgery. Dr. Denonvilliers, Huguier, Laugier, Malgaigne, Robert, and Vidal (de Cassis.)

Academy of Sciences—Sitting of the 24th June.—Baron Ch. Dupin in the Chair.—M. Flourens, in the absence of M. Dumas, presented in his name the 7th volume of his *Chimie Appliquée aux Arts.* This volume, in which the distinguished Professor continues to register the result of his researches, is written with his wonted lucidity and erudition, and contains subjects worthy of the attention, not only of the scientific, but likewise of the commercial man. The enumeration of the subjects studied in each chapter will be sufficient to indicate the importance of the volume. Ch. 1° Essential Oils; 2° Carburet of Hydrogen; 3° Alcohol and Substances, which, by their reaction, present a resemblance with it; 4° In this chapter are studied a series of compounds which exist in nature, and of which aldehyde is the type; 5° Camphor and similar compounds; 6° *Liqueur fumant* of Cadet and its compounds, or caeodyle; 7° Resins; 8° Varnish; 9° Oil cloth; 10° Asphalte; 11° Caoutchouc and its compounds; 12° Turpentine, and its compounds; 13° Neutral Animal Matter, such as proteine, fibrin, albumine, &c.; 14° Gelatinous Substances, and tissues which furnish them; 15° Glue, Gelatin, its mode of extraction from bones, &c.; 16° Tannin, and the various operations to which bones are subjected; 17° Preparation of ammoniacal salts; 18° Combination of Cyanogen, and its isomeric compounds; 19° Uric Acid, and its combinations.

On the Action of Boric Acid on Alcohol and Esprit de Bois.—Memoir presented by M. Regnault, M. A. S. in the name of M. Ebelmen. On mixing equal parts of powdered fused boric acid and alcohol, a considerable disengagement of heat takes place, and by distillation a somewhat viscous fluid is obtained, which, at a high temperature, gives rise to an abundant white smoke, and which solidifies on cooling. This substance, which is *boric ether*, presents in its physical properties a great resemblance to boric acid and the metallic borates; like them, it is vitrified by fusion, and forms a transparent glass; is of a feeble ethereal odour; of a pungent taste. Placed on the skin, it produces a sensation of heat, and is soon changed into a white powder (boric acid); whitens equally when exposed to the air, but this takes place in the superficial layers only in large fragments.

When heated to about 300°, it is decomposed, and produces a gas, offering all the characters of *olefant gas*, and which burns with a green flame. Analysed, its formula is $Bo^6\ C^4\ H^5\ O$; and the composition of this body permits our establishing the real equivalent of boric acid, and shews that borax $Bo^6\ Na\ O$ is a neutral salt. The action of boric acid on *esprit de bois* is somewhat similar to what takes place with alcohol; heated together, at about 300°, a gaseous product is obtained, which burns with a dull flame; is lighter than air; insoluble in water. It would be interesting to examine whether *mithylene* is not produced by this reaction. The author concludes, by announcing that he has commenced his researches on the borovinates and the boromithylates.

On the Solubility of Salts. Memoir presented by M. Poggiale, Professor at the Military Hospital of Instruction, Lille. From his researches, the author concludes: that almost all the salts are more soluble in hot than in cold water; phosphate of barytes alone being the same at all temperatures; that salts, which are almost insoluble in hot or cold water, increase in solubility in an exact ratio from 32° to 212°—whereas those which, like the borate of soda and alum, are more soluble in hot than in cold water, do not follow the same rule. That of the fifty-three salts, studied by M. Gay Lussac, fifteen dissolve more and more, according as the temperature is raised; such as the chloruret of barytes, the sulphate of potass, the bicarbonate of soda, the yellow cyanuret of potassium and iron, the citrate of lime, of barytes, &c. The other thirty-eight follow no regular order, each one having a peculiar mode of dissolution: such as chloruret of sodium, sulphate of soda, nitrate of potass, borate of soda, bichloruret of mercury, tartar emetic, ioduret of potassium, &c.; that the solubility of the sulphate of soda, the phosphuret of barytes, the seliniate of soda, and sulphate of lime, is very peculiar; for, instead of increasing with the temperature, it is at its maximum from 91° to 104°; that the solubility of salts, containing a considerable quantity of water of crystallization, never increases in a direct ratio with the temperature.

On the Action of Iodine on Plants. Memoir presented by M. Robin Magee.—From his researches, the author concludes: that seeds sown in iodine do not germinate; that a solution of iodine acts in a similar way, though less powerfully; for germination is not prevented by keeping the seed in a solution of iodine for twenty-four hours; that when seeds are sown in sand, and watered with a solution of iodine, they grow languidly, and ultimately perish; that this solution is equally prejudicial to branches removed from the parent stalk; that the iodine does not only unite with the part with which it is in contact, but is likewise absorbed and carried to a distance, whether in its natural state, or after having undergone various combinations.

On an Austral Aurora Borealis.—M. Arago informed the Academy, that on Sunday, between 8 and 9 p.m., the following curious phenomenon was observed, the weather being calm and fine. It consisted in the appearance of an arch of a black colour, under which, soon after, a whitish one was developed; their culminant point did not correspond to the terrestrial, but the magnetic, meridian; had no effect on the magnetic needle; could not be attributed to the rays of the moon: nothing being perceptible towards the north, M. A., thinks it might be considered as an austral aurora borealis. M. Arago likewise mentioned that the experiments of M. Thilorier failed completely, when tried before him. They consisted in magnetizing iron by the nervous fluid.

Academy of Medicine.—Sitting of the 25th June. M. Ferrus in the chair.—The Minister of Agriculture and Commerce addressed a letter, informing the Academy of a demand made by Dr. Hillairet, who requests being sent to Rochelle, in order to study febris intermittens, this disease being epidemic in the department of the Charente Inferieure; and asking, should the opinion of the Academy on this subject be favourable, to make out the series of questions Dr. H. should principally study.—*The President* announced that the *Conseil d'Administration* proposes sending the examination to the commission of topography and medical statistics.—M. Dupuy requested being permitted to form part of the commission, as he had attentively studied the subject (accorded).—Dr. Husson is astonished that the question was not sent to the commission for epidemics.—Dr. Dubois (d'Amiens) in reply, said, that the former having been requested to examine the question of antagonism between phthisis and febris intermittens, the *conseil* thought that the request ought to be sent to the same. However, in order to reconcile all opinions, both commissions might meet to examine it: (adopted).

The President informed the Assembly, that the members deputed to attend the funeral of Geoffroy St. Hilaire were there, and that a speech was made by M. Pariset.

Professor Roux, in the name of the section of operative surgery, requested to be permitted to present six candidates (adopted).

On a Lithotriteur and Sound for emptying the Bladder.—Dr. Guillon submits to the appreciation of the Academy, an improvement of M. Heurteloup's *lithotriteur;* and as one of his patients, affected with calculus, consents to be operated on before other colleagues, he requests the nomination of a commission, before whom he will prove that he can obtain, in one sitting, as much as could be obtained in four or five, and, perhaps, more, with the ordinary instruments. The *levier* with which *pressure* is performed, alone, or combined with *percussion*, is adapted to accomplish either alternately, and to crush the calculus with great rapidity. The central part, named *evacuateur*, empties the bladder with ease of the detritus of the calculus, and that without withdrawing the instrument. The objections made against lithotrity are:—1° The great number of sittings requisite in order to crush a calculus, especially when it is hard, and of a certain size—2° The rupture to a greater or less extent of the mucous membrane of the neck of the bladder, or of the urethra, whilst removing the *lithotriteur*, filled with small fragments of calculus with sharp edges—3° It is to this, which is repeated at least five or six times at each sitting, when the ordinary instruments are employed, that the greatest part of the accidents observed, ought to be attributed. In order to avoid these inconveniences, Dr. G. invented his instrument, by which he has, in several cases, effected the rapid crushing of the calculus, and that without withdrawing the instrument to clean it, as well as a diminution of the number of sittings necessary to obtain the desired result, and with less suffering to the patient. Finally, Dr. G. sends, likewise, a sound, the vesical extremity of which is in the shape of a spoon, and with which he removes the fragments of the calculus. (Commissaries: Drs. Amussat, A. Berard, and Blandin.)

Continuation of the Discussion on Ophthalmology.—Professor Gerdy continued his speech, commenced in the preceding sitting, and enumerated the different remedies employed in diseases of the eye indiscriminately, such as: antiphlogistics (leeches ought to be applied to the lid itself: this mode, adopted by the Professor, gives rise to no serious consecutive accidents; as to the œdematous swelling and ecchymosis, which sometimes take place, they yield spontaneously); collyria, blisters, &c. Here, the President interrupted the speaker, the Academy being obliged to form itself into *Comité Secret*, to hear the report on the *prix Itard.*

GARLAND DE BEAUMONT, D.M.P, B.L., & S., &c.
Honorary Physician to the Spanish Embassy.

ERRATA.—Page 238, col. 1, line 72, instead of "when sphacelus takes place," read "*sphacelus*, produced by inoculation;"—p. 239, col. 3, line 82, instead of "the nomination of the commission took place," read "the nomination of the commission by the *Conseil des Hopitaux* took place."

We learn from the *Phrenological Journal*, that Dr. William Gregory (who has just been appointed to the Chemical Chair in Edinburgh University) has satisfied himself by experiments of the reality of the phreno-mesmeric phenomena, and the insufficiency of volition to explain all the cases.

NOTICES TO CORRESPONDENTS.

X.—*Dr. Prout lives in Sackville Street, Piccadilly.*

X. *must acquire his opinion of the worthy physician from other sources than ours, for it is not our rule to venture on such matters.*

Mr. F. H.—*We must decline the controversy. We have expressed the truth before; a dissenter from medicine, is a dissenter from common sense. What medicine teaches, beyond doubt, is as true as if taught by mathematics, for it is a science. Would* F. H. *dissent from Euclid?*

Quiz *is declined. His caustic report would do no service, either to us, or the cause. Besides, the affair is defunct, and ridicule has reached its climax, when the fact is heard, that the Society "for Protecting the Profession," recognises in Mr. Rugg its Chairman or President.*

M. D.'s *note requires but one thing to make it perfect—authentication. Can that be given?*

A Friend to the Poor Man.—*We agree with our correspondent; with him, we are disgusted beyond measure at the continued packing of "decayed human bodies in holes here and there, "in the centre of our metropolis;" but we have had our say, and the duty of others has commenced.*

We have again to decline several communications. The rule we submit to ourselves is applied to our correspondents. The bonum publicum *regulates admission and exclusion. Our friends are clever, but they offer less interesting matter than we can furnish from other sources. When they furnish* choice *matter on a generally interesting, or new mytter on any subject, we feel much their debtors.*

An Old Surgeon, Gower Street, *thus writes:*—"Allow me, through the medium of your excellent journal, to ask Mr. Ilott, the gentleman who reported the case of compound dislocation of the malleolus internus in your last number, to state the direction of the dislocation; also, whether there was displacement of any other part of the tibia besides the malleolar process, and if not, to explain how it could have occurred without fracture, and without dislocation of the tibia, of which bone it is merely a process?"

R. S. *refers to No.* 113 *of the* Medical Times, *as containing a Transylvanian remedy for hydrophobia. He thinks the ingredients there given may possibly be those of the Bohemian remedy.*

A Constant Reader.—*The* Medical Times *goes free of postage to all the British Colonies. It is admitted free to Brazil.*

A. M.—*Apply to the visitors of lunatics, at* 45 *Lincoln's-Inn-Fields.*

A Poor Man.—*It is against our rule to give advice in such cases. Our Correspondent should apply to an institution, or an established medical practitioner.*

Dr. M. *will gratify us by sending the communication.*

Dr. Gore *is much thanked. We avail ourselves of his suggestion.*

Gentlemen *in arrears, who wish to have their names retained on our list of subscribers, and to receive their numbers without intermission, are respectfully requested to forward their subscriptions during the present week. We earnestly trust that the delivery of the present quarter's accounts will leave us without the pain of announcing a single defaulter.*

THE MEDICAL TIMES.

SATURDAY, JULY 6, 1844.

Quis desiderio sit pudor aut modus
Tam chari capitis?

DEATH has recently snatched from us one of the most gifted illustrators of our science GEOFFROY ST. HILAIRE, the most distinguished naturalist of our day, an investigator alike eminent by constancy of labour and strength of genius, has taken his place among the lost galaxy of those French celebrities, produced for us by their bloody revolution:—the Cuviers, the Laplaces the Amperes, the Hoüys, Berthollots,

Chaptals, Vaquelins, the De Jussieus, the Desfontaines, &c. He was carried to his last home on Saturday, the 22nd ult.

The life of St. Hilaire is purely scientific, and therefore one of those that offer matter rather for a passing editorial notice, than long biography. His mind, formed amid the events of the French revolution, partook through life somewhat of its daring grandeur, and his fortunes in the career of life he chose were not a little influenced by one of the incidents the Revolution's tragic course created. A student of Natural History, it was his grief to find that, among a number of other Professors, his teacher, the celebrated Abbé Hoüy, was imprisoned for a suspicion of political "malignancy." St. Hilaire interested himself in his favour, and by the hazard of his own life saved his preceptor's. The obligation was not forgotten. St. Hilaire, who had paid much attention to Mineralogy, was rewarded by his friend's influence with the place of Professor of Natural History to the Parisian Museum, at the early age of twenty-one. With his new post occurred to him a new order of studies. The celebrated Daubertin, with friendly intolerance, insisted that Mineralogy should be abandoned for Zoology—and the young Professor obeyed a better instinct than his own. The friend declared that the young man should make Zoology known to the world almost as a French science, and St. Hilaire's subsequent labours shewed the justice of the opinion.

But if, early in his scientific career, he was an accomplished Zoologist, an enquirer who brought to that science a power of rapid and correct perception rarely equalled, before its close he became much more, a *philosophic Anatomist*—a philosopher as great for the science of the nineteenth century, as Aristotle for that of the Macedonian epoch. We owe a new era in science to his philosophic generalizations on the principles governing vital organizations.

The more prominent events of his life are briefly given. He joined the famous Egyptian expedition of Napoleon; and while in the country, which once concentrated the wisdom attained by the highest progress of antique civilization, made important collections, enriching his country with new aids to the study of Zoology and animal organization. Unfortunate enough to have his General and country's army defeated by British valour, he found his scientific labours respected by the conqueror, and their fruits were safely transferred by him to the great Parisian Museum.

The Museum, before his time, had few or no living specimens. It is to Geoffroy St. Hilaire that we are indebted for that gorgeous menagerie which so interests the curiosity of the stranger, and aids the researches of the naturalist. An honour in itself immortal, he joined with himself in the labour the great Cuvier. He has thus established claims on us to be considered one of the great founders of the classsification of mammifera and birds.

In 1807, he was sent by Napoleon to Portugal on a scientific mission. He used the occasion to reorganize the Lisbon collection of Natural History. Transferring its duplicates to Paris, he received from Paris important accessions to the Lisbon collection. The Portuguese were so sensible of his benefactions to their country's science, that when the allied powers, in 1815, insisted on the return of foreign spoliations, the Lisbonians declared that whatever St. Hilaire had taken had been more than repaid, and that they would only look on the transaction as an exchange, of which they shared the principal profit. Napoleon would seem, in his employ, to have known the *political* services in foreign countries of an honest scientific man!

But the great, the true distinction of St. Hilaire, though less prominent to us than any other, was his establishment of a reasonable anatomical philosophy. Endowed with a genius to observe, to compare, to unite thousands of facts, which to ordinary minds would present no relation, he was inspired with the bias that leads to beautiful generalizations, and makes men the founders of systems. The grand idea of a universal correlation in all organized being we owe to him. He shewed us the inaccuracy of every received notion by which we held the immutability of species: or overlooked the influence on organization of external agents. He established the absurdity of that misleading, but still almost sublime opinion, that all beings have their whole organizations summed up in some pre-existent germ, which was held to be the perfect miniature of their more developed condition. He proved that each animal, before arriving at its present position in the scale of nature, passed through a number of intermediate forms; and laid down a system of Comparative Embryogeny, which threatens, finally, to influence our knowledge and opinions on every process of animal life. In short, by his labours we are taught to think that animal life is but one grand chain of animal beings, progressing in an ascending scale from the Infusoria to man—all identical in primary organization, and differing only in the results of an enforced arrest or permitted progress of development.

For several years before his death, St. Hilaire, like so many others of our imaginative celebrities, a Homer, a Galileo, a Milton, &c., was blind. He died in the bosom of a harmonious family, leaving an endeared daughter, and a son, who enjoys with the honours of his Professorship a reputation all but equalling his father's.

The funeral was one of those imposing things that occur, in reference to scientific men, only in France. The chief mourner was the distinguished son. The pall was supported by Baron Dupin, President of the Academy of Sciences, Ferrus, the President of the Academy of Medicine, and Chevreul, the Director of the Museum of Natural History. An immense crowd, including among others the most eminent medical, scientific, and literary men of Paris followed the hearse. The moment the coffin entered Pere La Chaise, a body of the populace, some of the ordinary labourers at the Jardin des Plantes, took the horses from the hearse, and bore the corpse on their shoulders to the grave. The accompanying multitude, we are assured, were much touched by this proof of attachment on the part of the labourers; and its effect was not a little enhanced by some eloquent funereal addresses delivered by Dumas, Chevreul, Dumeril, Pariset, Serres, and Lakanel.

A beautiful *morceau* from the mouth of Dumas, deserves translation:—

"All those men who emerged into greatness amid the convulsions of the Republic, whom the genius of Napoleon animated and raised to the height of his own glory,—these men of iron for labour, spirits of fire for thought, the eclat of whose discoveries shone with no paler fires than those of even the great contemporaneous events of war and policy, all these men are disappearing from about us, and the tomb now opened is about, alas! to close on one of the most illustrious! Amid these losses to science and our country, which, so often repeated, have in twenty years wholly renewed our Academy, may our minds rise to the height of the geniuses which are extinguishing! May the young men around who hear me, feel that in the absence of those great social crises which pervade men's minds with a sacred commotion and salutary zeal, they may find in calmer duties, conscientiously fulfilled, equally glorious inspirations!"

While rapidly inscribing these few observations on the career of St. Hilaire, the thought predominant in our minds has been the worship of Intellect which it evidences on the part of our French neighbours. M. Serres, in his panegyric, refers with pride to this national characteristic. After remarking that a great man's death is the signal for thought on his actions, he says—"The life of the mind is that which, above all things, absorbs the attention; for society feels that the *mind's* achievements are the best, as they are the most ineffaceable signs of a nation's true grandeur. The distinguishing trait in the Gallic race is its worship of Intellect!" And a trait is it well worth our imitation. It may be said to be the genius of Napoleon breathed into his country's institutions, and creating minds, even after his death, of a spirit akin to his own. France owes to it, almost entirely, her present high intellectual position in the scale of nations. With her happy climate, and the light, changeable character of her sons, unless there arose a stimulus of this kind, deep research, or intense courses of labour would be all but unknown. The lighter graces of literature might flourish, but we should look in vain

for that deep study and solid erudition which are at the base of every *high* literary or scientific fame. Without such a *vis a tergo*, can any one think that Arago would have made an astronomer, Magendie a physiologist, Orfila or Raspail chemists, Lisfranc, Roux, or Velpeau surgeons, Bouillaud, Chomel, or Lugol, physicians? Those who know the characters of the men will much doubt the likelihood of the event. Why is it that Ireland, so prolific in genius, has been so unfruitful in science? It is because, resembling much France in character, it does not resemble France in the character of its scientific jnrisprudence. While the whole instinct of the country is to educe, to admire, to worship intellect, there is nothing in its administrative government, as politicians on both sides admit, to embody the national mind; and thus, while we hear of Moores, and Shiels, and "Lorrequers" (the spontaneous offshoots of the soil) in abundance, we look in vain, amid its gifted sons, for such products, of a more careful cultivation, as a Cuvier, a St. Hilaire, a Newton, a Harvey, or a Hunter. The honour and distinction, then, of the MEDICAL TIMES shall be, never to tire in laying down the principle, and impressing, again and again, the truth, that our governors are playing false to our country's science and fame, acting most unjustly to the people committed to their charge, while they fail to step out of the narrow, miserable lane of hacknied precedent, into that broad arena of universal justice, in which no high intellectual labour shall ever want inducements and encouragements analogous to those enjoyed by our French neighbours. Asmoral worth is the glory and wealth of the individual, intellectual worth is the glory and wealth of a nation; and if we would not have England left behind in the race of science, and consequent power, it behoves us at once to give the young mind of its people some stimulus to scientific labours, besides that arising from private and temporary prepossessions, or vague chances of a barren, doubtful fame, or derivative pecuniary repayment.

Quem tu, Melpomene, semel
Nascentem placido lumine videris,
Illum, &c.

It is not without some little grief, and more shame, that we make our tardy acknowledgments to Dr. Blamey for the present of his "Epic Poem."* The author, so well known to fame, as forming, with his friend, the illustrious Rugg, the Duumviri who give vitality and forceful action to the Medical Protection Assembly, commands, by his very name, respect for each of his productions; and when he adds, on the title page of his poem, that he is an "*extraordinary* member of the Literary and Philosophical Society of University College," the conviction, we hope, is instantaneous, that a journal so proud of noticing men of eminent promise and achievements as ours, could have failed to point attention to the Miltonic achievement before us (we mean Dr. Blamey's immortalization of our age), only from a proper dffidence, that our powers of appreciation could scarcely do our Profession's *Epic* poet eommon justice.

And first, to begin our eulogy, where an ill-natured critic would say it should also stop, let us recognise the beauty of the ink, paper, and print, in which Dr. Blamey's work appears. The diamond gets new beauty from its setting; and this poem is certainly not the worse for its printing. Shenstone asked, by a poet of his day, how he liked his work, remarked with emphasis "It is beautifully printed;"—"But the style, Mr. Shenstone, the style"—"Admirably printed." "But the poetry, the living gushing poetry;" "Admirably printed—most admirably. Good morning, Sir." Without yet wishing Dr. Blamey good morning, we confess his printing most excellent.

Is his poetry less so? Mark how boldly he starts:—

———————Who would not inhale
The balmy sweets the ericket ground affords,
And gladly alternate the pleasing task,
Imposed by College-life, and certain Boards,
For manly games and exercise, I ask?
Or who of Œseulapius' noble sons,
In learning's mystie lab'rinths deeply read,
Immured in cloistered solitude like nuns,
Would rather elimb Fame's thorny steep, than tread
The downy paths which nature paves for those
More wise, who to her laws unerring yield,
And incense offer up—with vig'rous blows,
Well aim'd—in famous Copenhagen field!

If "*nuns*" were not a word necessitated by the laws of rhyme, in order that "*sons*" might not be left in single blessedness, we should think the use of the female gender applied to his brother *or sister* students—a matter calling for explanation. Let us leave this poetic obscurity, however, with the hope that some future commentators will shew wherein the "*likeness*" eonsists. One of those gentlemen who saw in Homer more than Homer knew, would be very useful to Dr. Blamey. *Singular* as he now is, such an addition might possibly make him *sensible*.

Here is a severity for King's College.

Our Eldest Daughter, we'l Lord Brougham said,
May envy our position, and our name;
But should she in our footsteps think to tread,
With stilts and awkward gait, she may the same
Achieve; yet if precocious Miss be wise,
And her parent would equal in knowledge,
A "sine qua non," she will find the demise
Of her mother—University College.
This maiden movement well should guarded be,
And likewise sanctioned by—her mother's leave!

With these few words, we reluctantly yield to the exigencies of our space, and conclude our acknowledgments to the *principal* member of the Medical Protection Assembly, and the *extraordinary* member of a Literary Society. The task of criticism, ordinarily so painful, has been here wholly joyous; and, short as has been our notice, we are proud to think that it has ushered into celebrity an Epic poet, who sharing the blindness of Homer and Milton, and the inspired lunacy of Tasso, has apparently been born, like another Fracastorius, to throw a new light on the character and prospects of our profession. Farewell, Dr. Blamey! with thee for poet, and Rugg for president, the Medical Protection Assembly must prove an immortal thing! Useful to it in life, thou wilt be still more useful in death to the shades of the great poets, whose name thou hast so daringly invocated. If they have any remaining earthly vanity about the merit of achieving *an Epic poem*, thou art the moral preacher destined to give them a lesson of humility!

* *An Epic Poem, &c., in Honour of the Students of University College, &c.; by R. M. Blamey, M.D., Truro, Cornwall, Member of the Medical Protection Assembly, Extra-Licentiate of the Royal College of Physicians, London, Extraordinary Member of the Literary and Philosophical Society of University College, &c. &c.*

THE CLAIRVOYANCE OF ALEXIS.

(To the Editor of the "Medieal Times.")

SIR,—I take leave to submit to your readers an outline of some extraordinary mesmeric proceedings, which took place on Monday last at a *seance* in the drawing-room of Mr. Bailliere, the medical publisher. The principal *performer* was the celebrated youth Alexis. The reunion was private, formed at the instance of a noble lord, and composed of some members of his family, with a few visitors, members of the three learned professions.

The magnetic sleep was induced in about five minutes. M. Marcillet operated. The process was simply a fixed gaze of much earnestness. A few convulsive movements of the youth's face were the only phenomena, preceding sleep, which excited my notice. After a moment's repose, he appeared to recover himself; and, though I thought I saw a changed expression of countenance, his appearance by no means indicated that he was not in a natural state: but his eyelids were closed. The task of bandaging his eyes was mine. I first fitted small layers of wadding exactly over the eyelids—successively overlayed these with larger—covered all over with two thick blankets of wadding:—finally, fastened three silk handkerchiefs in a way likely to make vision impossible. Alexis, far from "hesitating dislike," or suggesting objections, as I have seen others who have endeavoured to sustain similar pretensions, shewed an apparent anxiety for every precaution. The day was warm, and the room of not large proportions; but he assured me he did not care for the heat caused by the wadding, desired me to add more, and insisted on drawing the handkerchiefs tighter than I had deemed necessary; allowed me again to add wadding by the side of the nose, to close any possible channel of sight. He advanced in high spirits to a card-table to play *ecarté*. This game requires the small cards to be picked out and thrown aside: Alexis accomplished this with all the rapidity, and almost all the accuracy, of a skilled player unbandaged. When he made a blunder, he usually at once corrected it; he never failed to do so when his attention was thither directed. At times he made the most extraordinary discoveries or *guesses*. Thus, with the back of the cards turned towards him, he would single one almost in the centre of the pack, correctly naming and discarding it before the card's face could have come in contact with ocular vision supposing him to have after all enjoyed it. He more than once distinctly named the cards in his opponent's hand, and seemed to play throughout with a tolerably correct sense of the cards he had dealt both sides. He occasionally mistook—but speedily saw his error; and though bandaged, as I have said, he saw his opponent's cards *when played*, and his own, *when in hand*, with exactly the same ease and unvarying accuracy as would be possible with his eyes entirely free. There was no straining of the face; no attempt to see from any point above, below, or beside the bandage. He is one of the most expeditious players I have seen. Whatever the secret of his astonishing readiness with the cards, I am quite sure it was no ordinary ocular vision.

The marvels did not end here: he desired the table to be removed to the furthest part of the dining-room, remaining himself in his old position. There was the same clairvoyance and success. He suddenly took off the bandages and wadding, offered to do the same thing with his back turned, and still there was the same result. His explanation was, that there was a general power of sight about his body, and that distant objects appeared close to him. During these experiments he seemed in a state of extreme nervous excitement, evidenced at times by much oscillation of the body, accompanied by short exhibitions of impatience. There was no trace of anxiety; there was mental exaltation in excess; yet apparently pleasurable.

A book was brought: the *Regne Animale* of Cuvier. He spelt slowly and with difficulty a word in the page *below* that which was open before him. The paper was equal to *very* stout letter-paper. Though but the *first*, he supposed it to

ve been the fifth page below. He took about pages between his hands: holding them up pendicularly, under his eyes, he spelt a word the centre of one of the central pages,—on erence, correctly. He was taken to the title-ge, between which and sight three pages of ck paper interposed: he described an engraving, l fixed the date printed as 1842. On reference, medallion portrait of Cuvier was there, *but no date.* e nervous excitement I had noticed, while he was d-playing, seemed about this time much sened.

A card pill-box, enclosing some writing, was en. He made several attempts to decipher the ., but was declared to have failed. The word tten was "*Rouen*," given in a pointed, lady's nd, by which the letter *n* was not very dis-guishable from *n*; and the whole, it must be con-sed, was not very legible to a French youth. I put vord, in large round letters, in the box: he ed for my hand: I was desired to will that he ght know the word: he asked if there was an *a* it? I answered, "yes:" an *s?* I answered, es:" he said it consisted of five letters?—again, es:" he called for a pencil, and immediately ote, "*Paris.*" The same experiment was tried another gentleman, with the word, "*France,*" h a similar result.

His travelling powers were next essayed. He e to a lady a description of a country resi-ce; true in many singular particulars, incor-t in others. One of the truths was,—that a ain lady, whose age he accurately named, was a certain room (which was *partially* well de-bed)—she was neither sitting nor standing—was unwell in bed: the cause of illness was ned. To the noble lord he spoke with general uracy of a gallery of paintings in his country se—described two painted windows—spoke of sun as shining on one of them, and accurately d which of the two. His lordship wrongly called cellar, but the youth insisted that it was a gallery. e look-out from the house was also described y, except that a river before it was declared ered with boats. He was told that there were boats—he went from "*bateaux*" to "*canards.*" lady thought that, seen at a distance, sailing ts and white-winged fowl might be confounded. a lady, who had lost a bracelet, enquired about He said, that she had had it about four rs; first fact;—that she was accustomed to rl it round her wrist; second fact;—that a fat r, whose name he partially syllabled, had found This was doubtful; but such a name was wn to the loser as possessed by a neighbour. a more satisfactory *statement* concluded the eriments. A lady, related to the noble lord sent, asked the number of her children? "One boy."—"Where was he?"—"In a country-se, twenty miles from London?" —"With m?"—"His aunt." A mistake. He guessed in: "It was the lady's mother!" So it was. added: "It rained where the boy was—he , therefore, in the house: his name was D——." rything true but the rain; and, in Regent-et, though the day was very fine then, in half-nour, we had violent showers of rain.

Alexis was now aroused.

Though I went to these experiments without possession, watched them without favour, and rate them with my utmost fairness and good n, I know I risk some character for common e in making them known. It is dangerous to an extraordinary truth: still more, to affirm aordinary things, whose demonstration falsifies ions which have been held for ages demon-ted. But be it recollected that the farthest rty I take is to say what I *think* I have seen. not expect any one to give up their reasons my impressions; and few, of course, will not ner believe my impressions false than these vels true. But, in any case, there are marvels e believed. Whatever side taken, we must be ulous. M. Marcillet was the only per-who could help a collusion. He was in a nge room, among strangers; no mechanical possible of appliance. He was watched: he separated from the patient: his voice was the thing that could guide the youth; and he e little, and then but mere words of very natural encouragement. How could any aid of M. Marcillet help Alexis to deal with such ready and instantaneous judgment with the hundred unforeseen and complicated contingencies arising in the shuffling, cutting, and playing a pack of cards? By what *chance* were his *guesses* so right? By what ingenuity of contrivance was he tutored that a box, impenetrable to sight, contained a specific word out of so many thousands—a word unknown to myself one minute before writing—and *only* to myself when written? Supposing one deceived on so many successive and plain matters of obvious fact, how could so many others? But it is useless to expand on the difficulties which surround the hypothesis of fraud and collusion. If it be, *a priori*, improbable that Alexis has the power he pretends to—it is, *a priori*, improbable that under such circumstances he could achieve such tricks with ordinary capabilities. A *moral* is just as difficult of achievement as a *physical* impossibility: and there is just this to be said of the *first*, that we know much more about the laws constituting or governing it, than we do of the second. *All* may feel the difficulty of fully *believing* these phenomena: only those who have seen Alexis under such favourable circumstances as myself, can feel the difficulty of fully resisting them.

I am, Sir,

Very faithfully yours,

T. PIERS HEALEY.

2, Elm Court, Temple—July 1.

THE TRUTHS AND FALSEHOODS OF THE THEORIES OF LIEBIG,

WITH NEW VIEWS ON SOME IMPORTANT PARTS OF ORGANIC CHEMISTRY AND PHYSIOLOGY.

(Prepared expressly for the "Medical Times.")

As the origin and nature of strength of body, or organic action, is a matter of the greatest possible importance, too much pains cannot be taken to render our ideas upon the subject definite and precise. Liebig's opinion upon the subject appears in a general way to be summed up in the following quotation:—"The act of waste of matter, is called the change of matter; it occurs in consequence of the absorption of oxygen into the substance of living parts. This absorption of oxygen occurs only when the resistance, which the vital force of living parts opposes to the chemical action of the oxygen, is weaker than that chemical action; and this weaker resistance is determined by the abstraction of heat, or by the expenditure in mechanical motions of the available force of living parts.

By the combination of the oxygen introduced in the arterial blood with such constituents of the body as offer no resistance to its action, the temperature necesssary for the manifestation of vital activity is produced.

From the relations between the consumption of oxygen on the one hand, and the change of matter and the development of heat on the other, the following general rules may be deduced:—

For every proportion of oxygen which enters into combination in the body, a corresponding proportion of heat must be generated.

The sum of forces available for mechanical purposes must be equal to the sum of the vital forces of all the tissues adapted to the change of matter. If, in equal times, unequal quantities of oxygen are consumed, the result is obvious in an unequal amount of heat liberated, and of mechanical force. When unequal amounts of mechanical force are expended, this determines the absorption of corresponding and unequal quantities of oxygen.

For the conversion of living tissues into lifeless compounds, and for the combination of oxygen with such constituents of the body as have affinity for it, *time is required.*

In a given time, only a limited amount of mechanical force can be manifested, and only a limited amount of heat liberated.

That which is expended in mechanical effects, in the shape of velocity, is lost in time; that is to say, the more rapid the motions are, the sooner, or the more quickly, is the force exhausted.

The sum of mechanical force produced in a given time, is equal to the sum of force necessary, during the same time, to produce the voluntary and involuntary motions; that is, all the force which the heart, intestines, &c., require for their motions is lost to the voluntary motions.

The amount of azotised food necessary to restore the equilibrium between the waste and the supply, is directly proportional to the amount of tissues metamorphosed."

This great attempt at generalization must be truly delightful to every medical man, who wishes to practice upon principle. An effort to reduce physiological laws to those of statics, and dynamics, and to place the science of medicine, among other physical sciences, has almost always appeared so difficult as to prevent the attempt. Hence the dictum, *ars medica tota in observationibus*, appears as the result of a mind settling down in quiet resignation to the fate, that it is quite impossible to introduce science or order into medical subjects; but an attempt like the present, to range the animal body among other physical forms, and to demonstrate it amenable to the same laws, and as forming a portion of the physical world, being in a greater or less degree subject to the same influences as the rest of it, cannot be otherwise than the dawn of a brighter day for the Science of Medicine.

It is, in fact, bringing the mind, however reluctantly, to consider the human body as an engine, and the practitioner the engineer, who is to regulate this engine according to the known, or yet discoverable laws of matter and motion. In giving floatation to a ship, the ship-builder is called upon to construct a form on principles more definite, and better defined, than the result of a vague and ill-digested experience; and in the management of a steam engine, the engineer is called upon to state in terms of wood, metal, coal, water, &c., and figure and form what is possessed, and what is wanting, in the engine he professes to manage. But the feeling, that there is something about the human *body* which removes it above and beyond the sphere of ordinary physical laws, has saved the profession a world of trouble; because, to the question: "why do you administer so and so," the answer "I have found it produce so and so," can be always returned, and this puts an end to the enquiry. But while it enables the profession to return an answer, that would not be accepted from a ship-builder, or an engineer, it enables persons not professional to say so also, so that the testimony of experience can also be adduced as a witness in favour of amulets, charms and those reputed systems of medication which certainly stand upon no better foundation. At present, the homœopathist assures us, that by a millionth part of a grain and infinitesimal doses, he can cure diseases of debility; and the hydropathist attributes equal virtues to cold water. Now, why have we not homœopathic and hydropathic treatment of a steam engine? Because the principles of physical science have been brought to bear so plainly on that machine, that any pretension ill-founded, can be instantly tested; while in relation to the human body, that has not yet been done, and before the writings of Professor Liebig, has been but slightly attempted.

The engineer knows, that to produce a certain number of strokes of a piston, in a given time, a given quantity of coal and water must be consumed, and to repair a breach of a given dimension, a given quantity of wood, iron, &c., is required: but because the human body has not been considered as a machine, regulated by all the laws that appertain to other machines, some have been enabled to say, and many have been persuaded to believe, that the limbs can be moved, and the blood circulated, i.e., a heavy body raised by a force created by millionth parts of grains, &c., &c., an opinion often fraught with danger, and which never could have gained the credence of any portion of the public, if correct fundamental notions of the nature and origin of force or strength had been entertained.

It will no sooner be generally known, that nervous power is an electro-momentum, generated on common physical principles, that there is required a certain amount of oxygen, and a certain amount of *base*, to produce the effect; that that oxygen and base are to be measured and weighed in quantity proportioned to the effect to be pro-

duced; than we shall abandon millionth parts of grains for a man worn out by fever, to reinstate his strength. Neither could we objeet to *combination* of medicines, when we know that *combinations* of metals make the best amalgam, which, in every particular in the matter in hand, corresponds to motor, or strength giving food and medicine. If, as has been set forth in these papers principally, animal activity is the result of oxydisement of a base, and if that force be proportional to the quantity consumed, then we have a plain principle of physical science to test the allegation that the strength of an exhausted body can be restored by such small doses. Upon these principles, a person faint from loss of blood, requires *quantity* of base to be one of the factors of force, which, uniting with oxygen, the other factor of force, generates that force, strength, or momentum, which shall keep the medicine in motion. In like manner, as in a machine, those parts made of iron, cannot be replaced by wood, so the *hard* materials of the body cannot be replaced by cold water. Thus, a draught of that fluid alone will not give iron, phosphurus, lime, magnesia, &c., &c., to the body; but in order to repair it, we must try to find out what the machine wants, or what it contains in excess, and to increase or diminish by the thing, or something containing the thing required; and in that way water will be seen to be only one of the agents for repairing the human body, considered as an engine, generating its own moving power out of appropriate matter. Charms, amulets, infinitesimals, and cold water, cannot prevail against the static and dynamic laws that are announeed in this partial resumé of Liebig's Physiology.

All important as these principles are, and great as is the first fundamental law, that all vital activity arises from the mutual action of oxygen on the elements of the food or ingesta, yet to make this principle available in practice, we must have more distinct ideas of the mode in which the oxygen and the elements of the food act and re-act in the production of strength. Strength and spirits are so dear to every one, that we cannot be too jealous of any error creeping into our conception of the mode and manner of their production. It is not easy to see what could have led our author to the opinion that strength is the result of an oxydizement of metamorphised tissues, as it is most certain that no fact, nor facts, stated in the work, nor in any other, as yet given to the public, supports such a conclusion.

Yet such is our author's determination to allow no other source of strength or energy, that in order to carry this point, there is something approaching to a disregard of common sense facts. Thus, since all allow that alcohol cannot form tissues or muscle in partieular; and since Liebig will have it that strength originates in the oxydizement of "lifeless compounds" which had previously been parts of the body, then it follows that alcohol cannot give strength; and accordingly, it is asserted that it does not, but, on the contrary, it causes weakness by putting an end to the "change of matter," viz. by absorbing that oxygen by which the matter would have been changed. That wine, brandy, &c. &c., at least at the time in which it is taken, produces strength, "the momentum of motion, the momentum of talk, the momentum of force, and the momentum of feeling and thought," is a matter beyond the pale of dispute, as decided on by the common sense of mankind in every age and country.

There may be a rational dispute about whether subsequent weakness does not result, but about the generation of every kind of *momentum* at the first, there can be no room for two opinions. Since our author must have the human machine torn to pieces, in order to generate force for its own propulsion, alcohol can of course be allowed no share in that work, and consequently it, and all its class, (by far the greater part of our food) is set apart by our author for production of heat. Thus at page 240, "Now we observe that the production of heat in the body after the use of wine, increases, rather than diminishes, without the production of a corresponding amount of mechanical force." Now, this is exactly the reverse of the fact, for when wine agrees with the patient, it *diminishes* the *heat*, and *increases the mechanical* force, as shewn by Dr. Stokes, and others; and as any one may observe. Further "a moderate quantity of wine in women and children, unaccustomed to its use, produces, on the contrary, a diminution of the force neeessary for voluntary motion. Weariness, feebleness in the limbs, and drowsiness, plainly shew that the force available for mechanical purposes, in other words, the change of matter has been arrested." Now this, instead of being its effeets in a healthy person, unaccustomed to its use, is precisely its effect on a person who, either from its use, or from a damp and stagnant climate, has got disease of the liver. It may be possible that the Professor's observations have been made on such persons, or in such elimates; but still such observations are useless, nay deceptive, if mistaken for a general faet. It is not even allowed to the heart to get any stimulant from the aleohol, for what additional motion the heart exhibits, is said to be borrowed from the organs of voluntary motion.

Thus (p. 240) "In this case the circulation will appear accelerated at the expense of the force available for voluntary motion, but, as we before remarked, without the production of a greater amount of meehanical force, by the proeess of oxydisation of alcohol." Why the *oxydisation* of *a dead muscle* should produce force or strength, and the oxydisation of alcohol should produce no force or strength, appears to a mind in this country a natural question, and requiring an answer from Professor Liebig.

This view of the origin of strength is extremely defective, as tending to give *digestion* only a secondary place in the production of energy; while it certainly, in this respect, is primary. Thus, if strength is the result of the oxydizement of muscle previously existing, then, in order to have a supply of available force, there is only needed the motion to break down the muscle, and oxygen, to oxydize the "lifeless compound:" so that the instrumentality of the present meal is only of secondary importance. But does not every day's experience prove that an absolute and essential condition of vigour (momentum of force of Liebig) is a clear digestion. This *primary* importance of digestion is at once intelligible when vigour is known to arise from the action of oxygen on the elements of motor food; when in a state susceptible of oxydizement, they are transferred to the blood. But if transferred without the digestive organs having generated this susceptibility, the oxygen does not combine, and the resulting galvanoid force eannot be expected. Digestion is, in this view, like the preparation of the amalgam of the electrifying machine, viz.: such a change produced on food as renders its appetite or affinity for air energetic, and the resulting electric exeitement powerful. But not only is this view of the origin of strength incorrrect, but Liebig's view of the nature of the digestive process is exceedingly faulty—nay, even dangerous: for such is his attachment to "transformation," that he inculcates that digestion takes place by a metamorphosis derived from the transformation of a substance derived from the lining membrane of the stomach. At page 108, we are informed that the most decisive experiments of physiologists have proved that the process of chymification is independent of the vital force—that it takes place in virtue of a purely chemical action, exactly similar to those processes of decomposition or transformation which are known, as putrefaction, fermentation, or decay ("eremacausis"). Is this the case? Why does a heavy, indigestible meal of pastry, &c. &c., produce drowsiness and stupidity? Because the vital force is now digesting the meal, and cannot at the same time actuate the brain. Why does a fig, or an orange-peel, or other crudity, bring on in a child a fit of convulsions? Because so much vital energy is now sent to the stomach, that the nervous power is defective in other parts; i.e., the nervous equilibrium is destroyed. Why is the best remedy a small quantity of the most easily digested food? Because, by expending little in digestion, each part of the organism receives a due supply of nervous power, and the equilibrium is restored. That the food is *prepared for oxydizement* at the expence of the previously-existing stock of strength is, if not the *most important fact* in physiology, at least one of the most important, and is the clue by which the practitioner is guided through a labyrinth of disease the most protëiform and otherwise inexplicable, with a precision resembling that of the physieal scienees. He who believes other than this would be a most dangerous adviser, and in vain would attempt to trace the endless variety of disease resulting from excess and improper quality of food, to their common cause; namely,—*an expenditure of that energy which should supply duly every organ of the body in an effort to digest, and afterwards expel from the body an unnecessary quantity of intractable food.* However it may appear to the eye of persons aceustomed to view things through a chemical medium, it will certainly appear thus to the practitioner.

The objection that food, in perforated, metallic tubes, can be digested, is of no value, when we know that the digestive force is the galvanic, generated in breathing, and which eannot be prevented from meeting the food, though the latter be enclosed in partial metallic tubes.

Moreover, this view of the subject is incompatible with Dr. Wilson Phillips's experiments, shewing that the galvanic currents were sufficient to replace the action of the eighth pair of nerves.

In order that the motor food may be well oxydated, and the resulting strength good, digestion must be perfectly performed. For this purpose, not a mouthful of food in excess should be taken, as the blood-vessels, in a state of plethora, do not expose the blood to the full action of air but give rise to *oppression*, the result of material, which eannot be used. The analogue of this is a candle where there is too much fat for the wick, the excess producing a smouldering, instead of free combustion. This state is best relieved by a diuretic, which, depriving the blood of water—or, rather, by drawing to the kidneys their divisions of the elements of food—allows the other division (the complement of the latter) to be food for the liver, and thus to generate strength. This mode of remedying this pseudo-weakness (oppression) by a diuretic (sueh as spirit of nitrous æther, and laudanum), may be either explained by, or deduced from, one of the experiments of Liebig. It shews that the sum of the elements of bile, added to the elements of urine, make the elements of blood. Accordingly, to give bile to the liver, and obtain the resulting strength, the separation of blood may be effected by soliciting the kidneys to attract their share—and thus, as it were, compel the liver to attract its division.

Hence, with many dyspeptics, an abundance of urine indicates a return to health and spirits; and thus can the liver often be stimulated indirectly by acting on the kidney. It is, perhaps, by its aetion on the kidney, as much as by any direct action on the liver, the dandelion is so often useful to those suffering from hepatic disease. As soon as the function of the liver is developed (which assuredly has not yet been published, though Liebig has approached it) this reciprocal influence of the kidney and liver will be better understood.

REVIEW OF THE REVIEWER OF LIEBIG.

By KIRBY O'SULLIVAN. Esq., of the Laboratory of Liebig, Giessen.

(For the "Medical Times.")

My object in the following communication, is principally to prove that the writer of the articles in the *Medical Times*, "The Truths and Falsehoods of the Theories of Liebig," would have come to a much more philosophical conclusion, than he has done, by following the principle laid down in the passage of Bacon, with which he commences the first of the papers alluded to, viz: "That everything to be well understood, must not be studied as it stands by itself alone, but as it is related to all nature." Departing at once from this excellent maxim, and viewing the matter only from one confined point, he rejects the view of Liebig, that animal force is the result of the oxidizement of the disintegrated tissues of the body, and proposes another in its place, both hypothetical and incorrect, viz.: "that the oxidation of the hydro-

carburets in the food," an oxidation which he considers similar in its results to the action of oxygen on the amalgam of an electric machine, or the zinc plates of the galvanic battery, "is the true and sole cause of that phenomenon."

In this hypothesis he takes for granted the old idea, that electrical action is identical with the active principle of the nerves; an hypothesis, which is shown to be completely erroneous, by the structure of the electrical fishes. If these forces were identical, nature, in order to produce a stronger development of electricity in those animals, would only have required to increase the nervous apparatus, or to render the electricity thereby produced more intense by condensation or multiplication. But such is not the case; for we see, in fact, that the apparatus of the electrical fishes is perfectly similar to a galvanic battery, and totally different, and in fact, independent of the nerves. Further, on closer examination of the course of the finer nerves, with that of the electricity developed in the electrical organs, both in the *torpedo* and *gymnotus*, we find that the nervous force acts in a direction perpendicular to that of the current of electricity. This fact shows that they are dependent on two different causes, although the excitation of the one may call forth the other, as heat produces electricity and *vice versâ*. It is not intended here to deny that electricity is produced in the body, as all chemical action is attended with its development; it is also possible that thermo-electric currents are produced both in plants and animals; yet it would be absurd to confound such force with nervous action. We do not confound *chemical* with *heterogeneous* attraction, *heat* with *electricity*, or *magnetism* with either of them, and yet it is probable that these forces are different actions of the same *power*, but being called forth, each under its own peculiar conditions, they act under different circumstances, and in different directions, produce consequently different effects in nature, and must, therefore, without reference to their ultimate cause or *power*, be considered as distinct and independent *forces*.

However confident the writer in the *Medical Times* may be, as to the *possibility* of his hypothesis being true, he has taken few precautions to hide its defects. He denies that any disintegration (if I have understood him rightly) of the muscles takes place. How then is it that the muscles of a strong muscular man, when unprovided with food for some days, are reduced often to one-half their original weight, and this the more rapidly the more he labours or moves? Or how is it that life is prolonged sometimes for fifteen days without food, unless this disintegration take place, when we know that the whole quantity of blood, contained in the body, does not contain carbon enough to supply the carbonic acid given off from the lungs in four days?

According to his view, nitrogenous food is only required for growth, while respirable food is the true source of motion. As soon as a man is full grown, he has no further need of nitrogenous food, at least, no more than would be sufficient to supply the loss sustained by the cutting off of the hair and nails, the mucus of the nose, the scaling of the epidermis, &c.; the only food necessary being such as contains a large proportion of carbon and hydrogen, and a small proportion of oxygen, as they would afford the largest amount of force. The Laplanders should, therefore, be among the strongest of the human race, from the quantity of respirable food which they consume. Flogguér* relates that he has seen many of them devour from twelve to twenty pounds of butter, fat or oil, at a time: that is a quantity containing as much carbon as from sixty to one hundred and twenty pounds of meat. But we never find in real life the strongest men among the eaters of fruits, rice, and other vegetable substances, nor among the Samojedes and other Arctic nations, who swallow such incredible quantities of highly carbonaceous food. I am sure that no one would for a moment compare an English soldier, who receives no more than one pound of beef, with a proportionate amount of bread, beer, &c., with the fat eaters of the northern, or the consumers of fruit of the southern climates—the very idea is absurd. Besides, we know from the experiments of Magendie, that animals fed on perfectly non-nitrogenous food, die of starvation, attended with the same symptoms as those which receive no food whatever. In full-grown animals this could not take place, at least for a very long time, if the source of power depended on the carbon and hydrogen, and not on the nitrogen of the food.

Another point which this new view totally fails in explaining, is with regard to the urine, a phenomenon beautifully and simply explained by Liebig's theory. If motion or power depended on the oxydizement of respirable food, and if the muscular tissues were incapable of disintegration, the quantity of nitrogenous matter contained in the urine, should vary every day, independent of the mode of life, but depending solely on the quantity of nitrogenous matter consumed per diem; if none be consumed, the urine should be free from urea:—if a large quantity, the nitrogen in the urine should increase in proportion. Neither should its quantity increase with the amount of labour or fatigue undergone, independent of the food consumed at the same time; as the muscles, on this view, could suffer no disintegration, the only source of the nitrogen would be the nitrogenous matter derived from the food, added to the blood, and should consequently vary with the amount of the nitrogen in the food taken. But the converse of this is the truth. In the same individual, in a healthy state, under similar circumstances as to expenditure of force, the quantity of urea is almost invariable;—with increased expenditure of force, we have a proportionate increase of nitrogen voided. For the same reason, the nitrogenous matter of the food cannot be directly oxydized in the blood, as the urine should in this case also vary.

If we examine the muscular tissues of a strong athletic man, and of a weak debilitated woman, we can scarcely detect a difference in the size of the individual fibres; in fact, each individual elementary cell, composing a muscle, grows from within by a power inherent in itself, and independent of an external force, which would have the effect of causing them to increase by external deposition. The difference of strength between a strong and a weak person must, therefore, depend, not on increase of size of the original elementary fibres, but on an increase of their number, and a diminution of muscularity on a decrease of their number: that is on a total absorption or disintegration of a number of individual fibres. That this disintegration takes place, we can easily understand from the increase, and diminution, of different muscles under various circumstances, and at different intervals; and that this disintegration is not equal for all muscles, but depends entirely on the amount of force developed by each muscle, may be proved from the following results obtained by Chossat*, from experiments on pigeons and other animals. Having taken ten pairs of pigeons, each two of which were as near as possible of the same weight and age,—he killed one of each pair by suffocation, and the other by withholding its food; the weight of its individual organs was then accurately estimated, both in the fresh moist state, and when dried at 212°. The mean loss amounted to 0·4 or 2-5th of their whole weight, or estimated in grammes, at 142·17, of which the—

	Weight in grmms.		Fractional parts of one, being= the whole loss 142.17
Blood lost	7·86		0·0552
Muscles, namely:—			
Exterior muscles 66 32		0·46648	
Heart 1·87		0·01315	
Muscles of the intestinal canal and stomach 6·44	74·63	0·04530	0·5249
Fat	38·47		0·2706

Here we see that the fat formed one-fourth of the whole loss, the muscular tissues more than half, while all the other parts made up the other one-fourth, of which the blood formed one-twentieth, the glands of the abdominal region one-twentieth, the skin one-twenty-fifth, the bones nearly one-twenty-fifth, the lungs three five-hundreths, and the other parts a little more than one-hundreth. All the muscles did not lose weight in the same degree. The loss of the large muscles of the breast was relatively greater than that of the whole remaining muscles. The loss of the former, in the moist state, 0·531 of their whole weight, and of the latter 0·356; dried at 212°, the proportion was 0·550 and 0·359. This is a very important fact, as it proves that not only are the muscles disintegrated, but that the disintegration depends on the activity of the muscles; in this case, the muscles of the breast were naturally those which were in most constant activity, the other muscles being in a state of comparative quietude, owing to the confined state in which the birds were kept. It is evident from these experiments, that the fat and muscles are the most liable to change and waste in cases of starvation. And what occurs in this respect where food is withheld, must also take place where the natural quantity of food is afforded; the only difference between the two states is, that in the one, the waste is supplied by the formation of new tissues from the food, while in the other, this waste is not supplied, and the animal dies so soon as the organs, essential to carry on the functions of life, are so far wasted as to be incapable of fulfilling their offices.

I can recommend a medical practice, founded upon the views put forward by the writer of the paper in the *Medical Times*, quite as economical as the one which he derives from the theory of Liebig, and of much more general application. For instance, I need only mention one important application of it to our Union workhouses—where a large Armstrong's hydro-electric machine might be applied, not only to resuscitate the fevered and debilitated, but also as a substitute for the much more expensive *galvanoid force* derived from food; as nervous energy and electric force are identical, the latter may be supplied in any quantities where the former is not to be had, or where its production in the usual way would be too expensive.

The manner in which the hacknied arguments against Liebig's theories—that a drowned man does not receive a dinner immediately after his recovery, or that persons recovered from fever are not immediately invigorated by strong nutritious food—are daily brought forward, borders sometimes on the ludicrous, more particularly when we recollect that their authors are often *medical men*. They are right when they state that it follows from Liebig's theory, that, in order to restore the wasted strength of persons who have suffered from fever, abundance of strong nutritious food should be given them; but are they so stupid as not to know that food must undergo a preliminary preparation before it can effect the end desired? Do they forget that disease changes the condition of the stomach, the organ by which this preliminary preparation is effected, and that a certain portion of time must be allowed for it to return to its normal state, after the removal of the exciting cause—the disease, before it can effect such a change in the food as will enable it to reach the parts where its presence is required?

It is a mistaken notion that *beer*, *wine*, or *spirits*, communicate strength, and it is disgraceful to see medical men endeavouring to propagate the error: meat affords tissue, and consequently strength; starch and sugar are only useful for the production of fat, and by their combustion of animal heat; but spirits, and all other alcoholic liquors, although they possess the latter qualities in an eminent degree, possess another property, which is unfortunately the better known of the two, namely: their narcotic action on the brain. This narcotic action is caused by the spirit preventing the blood, which goes to the brain, from becoming perfectly arterialized, by its vapour diffusing itself through the lungs, and thus preventing access of air, by which means the functions of the brain can only be imperfectly carried on; (if the matter of the brain and spinal marrow be wasted like the muscles, by the exercise of their functions, this explanation of the action of alcohol agrees with the effects observed; because for such a waste, oxygen would be necessary, which can only be supplied by perfectly arterialized blood, in the absence of which a temporary cessation, more or less, of its faculties

* Travels in Lapland and Northern Sweden, Berlin, 1841.

* *Recherches expérimentales sur l'Inanition*, Paris, 1841.

takes place.) The more rapidly the alcohol can be oxydized, the less will be its action on the brain; consequently, in cold damp regions, it can be taken in very large quantities with impunity; in fact, under such circumstances, it forms an excellent respirable food; but, as the elimate becomes more temperate, so does the necessity for consumiug it diminish, while its dangerous effects increase.

When a theory, founded on reasoning from established facts, is attempted to be upset, it should be done so by bringing forward not *new views* and assertions, unsupported by *data*, but experiments and well-grounded facts. Such new views as those which I have attempted to disprove, though palpably incorrect, should not, therefore, remain unanswered, as they would be very likely to create a prejudice in the minds of persons unacquainted with the subject.

REMEDY FOR HYDROPHOBIA.

To the Editor of the Medical Times.

Sir,—The medical periodicals, and the newspapers of the day, have lately furnished a more than usual number of cases of that horrible and fatal malady, hydrophobia; and it stands forth in the broad day light, a disease casting an opprobrium on medical science. The treatment that has hitherto been adopted, not only in this country but throughout the civilised world, has invariably been found to fail. That the disease is a nervous affection depending on a specific poison, is I believe admitted by all. The spasmodic paroxysms have resisted every remedy, however violent, that has been tried. Under these circumstances, I beg leave through the medium of your extensively circulating journal, to call the attention of the profession to a remedy I would propose to receive a fair trial; it is a medicine that has received but little attention from British practitioners, and it occurs to me that from the peculiar effect produced by it on the nervous system, it might perchance be found beneficial. The medicine I allude to is the "Datura Stramonium;" its operation on the animal economy is most extraordinary; in some parts of South America, where this plant grows wild, the natives in certain cases drink a decoction of the leaves; it produces a burning thirst, a suffocating sensation, pains about the region of the heart, a kind of drunkenness accompanied by violent gesticulations, and actions approaching to madness. These effects will last for some hours, after which the patient falls into a profound sleep nearly resembling death, which lasts for two or three days; on awakening from which there is frequently loss of memory and partial paralysis of the muscles, generally of the lower extremity; these symptoms however subside after some time. Now I would suggest for the consideration of the profession, whether the creating of a new and violent nervous disease, such as the Datura Stramonium is capable of, might not be the means of overcoming the original one, and I would strongly advocate the propriety of giving the remedy a fair trial. A well prepared extract given in pills, would be the best way of administering the medicine.

Your obedient Servant,
NICH. GRATTAN,
Late Medical Attendant to the Killeagh and Mr. Uniack's Dispensary Co. Cork.

THE LATE CASE OF HYDROPHOBIA.

To the Editor of the 'Medical Times.'

Sir,—The case of hydrophobia related by Dr. Foley in your number of the 1st. June, was read by me with much interest, as well as your correspondent's remarks in the following number. I am however inclined to think that they place by far too much confidence in the medicine, received from the Earl of Arundel and Surrey, and used on that trying occasion. Whether hydrophobia arises from a specific virus as asserted by Magendie, and relied on by Dr. Foley, or from an injury done the parts by the teeth of an animal lacerating them, is a question of great importance, and one that in my humble opinion has not yet been fairly set at rest. All physiological discoveries, no matter how insignificant they be, have never been received as facts until they were tested by other physiologists, and in the same way by the discoverers themselves. Now Magendie's discovery was announced to the world many years ago, and although one of paramount importance, yet, so far as I know, it still remains without being strengthened or confirmed; it remains "all alone in its glory;" and if we take into view Magendie's late hasty investigations on the blood, and the still more hasty conclusions he came to concerning it, (at least so far as the carbonate of soda affects the health, when this substance is introduced in the circulation) we have every reason for receiving with caution what his enlightened, but sometimes too ardent, zeal may consider as truth.

It is said: "the protective influence of this medicine was tested in London on three soldiers of the Royal Horse Guards, who were bitten, as well as two horses belonging to the regiment, by a rabid dog; this medicine was given to the men, not to the horses; the men exhibited no signs of the disease, the horses died;" and we are told to look at this as a proof of the virtues of the medicine. As we have no particular account given us of this case, we cannot judge of it with certainty; but we know from the past history of hydrophobia, that the number of deaths are less in proportion to the number of beings bitten; it is a fact founded on the observation of a considerable number of cases, that, upon an average, not more than one person out of twenty five, who had been certainly exposed to the bite of a mad dog, had become seriously infected with the disease, and a very large proportion of that number have survived. The celebrated John Hunter gives an instance in which out of twenty persons who were bitten by the same dog, only one effectually received the complaint; in the case related by Dr. Foley, we have three men and two quadrupeds bitten; the two quadrupeds died; here, we have two deaths from among the five beings injured; surely this is more than a sufficient number of deaths, taking the past history of the disease as a lamp to enable us to judge of the present case, and this makes it exceedingly probable that the men would have recovered without their supposed antidote. There is another thing. We learn from our medical records, that fear has a powerful effect in accelerating the march of this disease; and a medicine brought by the Earl of Clan William from Bohemia, coming from some place far abroad, and accompanied as it probably would be with the many triumphs that it had achieved, could not fail to act as a powerful tonic on the minds of private soldiers, ignorant of the nature of the disease, and might enable the healing principles of their constitution to rally and throw off a complaint, partially communicated and feebly formed.

We hope we have said nothing offensive in the few remaks that have been made, our object being the discovery of truth: Dr. Foley's, the communication of useful knowledge. We would rejoice in receiving an antidote for this fearful malady, no matter from what source it comes, whether from a Peasant or a Peer; but the last mentioned class are as credulous, so far as the distribution of medicine is concerned, as the former; witness how they rallied around that notorious quack St. John Long, and warded off as long as they were able, the destined disgrace that awaited him.

We are far from undervaluing the motives of the Earl of Arundel and Surrey; his philanthropy was unquestionably pure on this occasion, and we are glad to learn that a virtue, so common among the working classes, is to be found here and there among the more wealthy. I am Sir, yours,

J. B.

Glasgow, June 25, 1844.

REPORT OF THE BRIDESWELL DISPENSARY, FOR THE YEAR ENDING APRIL 1844.

By Dr. O'CONNELL, Physician.

Bad Fever.—Cases, 16; Deaths, 1.—The result here is very favourable, and to be ascribed, as it was last year, to the abstinence from spirits, and the increasing confidence of the poor in medical advice. The fatal case was a strong proof of the injurious effects of whiskey in the outset of fever, without regard to symptoms. The patient was a strong young girl: her two brothers, who caught the disease after her death, under proper care recovered.

Pneumonia.—Cases, 5; Deaths, 0.

Bronchitis.—Cases, 6; Deaths, 1.—The death occurred in the person of an old man, whose constitution had been previously broken down.

Chronic Inflammation of Stomach.—Cases, 4; Deaths, 0.—In one case, an old man, whose whole life had been one continued scene of intemperance, the irritability of the stomach was such, that no food, no matter how light, would rest. The consequence was extreme emaciation. He is now in very good health.

Inflammation of Bowels.—Cases, 3; Deaths, 0.—The result here confirms our former observation in similar cases, that there is no disease of such pressing danger, more under the influence of *active* and *early* treatment.

Nephritis.—Cases, 1; Deaths, 0

Inflammation of Tonsils.—Cases, 14; Deaths, 0.—During the last winter, and beginning of spring, cases of this description prevailed, it might be said generally. Some were particularly severe, and had to be opened, where the difficulty of breathing was so urgent, as to threaten suffocation.

Malignant Sore Throat.—Cases, 1; Deaths, 1.—The death occurred a few hours after visit. There were several abscesses of the legs, and pustular swellings on different parts of the body. The case, in fact, resembled the accounts given of glanders, in the human subject, and there was good reason to believe it was really one of that description.

Phthisis.—Cases, 3; Deaths, 1.—Result not known in the remaining two cases.

Fracture of the Skull.—Cases, 1; Deaths, 0.—There was distinct depression of the bone; yet by bleeding, shaving the head, and application of cold, &c., no bad symptom came on, and he is now well. The injury was inflicted by a blow of a mason's hammer.

Rheumatism.—Cases, 4; Deaths, 0.

Inflammation of Larynx.—Cases, 2; Deaths, 2.—This very dangerous species of sore throat was mistaken by the friends, for the more common kind, and were in consequence visited only some short time before death.

Ophthalmia.—Cases, 4: Deaths, 1.

Difficult Labours.—Cases, 10; Deaths, 1.—In the fatal case, rupture of the uterus had taken place before visit, turning was performed, and the child removed without much difficulty; but the poor woman never rallied from the moment of the accident, and sank the following day.

Scarlatina.—Cases, 4; Deaths, 0.

Paralysis of lower Extremities.—Cases, 2; Deaths, 0.—These were very interesting cases; one occurred in a young boy, who, while under the influence of mercury, exposed himself to wet, cutting turf. The other, in a young girl, who was suddenly deprived of all power over the limbs while walking through a field. From lying constantly on the back, extensive sloughing took place, which is now nearly well, and the power of motion so restored, that she can walk with some little assistance.

Scrophulous Abscess.—Cases, 1; Deaths, 0.

Old Ulcer of Leg.—Cases, 1; Deaths 0.—Healed; but some weeks afterwards was attacked with spitting of blood, from which he recovered. Of course, it is difficult to say, whether the suppression of the discharge from the leg, brought on the hæmoptysis, or the catarrhal affection which accompanied it; but the patient had no hesitation in laying all blame on the drying up of the ulcer.

Phlegmonous Erysipelas.—Cases, 2; Deaths, 0.

Disease of Hip-Joint.—Cases, 1; Deaths, 0.—The pain in this case was excruciating; but the disease, though neglected from mistaken delicacy, for a few days, yielded completely to counter-irritation.

Hæmoptysis.—Cases, 2; Deaths, 0.—Both bad cases; principally met by bleeding from the arm in each. One of them has already been alluded to in the observations on "Ulcer of the Leg."

Old Liver Disease.—Cases, 3; Deaths, 2.—One death occurred in the person of a pensioner, very

many years in India. The other, in an old man, very intemperate during life. The whole digestive apparatus seemed to be one mass of disease. The result not yet known in the remaining case.

Hurt from Fall.—Cases, 2; Deaths, 0.

Severe Beating.—Cases, 2; Deaths, 0.—One was the case of a young woman, pregnant at the time; in six weeks afterwards delivered of a still-born child. This gave rise to a very serious investigation: but the medical testimony disproving the evidence of the woman, touching the death of the child before birth; the party was punished for the assault only. Comment on the other case is unnecessary.

Total,—Cases, 96; Deaths, 9.

THE APOTHECARIES' SOCIETY.

To the Editor of the Medical Times.

SIR.—Permit me to join you in your sympathy foryour correspondent (of last week) R. I., as well as with many of his class, who may probably not be considered by the forthcoming Medical laws so eligible to practice Medicine as those who have passed a regular medical examination. Your correspondent cannot of course be prevented practising surgery and midwifery, and he may feel satisfied that whatever changes may take place, there will be but little difficulty in his becoming recognized; if he belongs to the body he describes, of sound and experienced practitioners, all allowances will certainly be made, and there can be no doubt but the Court of Examiners will be open to all physicians and surgeons who may be desirous of acting as general practitioners.

Notwithstanding the value set upon the Apothecaries' licence by R. T., and the colonists, he should have conformed to the laws, by passing his medical, as well as surgical, examination, if he ever intended returning to his country to act in the capacity of a general practitioner; or should he be an army, navy, or East India Company's medical Officer of a certain standing, he may not be aware that the Apothecaries' Company will not interfere with him, as gentlemen entering those services, independently of obtaining the diploma of the College of Surgons, undergo an examination before a medical board appointed by the Government for that purpose. But I cannot accord with your correspondent, or yourself, Sir, as to the valuelessness of the Apothecaries' licence, being perfectly aware of the nature of the examinations, both at the College and Hall: at the former, it is strictly confined to anatomy, physiology, and surgery; nor is the nature of a candidate's general or classical education inquired into; I suppose that it is presumed to be correct; nor is he questioned upon his knowledge of the sciences connected with medicine. At the Hall things are very different; surgery is scarcely touched upon, but there is a good examination upon her sister sciences—medicine, chemistry, botany, materia medica, anatomy, with general questions on midwifery and the diseases of women and children, as well as Latin translations and prescriptions. Surely, Sir, you cannot complain at this addition to the examination at the College of Surgeons, nor can you deny the utility of such a test of the knowledge of the man who is about to become the Physician as well as Surgeon, to "*the millions*" who are unable to judge of his abilities, but are satisfied if they know he is fully qualified by law. And if the College of Physicians have not deemed it necessary for them to qualify persons for general practice, surely greater praise is due to the Apothecaries' Society, who have raised their standard of education and examination, as high as most of the Medical Institutions in the United Kingdom.

I have been induced, Sir, to notice this subject, not for the purpose of reflecting upon any part of the profession, but from a just conviction founded upon observation and experience. For years past, complaints have been made in the medical journals by members of the College of Surgeons, bewailing their hard fate, that they could not legally practice medicine without becoming apothecaries; they have even gone so far as to express it to be a disgrace to belong to such a body; in my experience, both at the hospitals and since, I have generally found that "*the grapes were sour;*" in most instances it has been from inability to pass, from not having received a proper preliminary education, being quite unacquainted with the Latin language (one of the greatest stumbling blocks), nor having paid sufficient attention to the other sciences; they have in consequence given it up in disgust, and commenced practising medicine and pharmacy at their own peril, and in turn became the greatest abusers of the apothecaries. These things I have noticed too often, not only in London but in the provinces; it is therefore to be hoped that the legislature will look to these matters, and let the fully qualified man only, whether physician, surgeon, or apothecary, pursue his arduous path unmolested, for he alone is able to do so with honour to himself, and justice to his fellow-creatures.—"*Palmam qui meruit ferat.*" I am Sir, your very obedient, humble Servant,

M. R. C. S., L. A. C.,
and a General Practitioner.

June 20th., 1844.

[Our correspondent has mistaken our opinions. We do not say, that the Apothecaries' license is valueless as a test of attainments, but as a source of honor and repute with the public. Won by harder work than higher sounding titles, the public cannot be taught to respect it.]—ED.

THE SOMNAMBULENT STATE.

To the Editor of the "Lincolnshire Herald."

SIR,—Some former remarks in your journal on this subject having been very favourably received, and reprinted in the *Medical Times*, I venture to address you again. I neither believe nor disbelieve the results claimed by the mesmerists, and merely wish to afford fair play by examining any existing analogies bearing on the subject. Artificial somnambulism certainly can be produced, but whether it differs from natural somnambulism I know not, neither do I pretend to know the real extent of the phenomena attending the latter state, beyond those popular stories which we hear of daily.

AN ENQUIRER.

1. Dreaming, nightmare, somnambulism, the disease of double consciousness, reverie, delirium, spectral illusion, hypochondriasis, lunacy, intoxication, and other anomalous states of the system, are all of them conditions more or less allied and naturally illustrative of each other. We may even consider the occasional or fixed habits of individuals or nations depending on this, and it may turn out that we may correctly state of some individuals that they "never were wide awake in their lives."

2. The primary condition seems to consist in a preternatural preponderance of the internal perceptivity; in all of them, also, the mind seems more or less passive, and wholly or partially to have lost its control over the current of images which may be presented to it, either by the natural association of the ideas or a power from without. Cicero mentions that in a dream parties will commit crimes from which they would revolt when awake.

3. In dreaming, external impressions often mix themselves up with the train of ideas. A person may dream that he is in the street, and feeling at the same time that he has not got on a hat, or other necessary part of his dress, may be placed in a very uncomfortable scene, or if the sensibility of his skin be so far deadened that he ceases to feel the support of the bed under him, he may dream that he is flying, or tumbling down an abyss. Amidst loads of trash, the medical man might deduce useful hints from one of the popular dream-books, inflammation, dropsy, worms, hunger, &c. &c. all forcibly intrude images upon the current of a dream. If the operator has power in a state of mesmerism to introduce at his pleasure external impressions upon the current ideas of the mind, which has lost its own control, it cannot be wondered that a mesmerised person should have said. "I have not any mind, my mind is in yours." The opening of a door may suggest a long *ex post facto* dream of burglary, or we may dream of a ruffian standing over us with a knife, and awake to the reality, and there is a well-authenticated story of a lady on whose wrist some morbid change occurred during sleep, and who was in consequence visited by a spirit in a dream, while the spirit left the impression as a token of the truth of its mission; and how can we, with such facts before us, deny the possibility of an absolute command of the mind from without.

4. It may perhaps be affirmed that the control of the mind consists in its ability to fix attention upon some one idea or class of ideas, and by so doing to increase their intensity, and associated power. The loss of this power of attention seems to be a primary condition in sleep, and sleep may be actually brought on by obstinately fixing the attention upon the image of a wind-mill, sheep passing through a hedge, &c., and obstinately bringing back the attention to it when the image vanishes from the mind, which it frequently does in a feverish state. Perhaps the power of fixing the attention is thus lost by its being over-exerted, and sleep follows. The absence of surprise at any thing which occurs in sleep may be connected with this wholly passive state of the mind. In dreaming also, though great distress of mind may be felt, bodily pain is not felt, a phenomenon which may also be connected with the passive state of the mind, and the loss of the power of attention, and may ultimately lead to the discovery of the mysterious causes of pleasure and pain. Pain perhaps may consist in involuntary compulsory attention, by a power from without. It is possible that the sensibility to pain in the mesmeric state, and certain states of lunacy may be connected with this condition of the mind. The elevation of the eyes and the abstraction of the mind among certain devotees, may have led to fanatical visions, and on the other hand the Almighty may thus have shielded the martyr from the worst power of his persecutors.

5. In dreaming, we are often delighted at the free current of our ideas, and the musician, the poet, and the orator is surprised at their flow. The faculty of attention acts as a sort of friction upon the current of our thoughts, regulates them, tends to keep the train continuous, and prevents it from starting aside under the associative power of the ideas immediately antecedent, and enforces a reference to the whole preceding train. When this power is suspended the measure of time seems also to be lost. In this state, also, images long-forgotten may revive; hence, we hear of persons in delirium speaking in a language known during infancy, or repeating passages from a learned tongue which they had heard pronounced aloud, and thus a person in a dream may easily be conceived to see his father point to the place of a lost deed where the dreamer may have seen it deposited during infancy. We may thus account for the facility and fluency with which a mesmerised person may follow the lead of the operator. Ease and grace in anything consists in our being able to dispense with sustained attention, or in doing it "without thinking of it."

6. We are told that in the mesmeric state the senses of hearing and smell become inordinately acute, so much so that the articles of dress belonging to different persons have been distinguished with as much facility as we read of in well-authenticated anecdotes of the dog. There certainly is no reason why the sensibility of the retina should not be similarly enlarged; if a closed letter be held against a strong light, the contents may be read, so that it becomes a mere question of degree. A series of printed papers should be enclosed in envelopes increasing in thickness and some of black colour to ascertain whether the faculty is one of mere degree. Neither should I consider it decisive against the faculty that some access of usual external light is required, as we find a deaf person enabled to hear by means of the beating of a drum.

7. But to avoid any involuntary deception in the preceding cases, I could wish that the person who folds up the papers should take them at random, so as to be himself unconscious of the contents. If the perceptive power of the somnambulant person is morbidly increased, he may become acquainted by certain external natural signs with the thoughts which pass through our minds. The changes of an expressive countenance open our thoughts to a practical physiognomist, some

can almost speak with their eyes after a little practice, some think aloud, uneducated persons cannot read in silence, and even among educated persons there may be some involuntary though trifling external expression. Some philosophers have affirmed that from habit we even think through the medium of language. There are some seemingly well-authenticated stories of Egyptians in the present day employing children to answer questions put by Europeans as to a description of their friends at a distance. One of these gentlemen, after some satisfactory answers, reports himself to have enquired very unfairly after the Grecian Helen, and to have received a description of a modern lady who may have been some Miss Helen Smith. It is not certain that some of the supposed phrenological manifestations have been induced by the operator unconsciously introducing a leading idea into the mind of the somnambulant person. It is a very remarkable phenomenon that we often receive from innumerable and very trifling impressions, a feeling which may not form itself into any distinct idea at the time, perhaps, merely producing undefined alarm at the time, or perhaps becoming definite in a future dream when the mind is passive. We may thus become imperfectly conscious that a person is concealed in a room, or that a person will die, or that a person has some very bad intention, and it is conceivable that such slight impressions may produce more definite ideas in the mesmerised state, and there seem to be some well-authenticated instances of such impressions producing a definite effect in inferior animals sooner than among men. If we admit the possibility of presentment, or the possibility that a person may become uneasy while an object of antipathy is concealed, or the possibility of the stories relative to the divining rod, as mentioned by Hutton in his Recreations and elsewhere, or the possibility of such a dream as we read of in the celebrated case of Maria Martin and the Red Barn, we must also admit that we can conceive notions of objects by their relations to other things, and that such objects may afterwards, under favourable circumstances, be presented as definite ideas to the perceptive faculty, and we may then admit that mesmerism may offer such a condition. It is true that an event presented by surprise to a person in a reverie, may strike us as being previously impressed and recollected, which explains many such phenomena, but by no means the whole of them. The supplementary resources of nature are wonderful; bodily feelings do not always amount to sensation; the powers of the blind John Metcalfe, of Knaresborough, and certain barbarous experiments on the bat are known.

8. If the above strained explanations fail us, we shall be driven to a still higher order of explanation. Our nervous power may depend upon electrical currents passing directly, or in a spinal form through the system, and we must conceive the electrical current in one person so to act upon the current within the patient that the two systems shall be thrown into complete harmony, and the images presented to one mind become in some degree coincident with those of the other. That an extraordinary sympathy and harmony of idea is often induced among individuals whose minds are thrown into the same attitude, is most certain. Two persons, after half-an-hour's silence, will at the same moment utter the same words. The magic action of electrical currents upon each other, may hereafter induce the revival of the term "Animal Magnetism," if such a condition be found possible.

9. If the supporters of mesmerism go beyond all this, and tell us that there is actual knowledge of persons and events, at a distance not to be explained in the preceding manner, they must rely upon the fact that every atom in nature, more or less, acts upon every other atom; they must rely upon the rapid telegraphic movement of electricity; they must quote some strange stories (not ill-authenticated) of the instantaneous communications of distant deaths, and the wonders of the second sight. Animals indeed, in some unexplained manner, find their way home, or follow their master to prodigious distances, though the horizontal position of the spine in the inferior animals may give them a sense of direction and space unknown to man. Finally, we must admit that waves of light reach us, even from the fixed stars, and it is certain that the telescope proves the possibility of a wonderful increase of discrimination, to say nothing of the boy at the siege of Gibraltar, who could see cannon balls in their flight, or the wonderful powers of some sailors in perceiving the approach of vessels by some effect on the atmosphere, even before their rise above the horizon. In mesmerism, we may suppose some power of excluding wholly all distracting images beyond those selected.

10. Some mesmerists claim even an occasional power of prophecy, which must rest upon the same ground as prophetic dreams, and the prophetic death-beds alluded to even by Homer. A shrewd person may often without difficulty foretell the future fate of individuals; and it is possible that a great variety of minute impressions may, in an abstracted state of the mind, assume a definite form, and may sometimes coincide with future events. [An Enquirer cannot write too much.—Ed]

PRACTICE OF HINDOO MESMERISM.

To the Editor of the "Medical Times."

Sir,—As your correspondents, who are now discussing the merits of animal magnetism, do not appear to be aware that the mesmerists of the present day are but reviving, under new names, what has been familiar to the Hindoo philosophers from time immemorial; and as the subject is curious in itself, and may be interesting to many of your readers, I annex an extract from that portion of *Ward's History of the Hindoos*,* where he treats of the Patunjulu philosophy. It will be evident from this that our modern mesmerists have yet much to learn, and that, in addition to the exhibitions of Messieurs Vernon, Collyer, and others, we may live to behold a first-rate performer at the Adelaide Gallery reanimate a dead canary bird or parrot, while his own body, for the nonce lies, lifeless, on the ground. I have not heard that this fact has yet been attempted here, although, I believe, one of our most able and enthusiastic mesmerists, Mr. G. of R. L., does not despair of appearing, in the body, to distant friends of congenial soul:—

"The Jogee, who has perfected himself in the three parts of *sungyumu*, obtains a knowledge of the past and of the future: if he apply sungyumu to sounds, to their meaning, and to the consequent result, he will possess, from mere sound, universal knowledge. He who applies sungyumu to the impressions of former births (lines of fate), from which actions and their effects proceed, will obtain knowledge of the events of preceding transmigrations. He who applies sungyumu to discover the thoughts of others, will know the hearts of all. He who does the same to his own form, and to the sight of those whose eyes are fixed upon him, will be able to render his body invisible, and to dim the sight of the observer. He who, according to these rules, meditates on his own actions in order to discover how he may most speedily reap the fruit of them, will become acquainted with the time, place, and causes of his own death. He who applies sungyumu to that compassion which has respect to the miserable, will secure the friendship of all. He who according to these rules, meditates on the strength of the powerful, so as to identify his own strength with theirs, will acquire the same strength. He who meditates in the same manner on the sun, as perfect light, will become acquainted with the state of things in every place. Similar meditation on the moon, procures a knowledge, from mere sight, of the union, progress and influence of the planets: similar contemplation applied to the polar star, will enable the Jogee (the *mesmerisee*), to distinguish between the stars and planets, and to observe their motions: by the application of sungyumu to the *centre of the bowels at the navel*, he will become acquainted with the anatomy of the human body: by a similar application of *sungyumu* to the cup at the bottom of the throat, he will overcome hunger and thirst: by meditating on the nerve *koormu*, which exists a little below the throat, he will obtain a fixed and unbroken posture in the act of *yogu*: by meditation on the basilar suture, he will be capacitated to see and converse with the deified persons who range through the aerial organs: by meditating on extraordinary presence of mind, he will obtain the knowledge of all visible objects: by meditating on the seat of the mind, or on the faculty of reason he will become acquainted with his own thoughts and *those of others, past, present, and future*: by meditation on the state of the Jogee, who has nearly lost all consciousness of separate existence he will recognize spirit as unassociated and perfect existence.

"The union of spirit and intellect, as the enjoyer and the thing enjoyed, in the work arising out of the natural order of things, is called the captivity of spirit. When the Jogee, by the power of Sumadhee, has destroyed the power of those works which retained the spirit in captivity, he becomes possessed of certain and unhesitating knowledge; he is enabled to trace the progress of intellect through the senses, and the path of the animal spirit through the nerves. After this *he is able to enter a dead or a living body*, by the path of the senses; all the senses accompanying him, as the swarm of bees follow the queen bee, and in this body to act as though it were his own.

"The collected power of the senses is called the animal soul, which is distinguished by five operations connected with the vital air, or air collected in the body. The body of the Jogee, who, according to the rules of dharuna, dhyanu and sumadhee, meditates *on the air proceeding from the anus to the head*, will become as light as wood, and he will be able *to walk in the fluid element*. The body of the Jogee who thus meditates on the air encircling the navel, will become glorious as a body of light. He who meditates on vacuum, will be able *to ascend into the air*."—Vol. II. page 214.

I need not add to the above extract much curious matter, which both precedes and follows it nor enter into any explanation of the terms of art which can be learnt by a reference to the work itself; but would only observe that the Hindoo saints are all self-mesmerisers, following the method adopted by Dr. Braid, of Manchester, in regard to his patients, restraining the breath, and fixing the eyes and thoughts on an object. The effect of a strong imagination, and habitual contemplation of one object, is alluded to in a late work by the Rev. Mr. Sandby, entitled "Mesmerism and its Opponents," who, in speaking of the Estatica and Addolorata of Lord Shrewsbury, remarks that "the involuntary effect of imagination after a preconceived idea, is so strong with sickly sleep-waking females, that through, the bare impression of the mind, nature might throw out the external phenomenon," namely: the small wounds marking the crown of thorns encircling the forehead, and the stigmata in the hands and feet. Mr Sandby proceeds to quote from the *Foreign Quarterly Review*, No. LXIII., the following example taken from *Lavergne's De l'agonie et de la mort sous le Rapport Physiologique, &c.*, which he remarks *strongly illustrates* the probability of the above opinion, and *shows the effect of habitual thought* upon the state of the body: "At this moment there exists in a village of the department of the Var, of which Brignoles is the chief town, a woman possessed by divine love. Since her earliest infancy, this woman professes the most ardent love for the Saviour; the passion *has always been her fixed idea*, the object of her aspirations and thoughts. She meditates and prays; and in her moments of ecstacy may have confided some of the visions to her friends. *When her prayer is at its height* (in other words, when the ecstatic state is most fully developed) a crown is seen to surround her forehead and the rest of her head, which looks as if it were opened by a regular tattooing, from each point in which pure blood issues: the palms of her hands and the soles of her feet open spontaneously, at the places where the nails of the punishment were inserted; her side offers the bleeding mark of a lance thrust, and, finally, a true cross of blood appears on her chest. Cotton cloths applied to those places absorb the red mark. This fact can be vouched for *by hundreds* in the

* Published by Parbury and Allan, London, 1822.

country." The unimaginative may smile at the credulity of the narrator of this phenomenon, and of the Reverend author who quotes him; but are there not many who will tell you, that they experience a thrill of horror, and a tingling or peculiar sensation through their whole body to the soles of their feet, on hearing the bare description of a dreadful accident which has befallen another? In corroboration of the fact of such exquisite sensibility in some constitutions, I may mention that it is recorded of one of the Eastern saints, that, on witnessing the punishment of a criminal, the marks of the lash applied to the back of the latter, showed themselves on his own. Looking then to the extraordinary effects of long and uninterrupted contemplation of an object, as the mode described in the extract from Mr. Ward's book, do we not see a possibility of a fact now treated as the superstition of an ignorant and bygone age? And is it not highly curious and instructive, that, from Hindoo authority, we derive a reason for the power, here alluded to, of *witches walking* (or sailing in a sieve), *on the fluid element*, or *ascending into the air*? A poor and houseless old hag, we may easily conceive to have been long troubled *with flatus arising from an empty stomach to the head*, and accustomed to *meditate on vacuum*, when she had not wherewithal to satisfy the craving void within. At all events, the coincidence is remarkable.

I remain, Sir,
Your obedient Servant,
A RETIRED EAST INDIA SURGEON.

Dundee, 24th June, 1844.

THE BOHEMIAN REMEDY.

(To the Editor of the Medical Times.)

SIR,—"What is the Bohemian Remedy?"—This question heads a very interesting article from "a correspondent" in your journal of June 15th. He says, "I presume neither of the noble Earls alluded to nor Dr. Foley, know of what it consists, or they would have made it known, but could it not be ascertained by chemical analysis, or has that been attempted?"

I feel perfectly warranted in saying, that neither of the noble Earls know exactly what the composition is; if either did, the same philanthropy that excited them *to procure*, and I shall say "administer" the remedy, would also render it a most agreeable duty to publish to the world for the benefit of their suffering fellow creatures, the composition and all other particulars of a means for averting the most dreadful malady our race is heir to.

In reply to the latter portion of the passage quoted, I have submitted the remedy to chemical analysis. By incineration, and destructive distillation it yields only the ordinary products of vegetable matter: namely: by the former process, a very light charcoal affording the usual alkaline and inorganic residue; by the latter an essential oil, oxygen, and hydrogen gases in addition to the results of the first process.

Accordingly I consider it to be exclusively a vegetable powder, but what that vegetable is (I need not say) chemical analysis cannot ascertain.

A description of it may be interesting. A light powder of a brownish green colour, interspersed with yellow particles as if the leaf, ribs, and footstalk were powdered together, an aromatic smell and taste resembling in both particulars "Buchu," but not so strong in either, and possessing diaphoretic influence in a very high degree. I regret that I cannot throw further light on the interesting subject. Yours Sir, &c., &c.,

H. FOLEY, M. D.

Kilrush, June, 19, 1844

THE LANCET THE TRUE ENEMY TO THE MEDICAL PROFESSION.

"We have seen him the untiring apostle of vulgarity and demoralization to youths whom he should have encouraged to gentleness and goodness; we have distinctly traced the degradation of our honourable fraternity, before the legislature, and the public, to the vile opinion of us he created."—*Medical Times*, No. 232.

"There is a very general feeling in the medical mind that the public are not disposed to estimate us at former high rates—to look upon the medical profession as of that weight and importance which it was once held to have in the community.

This feeling, we think, in the main, well founded; and it seems not very difficult to show the causes out of which it has sprung. Sorry we are to be compelled to say, that we have ourselves to blame in very considerable part, both for the more slender respect in which we are severally held, and for the minor influence that is allowed us as a body. We have been too eager to discover the errors which all as individuals necessarily commit in the practice of a profession so difficult as that of medicine; and more than this—of far more moment than this—we have been of late years incessant in our efforts to expose these errors to the common gaze, to hold them up in their nakedness, and as sins emanating from the ignorance and incapacity of their authors; these being often the very polar stars of our profession. Now the public can form no estimate of the difficulties in the way of judging rightly in points of medicine; but they can all appreciate an error when it is laid open to them, and they are told that the inference ought to have been different from that which was drawn—the procedure other than that which was followed. It was thus that the seeds of suspicion of the very foremost men in all the land, in point of medical and surgical position, were first sown; and it was no wonder that these seeds struck root, and by degrees grew up into lusty plants that now overshadow the whole profession. But these plants have proved very upas trees, and we, who of necessity remain under their shadow, have been the first victims of their poisonous breath.

* * * * * *

A gentleman, high in rank among us, is held as not having paid that attention to his friend, taken suddenly and seriously ill, which the circumstances of the case seemed to require; forthwith the tale is blazoned abroad; like the stream as it flows, the story gathers aggravating characters as it spreads, and finally it is so black and damnatory, that, lumped together, the whole profession are concluded to be monsters utterly heartless and unprincipled. Or otherwise, and thus: Another gentleman, who has achieved a reputation for urbanity, for kindness of heart, and for surgical skill higher, and in so far as practical tact and extensive knowledge are concerned, deservedly higher, than was ever achieved by any man before, is brought into the bear-garden of a common law-court in England, and badgered and baited by one sharp-tongued lawyer after another; there he uses language figuratively, that is immediately construed and set down literally, and forthwith we are looked upon as butchers, wading to mere manual dexterity through the blood of our fellow creatures—reckless of the mutilations we practise, without a pang for the pain we inflict.—The heart sickens at all this; but the vulgar gape, and the gentle are confounded, and refuse to give us their hands, and so there is a mark set upon us, and all the good we do, and have done—our sleepless nights, and anxious days, our generally honourable conduct, our self-sacrifice, our lives shortened in the cause of humanity—all go for nothing. It is thus that we have been blackened as a body, and every thing that could be done, to make us infamous, has been perpetrated."—*London Medical Gazette.*

TRANSACTIONS OF LEARNED SOCIETIES

ROYAL MEDICAL AND CHIRURGICAL SOCIETY, June 25.—Mr. Stanley, President, in the chair. The following papers were read:—

Observations on the recorded cases of operation for the extraction of ovarian cysts, by Benjamin Phillips, F.R.S., Assistant Surgeon to the Westminster Hospital.—The object of this paper is to bring together the results of these operations for the purpose of determining whether this plan of treatment is to be regarded as a benefit conferred on humanity, or not. Extirpation of ovarian cysts has been practised, as appears from the tabular arrangement of the cases, at least sixty-nine times. In fifty-cases, a tumour was extracted; in fourteen cases, adhesions, or other circumstances, prevented its removal; and in five instances, no tumour was found. Of the cases in which the operation was completed, the tumor being extracted, thirty terminated favorably, and the patients recovered; in twenty instances, the termination was unfavorable, and the patients died. Of the five cases in which no tumor was discovered, all recovered. Of the fourteen cases in which adhesions, or other circumstances, prevented the extraction of the tumor, eight recovered, and six died. The proper way, therefore, according to the author, of looking at this plan of treatment, is to observe the number of cases submitted to operation, and the number of recoveries after the removal of the tumor. He conceives this to be the fair way, because what has happened already, is likely to happen again. Adhesions may be too strong and extensive to make removal prudent; the tumour may be other than ovarian, or it may be that no tumor can be found. Regarded in this light, it appears that the operation has been undertaken sixty-nine times, and that, in thirty instances, the patient has recovered after the extirpation of the tumour. It is true, that forty-three patients survived gastrotomy, but many of them were subjected to such a painful operation, on the one hand, without necessity, and on the other, without being disembarrassed of the disease. Two different plans have been followed in the operation, and it is proper to ascertain whether there has been a corresponding difference in the results. In the one plan, the incision of the abdominal parietes is sufficiently extensive to admit of the removal of the tumour entire, often extending from the ensiform cartilage to the pubes. In the other plan, the incision has had the extent necessary for the removal of so much of the tumor, as would not escape through a puncture or incision, made in it before the extraction was attempted. If the tumour contains little or no solid matter, a puncture might cause the complete evacuation of the contents, and the cyst might be removed through a very small opening. The author thinks the evacuation before extraction, and not the exact length of the incision, the important distinction between the two operations. The principle of extraction entire has been followed in forty-two instances: the instances of successful removal by this plan, amount to eighteen. The cases in which the plan of procuring the evacuation of as much as was practicable of the contents of the tumour, before its extraction was attempted, amount to twenty-five; the instances of success to twelve. The evidence is then directed to the consideration of the following points:—first, can we determine with certainty whether a tumor be ovarian or not? If not, have the failures been so frequent as to constitute a reason why the operation should not be attempted? Secondly, supposing a tumor to exist, and to be ovarian, can we ascertain the nature of its contents, as well as its connections? If not, have the failures been so many as to be an objection to the adoption of the operation at all? Thirdly, are the results of this plan of treatment sufficiently favorable to justify us in preferring extirpation to any other mode of treating ovarian tumors? If so, what plan of operation promises most success? The general materials, together with the circumstance, that the author has been present, either as principal or assistant, in six of the operations, have given him peculiar facilities for fairly considering these questions, and the conclusions he comes to are, that we have not the means of determining with absolute certainty, whether a tumor be an ovarian cyst or not; though he thinks the chances of cure ought not to be so large as is represented by the tables: that we have no sure means of ascertaining the contents and connections of tumors presumed to be ovarian. After an elaborate consideration of the bearing of the third question, he says, the aspect in which the question should be ultimately regarded, is this: the circumstances of the patient's case are so pressing that relief must be afforded, and as all other means have failed, it must be by an operation. Tapping is usually a successful operation, so far, at least, as to afford immediate relief, and in an ordinary case, the patient may reasonably expect to live four or five years, not in comfort, it is true, but requiring re-

lief three, four, or five times, it may be, in a year. Extraction, though not a very painful, is a dangerous operation ; the experience we possess justifies us in the expectation, that in, at least, forty-three cases out of every hundred, the tumor may be extracted, and life saved; but, at the same time, it must not be concealed, that out of the sixty-nine operations to which reference is made, twenty-six died, and that soon, in fact, in a few days. If the results already stated should be held to justify the performance of the operation of extraction in cases of ovarian tumors, it is incumbent on us to select the operation which is least painful and perilous to the patient. It must be borne in mind, that the plan of making such an incision as would admit of the extraction entire, was employed in forty-four cases, and that the recoveries after extraction amount to eighteen cases. The plan of making such an incision as would admit of the extraction, when as much as possible of the contents were removed, was followed in twenty five cases, of which twelve recovered after extirpation ; the proportion of recoveries being, in the one case, forty-three, and in the other, forty-eight, per cent. The author's own experience is much more favorable, being five out of six. It is evident, therefore, that the preponderance of success is in favor of what is termed the minor operation, that is to say, an operation in which the incision is as small as is consistent with the easy removal of an emptied cyst, provided it be large enough for the convenient application of the ligature around the pedicle.

Dr. Moore complimented Mr, Phillips on the value of his paper, and expressed his gratification that the subject was again brought forward for discussion, for had it been the custom in that Society, as elsewhere, to come to a decision in the affirmative or negative, respecting any question before it; he thought, that at a recent meeting, when two cases of operation were brought forward, an opinion against the value of the operation would have been strongly pronounced, as the general feeling then expressed was decidedly hostile to it. There was an important omission in Mr. Phillips' paper, inasmuch as no allusion was made to the various modes in which ovarian disease presents itself. According to his (Dr. Moore) experience, which extended over a period of many years, there were three forms or varieties of the disease. He did not mean to imply, that there were not any more forms, but there were, at least, three of which he himself was cognisant. In the first form, the ovary itself took on diseased action, and became degenerated; a cyst or sac was formed, which enlarged more or less, and contained a thin watery, not ropy, fluid. This form of disease may go on for a certain number of years. In the second variety, each Graafian vesicle is the seat of disease, and is enlarged, forming together a mass which, on percussion, may present a similar appearance to the other, but it contains a thick yellowish tenacious fluid in several different cells, which cannot be evacuated by paracentesis. The third form does not exhibit any of these characters; it appears to be situated between the ovary and the peritoneum, and to have resulted from irritation or inflammation in the neighbourhood, and it contains a thick ropy fluid. The discrepancy in opinion respecting the value of the operation, he thought might be thus, to a certain extent, at least, accounted for, from the different forms which the disease presents not having been duly considered. In the first variety, which he had described, paracentesis might be of advantage, and the disease might not return for years after the performance of that operation. He did not think, that it could remove the second form of the disease ; nor that medicine could be of any service, and, as in the third variety there was an adventitious structure produced, if the fluid contents were removed by tapping, the cyst would re-fill, and the disease would go on to the destruction of life. This was the result of his experience, and he thought it explained the discrepancy of opinion which existed among gentlemen who had not attended sufficiently to these different forms of disease, which, as he had shewn, were essentially distinct, and consequently must materially modify the value of the operation. In making these remarks, he had passed by collections of fluid in the Fallopian tubes without notice, as he had never met with any such cases. He (Dr. Moore) regarded this as an important era in surgery, and was disposed to hail the operation as one calculated to relieve suffering humanity. As far as could be at present ascertained, the mortality was not so great as after the operation of lithotomy, nor that from the amputation of a cancerous breast, operations which, he believed, no surgeon would hesitate to perform. The last-named operation was infinitely more fatal.

Mr. Stanley remarked that an important question had been raised by Dr. Moore relative to the different forms of ovarian disease, and he directed the attention of the members to the means of diagnosis between them, and of their appropriate treatment.

Mr. Brown begged to offer a few words on the very excellent paper which had just been read, and which, he considered, was very carefully drawn up. There was, however, one point on which he differed with the author, from practical experience. If he understood the author's meaning aright, there was a sentence to the effect, that diuretics, &c., combined with pressure, had all failed in effecting a cure. Now, he (Mr. Brown) had read a paper before the Physical Society of Guy's Hospital, containing the details of four cases of ovarian dropsy, which had been all treated by him successfully. He had, since then, had one more successful case ; and another was now in progress of cure. The distinction that had been drawn by Dr. Moore between the three varieties of the ovarian disease, he regarded as very important ; all the cases which had been under his care were instances of the first of these varieties, in which the secretion of fluid had been the result of inflammation. One of these cases had been seen by Dr. Locock, Dr. Bright, Dr. Arnott, and others, and was distinctly recognised by them as an instance of ovarian disease. He (Mr. Brown) saw the patient first when the tumour was about the size of an egg, about four years previously to her being placed under his care. The usual treatment was adopted, but without any improvement. When he took charge of the case, the young lady was about eighteen or nineteen years of age, and the tumour as large as a seven months' pregnancy. He exhibited mercury internally, so as to produce slight ptyalism, gave her a combination of diuretics and tonics, and applied careful bandaging to the abdomen. Under this treatment her health improved, and absorption took place to a certain extent ; he then performed paracentesis, and drew off about nine pints of a clear watery fluid, after which he had recourse to tight bandaging of the abdomen, together with pressure by means of pads, &c. The patient fully recovered, and now, although eighteen months have elapsed, she remains perfectly well. In another case, which is now under treatment, and which had been seen by Dr. Marshall Hall and others, who had all agreed that it was a case of ovarian disease, the same plan of treatment has been adopted. The patient previously had increased eight inches in the circumference of the abdomen in two months, and her health was also much affected ; but, after having been under treatment about six weeks, it has again improved. The effect of the remedies has been to stay secretion, and promote absorption. This patient's mouth has been slightly sore, and he should continue to keep it so, as long as the tumour continued to diminish in size ; and, after that, he should perform the operation of paracentesis. In conclusion, Mr. Brown observed that the remarks he had just made were intended, by him, to be regarded as applicable only to the first form of the disease described by Dr. Moore. He did not know how far they might be applicable to the other varieties, and he protested against gentlemen employing one part of his plan of treatment, and omitting the other, and then reporting their failure, an instance of which he mentioned to the society.

Mr. F. Hale Thomson remarked that the observations that had been made by Mr. Brown did not at all coincide with his experience, and were not of such a conclusive nature as to carry conviction to his mind. He did not think that any remedial measures could be used which could remove tumours such as those in question—a tumour constituted by a cyst, which fills the entire abdomen, the contents of which are a thick gelatinous fluid, and which is supplied by an artery as large as his little finger. He had seen three or four cases in which the operation had been performed, and in all of which it had terminated successfully. In the last case, which was operated on by Dr. F. Bird, there were seven or eight medical men present, who all examined the abdomen prior to the operation, and were of opinion that the cyst contained fluid. After the cyst was removed, however, it was found not to contain any fluid, but a thick gelatinous substance. He (Mr. F. H. Thomson) could not conceive it possible that a body weighing thirty or forty pounds could be removed, either by pressure, diuretics, or mercurials ; and besides, it is the opinion of all surgeons that cysts, wherever they may be situated, are not capable of removal by medicines. In these cases, also, it should be remembered that the mercurial treatment was rarely adopted until the patient was at the last ebb, when, at all events, she was decidedly unfitted for a course of mercury ; and. indeed, he was of opinion that no medication was adapted for the treatment of such cases. He considered the operation to be one of the greatest and most important improvements in modern surgery, but it is totally inapplicable to hospital practice, inasmuch as the means of ensuring a proper degree of temperature, which must be maintained, from prior to the operation until perfect convalescence, are wanting. The operation he believed to be both simple and easy of performance ; but unless all the advantages of a private residence can be obtained, and the case is thoroughly under the control of the operator, as regarded the regulation of the temperature, diet, &c., he did not think there was any chance of saving the life of the patient.

Dr. Theophilus Thomson was desirous to put a question to Mr. Phillips relative to the cases to which he had referred, as having been operated on in 1816. He wished to know if he was acquainted with the after-history of these cases, as it is not sufficient to know that the patients escaped death by the operation, and survived it a year or so ; it was necessary that their subsequent history, for at least five years afterwards, should also be ascertained. If it should prove, from such an enquiry, that the diseased condition was entirely a local one, then it would be an argument in favour of the operation ; but if, on the contrary, it was found to depend on a vitiated state of the blood, etc., it would then be a more difficult question to decide. Women are occasionally seen, who get into bad health, and are threatened with various diseases about the head or chest, or about the heart ; but which, in some instances, settle in the ovaries, and produce this disease. Some of these cases are tapped, and the patients afterwards die of disease of the heart, of the head, or the chest. If the patients who were operated on in 1816 have gone on without the occurrence of disease, either in the heart, lungs, or in the other ovary, their cases would be in favour of the operation ; but, if otherwise, they must then be regarded as militating against it.

Mr. Davis, of Hampstead, expressed his regret that Mr. Phillips had avoided giving, in his communication, his own opinion as to the value of the operation. He (Mr. Phillips) had mentioned cases in which the operation had been performed, and no tumour found afterwards. He thought these cases required some explanation, as he had never met with a case where there was suspicion of ovarian disease, in which there was not some enlargement.

Mr. Coulson asked Mr. Phillips if he thought that age exercised any influence on the success of the operations?

Mr. Phillips would content himself with replying to some of the remarks that had been made. Mr. Brown had described cases in which the contents of the ovarian cyst had been removed, and the tumour had not filled again ; it would not be difficult to find twenty or thirty different kinds of treatment, which had been attended with the same result ; in fact, it was scarcely possible

to find any mode of treatment, however extraordinary, which could not boast of some cases of success. With regard to the employment of pressure, that had been largely tried, and in the end abandoned; there were several circumstances that might lead to error. In respect to this mode of treatment, he could easily understand that a tumour measuring thirty-three inches in circumference might be reduced to thirty-one inches in a short time by pressure; he could understand that a tumour which previously did not occupy any space in the pelvis, might be pressed down into it; and thus the disease would appear to be removed from the abdomen. He could say but little in answer to the question of Dr. T. Thomson. The earliest case was that of Dr. McDowell, in America, and the ultimate results were not known. The same may be said of Mr. Lizar's cases also, and the operations, that have been performed since, are not of sufficient date to supply the deficiency. He was not able to furnish much information in answer to Mr. Davis' question. In Mr. Lizar's case, the abdomen had been very carefully examined, and there did not exist a doubt in the minds of any, as to the nature of the disease, but when the abdomen was opened, there was not found any thing beyond a very prominent sacrum, which was supposed to be the cause of error. There is a case at present in the Middlesex Hospital, which was sent up expressly from the North of England, to undergo the operation. The patient had been examined in the North by several medical men, who all concurred in the opinion that there was ovarian disease; and yet the complaint, after all, proved to be only hysterical tympanitis. The diagnosis is, therefore, not so easy as has been supposed. Such cases, it may be said, should not be causes of error; but they have been so, and what has been, may be so again, —and on that account, therefore, he drew attention to it. With regard to Mr. Coulson's question, as to the influence of age, he did not think that had been sufficiently made out. Mr. Key, indeed, had an idea that it was unfavourable, but a good many of the successful cases had occurred among young women, between twenty and thirty years of age, and, indeed, it was a question whether the operation should be performed for persons advanced in life. He did not think that it would be worth their while incurring the risk. The operation would be principally of service for young women. With respect to attention to an elevated temperature, there could not be a doubt but that it promoted the success of the operation; but yet there were many cases where no such attention was paid, and yet the cases did well. The operation was thus far unfitted for hospital practice, that it was not suited to be performed in a large operating theatre, as neither there nor in extensive wards could the requisite degree of temperature be maintained; but if it is to take rank as an operation in surgery, it must be performed in the hospitals, and arrangements must be made so that the requisite precautions may be adopted.

Mr. F. Hale Thompson explained his views respecting the elevated temperature he deemed necessary, which he founded on the experience of Dr. F. Bird.

Dr. Frederic Bird said that he did not rise for the purpose of discussing any of the arguments brought forward by the author in his paper, or of referring particularly to any of the cases it contained, as he conceived that it would be impossible to arrive at any just conclusion from the statistical tables that had been made by Mr. Phillips, inasmuch as cases had been associated together which could not be received as presenting features in common. The author had classed in one great group, cases in which diseased ovaria had been successfully extirpated, without reference to any one method of operating; also, cases in which the tumours could not be extracted, as well as those in which the abdomen had been laid open and no tumour found; and, lastly, those in which the tumour was found to be other than ovarian. Arguments based upon data such as these could be but of little value, and any practical inferences that might be drawn from them, could scarcely fail to be both erroneous in themselves and mischievous in their application. He thought, moreover, that the value of the operation, as a remedial measure, could not be determined by the cases as at present recorded, for it was still to be regretted that unsuccessful cases had been suppressed, whilst those which had had a favourable termination had been prematurely published. But, although the cases quoted by Mr. Phillips could not be received as determining the expediency of the operation, they, nevertheless, afforded valuable evidence in favour of the method of operating by an abdominal incision of moderate size; the ratio of mortality being very much greater in those cases in which the large abdominal section had been practised. The mediate operation would be found the most successful. He concurred in the observations that had been made by Mr. Hale Thomson, relative to the employment of a heated atmosphere; he regarded the elevated temperature as a valuable prophylactic measure in preventing the accession of peritoneal inflammation. In more than one case in which he had operated, considerable manipulation had been necessary, in order to remove peritoneal adhesions; but so long as the cutaneous action was maintained by the heated air, and other means, no unfavourable symptom occurred, and convalescence had quickly followed.

With regard to the treatment proposed by Mr. Brown, he believes that very little need be said to prove its inefficiency; the cases on the supposed success of which Mr. Brown founded his plan of treatment were vague and unsatisfactory; they had occurred nearly thirty years ago, had not been even seen by that gentleman since, and the only notes preserved of them were very incomplete, and lastly, they had occurred in individuals whose ages were opposed to the ovarian origin of the dropsy from which they suffered. One case only was of modern date, and in that so little time had elapsed, that it would be unsafe to pronounce it cured. He had given Mr. Brown's plan of treatment a fair trial in several cases; in none had he found any beneficial effect, and in one mischief had resulted.

Mr. Davis of Hampstead mentioned that he had been consulted respecting some young chlorotic girls, who, about the period of puberty, had enlargement of the abdomen to such an extent that their female acquaintances spread a report that they were pregnant, and he had great difficulty in disabusing the minds of the friends. All these cases did well without any operation, and he was not certain, that, there were instances of ovarian disease, although he believed there was something wrong about the ovaries. One of these ladies had since married, and has borne five or six children.

Mr. Hale Thomson would be glad to learn Mr. Phillips' experience with respect to the greater or less frequency of ovarian disease in females who had been pregnant, in contra-distinction to those that have not.

Mr. Phillips, before replying to Mr. Hale Thomson's question, would take the opportunity of correcting a misapprehension which seemed to exist relative to the manner in which he had classified the cases, which he had done on the broad principle of arranging together all the cases in which the operation was performed, and all those in which recovery took place. This he thought was the best method of classification, which he could adopt. With regard to Mr. Thomson's question, cases have certainly occurred, where the patient has borne a child after the operation of tapping, and some have been pregnant before the tumour had formed, but he was not able to state the proportion of these cases, to those where pregnancy had not taken place.

Cases of mollities ossium, with observations, by S. Solly Esq., F.R.S., assistant surgeon to St. Thomas's Hospital, and surgeon to the General Dispensary, Aldersgate Street.—The author of this paper relates two cases of mollities ossium in the adult, which have lately come before him. The first case was that of a young woman, aged 29, in whom the disease first exhibited itself seven years previous to her death, by a fracture of the clavicle caused merely by the exertion of lifting a stool. The disease advanced in the spinal column and skull, in which latter portion of the skeleton it was of such an acute character that the membranes and substance of the brain became secondarily affected, and insanity was the consequence. When in St. Luke's hospital in 1840, whither she was removed in consequence of her mental derangement, the lower extremities gave way, and, depriving her of the power of walking, she was obliged to push herself about the floor upon her haunches. On the 11th of April 1842, she was admitted into Hanwell asylum, where she died in the October following, the disease having attacked almost every bone in the body. The second case was that of a woman aged 39, whom Mr. Solly admitted into St. Thomas's hospital a few days before her death. In this case the progress of the disease was rather different; it commenced in the lower extremities, and attacked the rest of the skelton subsequently. The immediate cause of death was suffocation from contracted thorax, one lung being wholly impervious to the air, and the other nearly so. Mr. Solly proposes that this disease should be distinguished from other kinds of softening of the bones by the title of *osteo-malacia rubra et fragilis*, from the color which the bones invariably exhibit in their interior when divided, and the fact that they almost invariably break and not bend as in rickets. The two adjectives appear advisable, as the redness in the interior exists in the early stages of rickets, an essentially different disease, whilst the liability to fractures is not characteristic of this complaint alone. From a comparison of the symptoms during life, with the appearances after death, he has been led to believe that the disease is of an inflammatory character: that it commences with a morbid action of the bloodvessels, which gives rise to the severe pain in the limbs invariably attendant on it, but more especially in its commencement, and exhibits itself after death by an arterial redness of the part. The absorbent vessels are at the same time unnaturally excited, and the earthy matter of the bone is absorbed, and thrown out by the kidneys in the urine, which excretion is sometimes so abundant that, as in the last case, it clogs up the calices and pelvis of the kidneys, and forms a solid calculus. The important fact of the excretion of the phosphate of lime had not, according to the author, been previously established. Earthy deposits in the urine have been almost always observed in these cases, but the chemical characters have never been minutely examined. The place of the phosphate of lime in the bones is supplied, he supposes, by that morbid secretion of red grumous matter which has been so universally found in this disease, and which was abundant in both the cases just related. The microscopic examination of this matter, shewing cell-development in its various stages, confirms the impression that it is an adventitious morbid product, and not simply the fatty matter of the bone, altered by the effusion of blood into it. He thinks that the enormous hypertrophy of the bones of the skull in the first case demonstrates that mollities ossium is an active disease, and not a mere atrophy; and the inordinate vascularity of the bones of the skull, though unaccompanied by increase of thickness in the second case, proves in his opinion nearly as much. He concludes with several observations on the symptoms and the treatment of the disease.

The paper was accompanied with numerous drawings, which represented the remarkable deformities produced by the disease in the two patients, and illustrated the changed condition of the interior of the bones, as exhibited in several sections.

Case of acute retinitis, caused by the use of the microscope. By William White Cooper, Esq., Surgeon to the North London Ophthalmic Institution, &c.

The following case is considered interesting by the author, as offering a warning to those microscopical investigators who are in the habit of pursuing their researches with powerful instruments, and the aid of strong and concentrated light.—Mr. G——, a gentleman well known for his remarkable skill in minute and microscopical dis-

section, was engaged on Friday, the 29th of March last, dissecting the nerves of the human tongue, under a powerful microscope, and in a situation exposed to the full influence of the sun, which, although occasionally obscured, burst forth at times with great power. The nerves, having been cleanly dissected, were of a dazzling white, and, whilst he was intently regarding them through the microscope, the sun, which had previously been obscured, suddenly shone forth with all its brilliancy upon them. Acute pain was instantly felt in the eye, pervading the whole globe, so severe as to induce Mr. G. to start back and utter an exclamation. He paused from work, but for some time was not able to see any thing with that eye, the spectrum of the sun continuing before it whether closed or open. In about twenty minutes, however, this, as well as the pain, had sufficiently subsided to enable him to resume the work with the other eye; but the injured organ was not free from uneasiness until the evening. The following day the eye was not painful, and he incautiously used it to complete his dissection, when the very same occurrence took place as on the previous day—the reflected rays of the sun being thrown powerfully on the retina. This time the shock was excessive; great and deeply-seated pain pervading the whole globe, with much intolerance of light, immediately set in, and the spectrum of the sun was most distressing. He remained in acute suffering all the evening and following night; and, on the next day (Sunday), it continued to increase, with a sensation of fulness and tenderness of the globe, and extreme intolerance of light. Fomentations failed to afford relief, and when he consulted Mr. Cooper, on Monday morning, the following were the symptoms:—Acute, deep-seated pain in the eye; exquisite tenderness, especially at the upper half of the globe; great intolerance of light; profuse lachrymation; any attempt at vision produced luminous spectra; pupil contracted; iris natural; conjunctiva, but slightly injected; pulse, feeble and irritable: he complained of weakness and mental depression. He was sent to bed in a darkened room, and ordered to apply twelve leeches around the eye, to foment, and to take a purgative pill and dose. Mercury, he stated, always disagreed with him; and this, which is so important an auxiliary in such cases, was, therefore, obliged to be used with great caution. The next day he was rather easier; friction of the brow and temple, with mercurial ointment and opium, was directed. Pil. hydrarg., with conium, ordered at night, with salines and antimony at intervals. The following day all the symptoms were alleviated. The antimony was omitted, but the mercurials directed to be continued.—On Thursday, a still greater improvement was manifested, the eye being perfectly free from pain, except when exposed to the light. There was, however, great debility and general exhaustion, and half a grain of quinine, twice a-day, with a moderate meat diet, was ordered; the mercurial friction being continued. This treatment, with counter-irritation behind the ear, and the use of a mild astringent collyrium, was steadily pursued for a week with advantage, although the least exertion of the eye immediately produced luminous spectra. The further treatment of the case presented nothing remarkable. The eye gradually and steadily recovered, and is now perfectly well. —From the state of general debility in which the system was at the time of the attack, taken in connection with the constitutional antipathy to mercury, the free exhibition of the medicine was inadmissable,—whereas the patient did perfectly well under its cautious use, the system being at the same time supported by a nutritious diet, and the careful exhibition of tonics.

Some statistical records of the progress of the Asiatic cholera over the Globe. By S. W. T. Merriman, M.D.

The author's attention was first directed to this subject, by being appointed to deliver the Thurston oration last year at Caius' College, Cambridge, taking "cholera" as the immediate subject of his thesis. He then found that much authentic information was wanting to render the history of this pestilence complete, and he endeavoured to procure the necessary data for filling up the vacancies. By the kindness of Sir W. Pym, he obtained from the Privy Council Office a copy of the summary of the reports sent up daily to the Central Board of Health, and containing a vast body of most valuable information never published. This summary includes all the cases reported between Oct. 26, 1831, and Dec. 31, 1832; being about 82,000 in number, occurring in 422 places in Great Britain, which he has analyzed thus: places in England 277, Scotland 127, Wales 17, and Isle of Man. He has made several analyses of the information thus obtained, and has extracted the returns from the principal places, thus presenting, at one view, a general idea of the extent of the ravages of the disease, and also of the dates of the first and last cases, and the consequent duration of the disease in each place, the number of cases, deaths, recoveries, with the proportion of the mortality, and also of the population affected, &c. This he has prefaced by a very concise account of the progress of the disease over the globe, and has followed it up by a recital of all the facts that have come to his knowledge of the subsequent history of the disease spreading over America and the southern parts of Europe; a part of the history hitherto scanty and meagre. The author has also copied an account given by Mr. Henry, surgeon to the forces, of the precautionary measures taken at Kingston in Canada, to prevent the occurrence of the disease in the army by infection; or, if present, to restrain it as much as possible. The barracks were isolated, the soldiers relieved as much as possible from hard work, but carefully kept at light and agreeable occupations, they were carefully inspected each day: it was noticed with what appetite they took their meals, and any, the least appearance of disease arising, was instantly attacked by appropriate treatment, so that remarkably few cases—and, of course, fewer deaths--occurred in the army stationed at Kingston. Saline transfusion was tried with great temporary success; yet, although one man was kept alive for seven days by constant pumping, not a single case eventually recovered. Mr. Henry's "favourite remedy was castor oil, combined with a small quantity of laudanum, given in some grateful and stimulant fluid, as hot as possible, making the patient lie on his right side for the assistance of gravitation towards the pylorus, and to prevent nausea." This plan he used, he says, in some hundreds of cases.—Acetate of lead was found to be very beneficial in the attack of cholera in 1834; also bleeding, where the spasms were strong; but, in another form of the disease, debility was the characteristic, and, in these cases, venesection was injurious.

An account of the dissection of a cyst containing seminal fluid. By James Paget, Esq.

The cyst described in this paper was situated on the upper and inner part of the epididymis, external to the tunica vaginalis. It was about two-thirds of an inch in diameter; its walls were thin, but opaque, and composed of a fine fibro-cellular tissue, lined by a very delicate tesselated epithelium. It was filled by a milky-white non-albuminous fluid, in which there were numerous dead spermatozoa and spermatic granules. The most careful examination shewed that the cyst had no open connection with the *vas deferens*, or any part of the seminal tubes; it was on every side closed, and isolated from the surrounding parts. In explanation of this, and similar cases of cysts containing seminal fluid, (for their contents are not merely spermatozoa floating in an ordinary fluid, but semen, more or less perfectly formed,) the author suggests that their occurrence is analogous to that of cysts most commonly found in the ovaries, containing hair, epidermis, sebaceous matter, and products of the skin. In these cysts, either the whole or part of the wall is formed of true skin-tissues, with its various imbedded organs of hair-follicles, sweat glands, &c., all of new formation, a fact which is more remarkable than that, close by the organ by which the materials of the semen are naturally produced, and therefore, in some measure, under its influence, cysts should be formed which can secrete the materials of the seminal fluid. And as in the cysts containing hair, &c., these organised secretions are often found imperfectly formed, so in these seminal cysts the semen is probably sometimes very imperfectly-organised; in evidence of which, the author gives an account of the dissection of two cysts, like that first described, in which bodies, like imperfectly-formed spermatozoa and spermatic granules were found in a thin milky fluid. In the first described case there was a cyst containing about four ounces of fluid, like that of ordinary hydrocele of the tunica vaginalis, but no organic particles. This cyst was in front of the spermatic cord, and completely separated from the cavity of the tunica vaginalis; but it had been tapped, in the belief that it was a common hydrocele, and its true nature was not discerned till it was dissected. The author suggests that in the cases in which it has been supposed that the fluid of common hydroceles contained spermatozoa, the fluid has been drawn from cysts like this, and not from the tunica vaginalis; and that, as the cysts in which hair, &c., has been found, after a time wholly degenerate, and lose their cutaneous tissues, so seminal cysts may, after secreting seminal fluid for a time, degenerate and secrete a common serous fluid; or serous fluid from one part of their walls, and seminal fluid from another.

A few remarks upon the origin and treatment of syphilis, and upon the extraordinary prevalence of the disease in the East, as compared with the West Indies, with the marked influence of famine in extending its ravages. By John Clark, M. D., Staff Surgeon, (2d class), communicated by Dr. Gordon, Deputy Inspector General, and Vice President of the Society.

The author presents a table showing the number of patients admitted into the hospital for gonorrhœa and syphilis, in regiments stationed in the East and West Indies, during the year 1829, and he deduces from it, that more cases of disease occurred in each individual regiment, in the East Indies, than were met with in the same time in five regiments which served in the Island of Jamaica. In another table, which contains the admission for the same diseases in the 13th regiment of dragoons, during fifteen years that it served in the East Indies, the author makes a contrast between the years of plenty and those of famine; and he shows that there was an extraordinary increase in the number of cases during the latter, compared with the former years. To account for these differences, the author enumerates various circumstances in the mode of life of the native females in the two parts of the globe, which may explain the greater freedom from the above diseases in the West Indies compared with the East; and he adverts particularly to the encouragement given to marriage, as well as the exemption from famine among the negroes in the West Indies, as contrasted with what is met with in the East. The author concludes by discussing, at length, several general questions relating to syphilis and its treatment.

Case of fistulous communication between the intestinum ileum and urinary bladder simulating stone in the bladder. By W. C. Worthington, Esq., Surgeon to the Lowestoft Infirmary, and Fellow of the Royal Medical and Chirurgical Society. Communicated by James Copland, M. D., F. R. S., &c.

The patient, a female, 65 years of age, previously enjoying good health, began four years ago, to suffer from pain in the right iliac region, the cause of which could not be satisfactorily traced. Having continued to experience this pain, symptoms, indicating disturbance of the urinary organs, commenced in November, 1842. Her pain was now much aggravated; she had frequent and painful micturition; the urine was bloody, ropy, and highly offensive; and fragments of extraneous matter, the exact nature of which was not ascertained, were often found deposited from it. On sounding the bladder no calculus was felt, but there was a grating produced by moving the instrument, which led to its

being supposed that some malignant ulceration had taken place in the coats of the bladder. The treatment consisted chiefly in giving anodynes to relieve the pain. The patient survived about four months, and died from an attack of diarrhea. On examining the body after death, adhesions were observed between the convolutions of the intestines and the pelvic viscera. By further dissection it was found that a fold of the intestinum ileum was closely adherent to the fundus of the bladder, and that a communication existed between the two cavities, by an ulcerated hole, which extended through the coats of the intestine and the bladder, and was sufficiently large to admit the point of the index finger. On slitting open the bladder it was found partly filled with fæculent matter, and undigested food, such as currants, seeds, and other vegetable matter. The coats of the ileum, near where the ulceration had taken place, were thickened and indurated, and the canal consequently strictured. The author concludes, by quoting Dr. Copland's Dictionary of Practical Medicine, where similar cases are referred to with interesting observations on fistulous communications between the intestines and other viscera.

Proposals for the improvement of diagnosis in the investigation of the diseases of the uterus, with an account of a newly invented speculum uteri; by Protheroe Smith, Esq., assistant teacher of midwifery at St. Bartholomew's Hospital, and surgeon to the Hospital for the Diseases of Women, &c.

The speculum described in the paper consists of a glass cylinder, fitted to an outer one of metal, within which it slides. The metallic tube has its inner surface highly polished, the reflecting powers of which are still further increased by a glass cylinder which it contains. The edge of the smaller, or uterine extremity, is carefully rounded into a smooth ring, which projects slightly from the inner surface, facilitating its introduction per vaginam, and also presenting a limit to the further progress of the internal tube. In its sides is cut an oval aperture of about three inches in length and two in breadth, and extending to within an inch of the uterine end of the cylinder. The other extremity terminates in a rim, having its surface blackened for the purpose of absorbing any rays of light which might otherwise be reflected, so as to dazzle the eye of the observer. There is also a corresponding rim to the glass tube, by which it is more easily withdrawn from the metallic tube. The author has found this instrument of great use in examining the condition of the vagina. With this view the speculum should be passed, per vaginam, to its full extent, when, by partially withdrawing the glass tube, a portion of the lining membrane would be seen protruding through the oval aperture into the cavity of the cylinder, and by turning it gently round, every part of the canal would be successively brought into view. Thus it had been found of much assistance in cases of vesico-vaginal fistula, when the opening was so minute, as to perplex the operator, if not to elude his search. For the application of leeches to the cervix uteri, or the surface of the vagina, the instrument is also well adapted; to accomplish this, two very fine gauze tubes are supplied —one for the os uteri, the other for the vagina. In the former, one end only is open, through which the leeches, previously placed within it, are brought into immediate contact with the os uteri by means of a wire-guage piston: in the latter each end is closed, snd there is an oval aperture similar to that in the metallic tube. The aperture in the outer tube being directed to the part of the vagina about to be leeched, the wire-gauze cylinder containing the leeches is introduced, and turned until the two openings correspond. After enumerating several of the uses, to which the instrument may be applied, the author directs particular attention to the superior advantage which it possesses over other instruments of the same kind, that it enables the practitioner to feel with his finger, as well as to see, the diseased parts in the course of his examination.

HOSPITAL REPORTS.

WESTMINSTER HOSPITAL.

Fracture of the Orbitar Process of the Frontal Bone—Wound of the Right Anterior Lobe of the Brain.—James Kelly, aged six years, residing in Snow's Rents, was admitted January the 18th, into Anne's ward, under the care of Mr. White, in consequence of an injury resulting from an old door or gate having been pushed against him, and knocked him down. The child was immediately carried to a surgeon in the neighbourhood, who suspected the existence of fracture, and sent him to the hospital. When admitted, a lacerated wound, about an inch, or an inch and a half in length, was observable above the right superciliary ridge, and part of the bone was plainly seen deprived of its periosteum: the lips of the wound were much separated, the eyelids ecchymosed and tumefied, and the right eye quite closed; a small contused wound was discovered on the back part of the head, rather to the left side; the pulse was very small and slow, not exceeding 60 beats in the minute; the skin and extremities cold; the boy sensible, but evidently in great pain. The head was shaved; two sutures were made in the wound of the forehead, and strips of adhesive plaster applied; simple dressing was employed for the wound at the back part of the head.

19th. Had an aperient powder yesterday, which did not act; was ordered a dose of house physic immediately; complains of great pain in the head; pulse 76, regular in the strength and frequency of its beats; tongue slightly furred; eyelids extensively ecchymosed. Cold lotions have been applied to the head, and their use is directed to be continued, as it has afforded considerable relief. Mr. White, who saw him in the course of the day, ordered simple ointment to be applied between the eyelids, to prevent their sticking together, and causing an accumulation of the tears, which he has seen produce ulceration of the cornea.

20th. He continues in great pain, which, however, has been somewhat lessened by the division of the sutures; leeches have also been applied to the temples. He screams whenever any degree of pressure is exerted over the orbit; the edges of the wound are beginning to suppurate. He continued sensible until the evening, when he fell asleep, without stertor, and so died.

Autopsy.—Considerable effusion of black coagulated blood was found under the scalp over the orbit, and at the back part of the head, where the wound was: two fractures were discovered in the frontal bone, but both unattended with depression. The skull having been sawn through, and the brain removed, it was ascertained that the orbitar process of the frontal bone was also fractured throughout nearly its entire extent, the fractured portion being so displaced that its rough edge had lacerated the anterior lobe of the brain on that side. There was a little more fluid on the ventricles than usual. No other part of the body was examined.

Carcinomatous Tubercle of the Face.—James Bryant, aged 51, residing at Braeknell, in Berkshire, was admitted into Mark's ward, under Mr. White, Dec. 8. About twelve months ago, he perceived a small pimple on the left side of the nose, which ulcerated, the sore gradually increasing to its present size, that of a sixpence. He complains of but little pain in the part, and that rather of a lancinating character; the ulcer has hardened and rather everted edges, with an irregular depression, presenting the appearance of the carcinomatous tubercle. Mr. White considered the disease to be more analogous to the tubercular fungoid tumour of the breast, occurring in young females, between twenty and thirty years of age, than to true cancer; he also added that on the face and lips, the application of destructive agents and excision would prove more permanently successful than elsewhere; nevertheless, he had seen the glands in the neighbourhood enlarged, and containing the peculiar matter indicative of the origin of the disease from the parent stock (cancer). [These remarks were made by Mr. White when the man was recovering.] The man's health is generally good.

15.—He was brought into the operating theatre to-day, for the purpose of having the diseased part removed by excision. But, after a consultation had been held upon the case, he was sent back into the wards, in order that a trial might be made of the effects of the ceratum æruginis, combined with the basilicon ointment. This application was afterwards changed by Mr. White, for the nitrate of silver in substance: the other application was advised by Mr. W. B. Lynn. The great objection to the operation appeared to be the fear of wounding the tendon of the orbicularis palpebrarum.

Jan. 1.—The caustic has been applied two or three times since the last report; the ulcer appears to be deeper, but at the same time less in size.

10.—The ulcer is much smaller, the lower part having cicatrised; the hardened edges have disappeared.

19.—The ulcer is very small; the cavity is filling up. Mr. White observed that he had directed the house-surgeon to apply a very finely pointed pencil of nitrate of silver, again and again, to see how near the tendon it could be carried; he was of opinion that it might be applied still a line further: when the disease was sufficiently removed, the remaining portion might be extirpated altogether by the knife.

22.—It does not look so healthy as before: the cavity appears to be deepening.

24.—It looks rather improved; the cavity is filling up. The ulcer is now dressed with the balsam of Peru ointment.

29. The ulcer is completely cicatrized. He was then discharged, with directions to return to the hospital, should any relapse take place.

Disease of the Tricuspid Valve—Dr. Mackenzie publishes the case of a soldier, 22 years of age, who died under his care, having been troubled previously with violent palpitation and pain in the chest, dyspnœa, and a feeling of weight in the cardiac region. The sound of the heart heard through the stethoscope was loud and rushing, without any distinct interval between its contractions. On examination of the body, the pericardium contained nearly six ounces of straw-colored serum; the heart was immensely large and flabby-looking, and contained a large quantity of dark, clotted, and fluid blood; when emptied, it weighed upwards of one pound and three quarters. The right auricle was larger than an ordinary sized left ventricle, with very thin walls, and was distended with clotted blood. The tricuspid valve, and the natural orifice between it and the right ventricle, were quite obliterated, and three fingers could be easily passed together through the opening. The venæ cavæ were distended with blood. The liver was hard, of a yellowish pale color, and weighed five pounds and three quarters. The hepatic vessels were much distended. The brain was not examined.

Metropolitan Mortality for the Week ending Saturday, June 22.

Causes of Death.	Total.	Average of 5 Springs.	Average of 5 Years.
All Causes	964	883	946
Zymotic, or Epidemic, Endemic, and Contagious Diseases	208	161	178
Sporadic Diseases—			
Dropsy, Cancer, and other Diseases of uncertain or variable Seat	105	105	111
Diseases of the Brain, Spinal Marrow, Nerves, and Senses	160	152	157
Diseases of the Lungs, and of the other Organs of Respiration	227	269	286
Diseases of the Heart, and Blood-vessels	30	21	21
Diseases of the Stomach, Liver, and other Organs of Digestion	84	61	69
Diseases of the Kidneys, &c.	13	5	5
Childbirth, Diseases of the Uterus, &c.	9	9	10
Rheumatism, Diseases of the Bones, Joints, &c.	6	6	6
Diseases of the Skin, Cellular Tissues, &c.	...	1	1
Old Age	49	64	71
Violence, Privation, Cold, and Intemperance	69	25	26

A SELECT PRACTICAL FORMULARY,

TRANSLATED FROM THE FRENCH OF M. FOY, PRINCIPAL PHARMACIEN OF THE HOSPITAL SAINT LOUIS, AT PARIS.

(Continued from 203.)

PILLS OF THE BROMURET OF IRON (Magendie): twenty-four grains of porphyrised bromuret of iron, thirty-six grains of rose confection, twenty-four grains of powdered gum arabic, mixed together, and made into forty pills, two to be taken evening and morning.

PILLS OF BRUCINE (Magendie): six grains of pure brucine, eighteen of rose confection, mixed together very accurately, and made into twelve pills. Mode of exhibition: one evening and morning.

ANTI-CACHECTIC PILLS (De-Haen): four drachms of scraped medicinal soap, three drachms of powdered gum ammoniacum, one drachm of Rufus' pill, mixed together, and made into pills weighing three grains, with a sufficient quantity of tincture of myrrh. Mode of exhibition: four pills to be taken daily in cases of chlorosis and amenorrhea.

PILLS AGAINST CHRONIC GLANDULAR ENLARGEMENTS (Journal de Savoie): sixteen grains of medicinal soap, eight grains of gum ammoniacum, six grains of extract of conium, six grains of extract of aconitum napellus, and four grains of Rufus' pill, mixed together, and made into pills weighing five grains. Mode of exhibition: two to be taken evening and morning; afterwards three or four, up to fifteen and twenty, evening and morning.

PILLS AGAINST INCONTINENCE OF URINE (Ribes): eight grains of alcoholic extract of nux vomica, one drachm of black oxide of iron, mixed together, and made into three-grain pills. Mode of exhibition: three daily.

SEDATIVE PILLS (Kopp, German Journal): thirty-six grains of assafœtida, forty-eight grains of extract of lettuce, mixed together, and made into eighty pills. Mode of exhibition: two or three every two hours, in the treatment of hooping-cough, until the violence of the cough has lessened; as the symptoms are relieved, the dose of the medicine may be diminished.

COMPOUND CALOMEL PILLS (Ricord): twenty-four grains of calomel, prepared by steam, forty-eight grains of powdered conium leaves, forty-eight grains of medicinal soap, mixed together, and made into twenty-four pills. Mode of exhibition: one daily for five days, then two, three, four, five, and six, unless the system becomes affected with mercury previously. Used in the enlargements which continue after blenorrhagic epididymitis.

CAMPHORATED PILLS (Cullerier): half an ounce of powdered camphor, eighteen grains of watery extract of opium, with a sufficient quantity of powdered gum and simple syrup, to make seventy-two pills. Mode of exhibition: four or five daily in inflammation of the urethra.

CAMPHORATED AND NITROUS PILLS. see Pills of Sir Charles Bell.

PILLS OF SEVADILLA: two grains of the alcoholic extract of sevadilla, twenty grains of liquorice powder, mixed together, and made into ten pills, to be taken in the course of two days.

PILLS AGAINST VESICAL CATARRH (Gall): equal parts of copaiba and turpentine, made into pills weighing four grains each, with a sufficient quantity of magnesia. Mode of exhibition: three to five evening, morning, and noon.

CHALYBEATE PILLS: sixteen grains of porphyrised iron filings, twelve grains of powdered cinnamon, two grains of powdered socotrine aloes, mixed together, and made into pills weighing four grains, with a sufficient quantity of syrup of wormwood. Mode of exhibition: from two to six daily, in chlorosis and serous cachexia, as emmenagogue and tonic.

PILLS OF CHARLES BELL: twelve grains of nitre, twelve grains of camphor, with a sufficient quantity of simple syrup, to make two pills.

PILLS OF CHARLES BELL: six grains of camphor, four grains of extract of hyoscyamus, made into two pills. Mode of exhibition: three or four daily, in ardor urinæ.

PILLS OF CONIUM (Storck): one drachm of extract of conium, mixed with a sufficient quantity of powdered conium leaves, and divided into pills, weighing two grains each. Mode of exhibition: from one to four daily in cancerous affections.

DRUG PRICE LIST.

DRUGS.	PRICE. £ s. d.	£ s. d.	DUTY.
Alkanet Root, bd.. cwt.	0 14 0	to 0 18 0	1s. cwt.
Aloes, Barbadoes.....	5 0 0	12 10 0	per lb.
Epatica, bd.....	1 10 0	9 0 0	1d. BP.
Cape, bd.	1 6 0	1 12 0	2d. F.
Alum, British.....ton	10 0 0	12 0 0	
Roch. .....cwt.	1 2 0	1 4 0	2s. cwt
Ambergris, Grey...oz.	0 4 0	0 7 6	3d. oz.
Anchovies....dble. brl.	1 2 0	1 3 0	2d. lb.
Angelica Root..dpcwt.	1 0 0	1 15 0	4s. cwt.
Annatto, Flag, dp...lb.	0 0 7	0 0 9	1s. cwt.
Roll.....dp.	0 0 7	0 0 8	1s. cwt.
Antimony, Crude..cwt.	1 18 0	2 0 0	2s. cwt.
Ore, bd. .....ton	12 0 0	13 0 0	1s. ton
Regulus Cps. cwt.	2 15 0	3 7 0	4s. cwt.
Bowls	0 0 0	0 0 0	1s. B.P.
Arrow Root.....	0 0 5	0 1 4	B.P. 1s. F5s.cwt
Arsenic, White. ..cwt.	0 0 0	0 0 0	1s. cwt.
Red	2 7 0	2 10 0	6d. B.P.
English White	12 0 0	18 0 0	
Yellow.	32 0 0	38 0 0	
Argol, Bologna ....cwt.	2 4 0	2 11 0	
Florence White	0 0 0	0 0 0	
Red	2 4 0	2 7 0	
Naples White	2 0 0	2 3 0	6d. cwt.
Red.....	1 14 0	1 16 0	
Sicily White	1 15 0	2 0 0	
Red..... ..	0 0 0	0 0 0	
French	1 14 0	2 6 0	
Cape	1 18 0	2 16 0	
Boracic Acid.....cwt.	1 19 0	1 19 6	6d. cwt.
Balsam, Canada....lb.	0 1 0	0 1 2	1d. lb.
Capavi, bd....	0 1 4	0 1 9	4s. cwt.
Peru, bd.	0 5 6	0 6 0	3d. lb.
Tolu, bd.....	0 1 6	0 1 9	2d.
Bark, Peruv. bd. p...lb.	0 0 6	0 0 10	
Good	0 2 3	0 2 9	
Mid do.....	0 1 3	0 1 9	
Crown.....	0 0 9	0 3 0	1s. cwt.
Yellow, Flat.....	0 3 4	0 3 7	
Quill	0 3 3	0 3 4	
Red, Flat	0 3 6	0 6 0	
Quill.....	0 1 6	0 2 0	
Cascarilla, bd.....cwt.	1 0 0	2 10 0	
Quergitron ....dp.	0 10 0	0 11 0	BP.1d.c.
Oak English.per ld	15 0 0	17 0 0	F. 3d.
Foreign .per ton	5 10 0	7 10 0	
New S.W.....	8 0 0	9 0 0	
Berries, Bay.....cwt.	1 5 0	1 6 0	
Juniper, Italian	0 5 9	0 6 0	
German	0 11 0	0 12 0	1s. cwt.
Turkey, Yellow .	1 19 0	2 4 0	
Persian, do. .	4 2 0	8 0 0	
Black Lead, E. I. .cwt.	0 6 0	0 6 6	
Malaga.	0 10 0	0 18 0	B.P. 5s.
German ..	0 9 3	0 18 0	ton
Dust	0 0 0	0 0 0	F. 20s.
Borax, or Tincal, bd. cwt.	2 6 0	2 12 0	6d. ton.
E. I. Refined, bd.	2 8 0	2 11 0	5s. cwt.
English Refined..	2 10 0	2 12 0	
Brimstone, Rgh. bd ton	5 5 0	0 0 0	BP.3d
Roll	8 10 0	9 10 0	F.6d.c.
			1s. 6d.
Camphor, Unref... cwt.	6 0 0	6 10 0	
Dutch, bd... cwt.	0 0 0	0 0 0	1s. ct.
Refined.....lb.	0 2 8	0 2 9	
Cantharides, bd.....	0 2 6	0 0 0	10s.
Capers, French ...cwt.	4 0 0	9 10 0	3d.
Capotts	0 0 0	0 0 0	6d. lb.
Cardemoms, Mal. bd.lb	0 3 0	0 5 0	3d. BP.
Long Longs ..	0 4 6	0 4 9	
Ceylon	0 1 6	0 1 8	2d.
Castor, America... lb.	0 19 0	1 5 0	
Castor Oil, America lb.	0 0 3	0 0 6	2s. cwt.
E. I. bd. ..	0 0 4	0 0 9	1s. 3d.
Chillies, E. I. bd...cwt.	0 0 0	0 0 0	cwt.
China Root, bd....cwt.	1 5 6	1 10 0	6d. lb.
Cochineal, bd. Black lb.	0 5 0	0 6 0	3d. lb.
Silver...	0 4 7	0 5 2	1s. cwt.
Foxy.. .	0 4 4	0 4 6	
Cobalt, bd.....lb.	0 0 0	0 0 0	5s. ton.
Cocculus Indicus, bd. c.	0 10 0	0 13 0	7s. 6d.
Colocynth, Turkey, dplb.	0 1 7	0 3 5	
Spanish	0 1 4	0 1 0	1d.
Colombo Root, bd.cwt.	0 8 0	0 18 0	1s.
Copperas Gr. bd ..ton	3 15 0	0 0 0	£1 ton.

DRUGS.	PRICE. £ s. d.	£ s. d.	DUTY.
Blue	1 17 0	to 2 0 0	10s. B.P.
Cream Tart. d.p. Fr. c.	0 0 0	0 0 0	1s. ct.
Venetian	3 2 0	3 7 0	
Cubebs, bd. .....cwt.	2 0 0	2 4 0	1d. lb.
Cutch	0 15	0 16 6	5s. ton.
Cowries	3 3 0	3 5 0	5 per cent.
Dragon's Blood, bd....	4 10 0	7 10 0	1s.
Reed.....	6 10 0	12 0 0	
Emery Stone.....	9 10 0	11 0 0	
Essential Oils,			
Cloves, bd.....lb.	0 7 0	0 10 0	4s. lb.
Carraway, dp.	0 8 9	0 9 0	
Lavender.....	0 7 6	0 0 6	2s. lb.
Peppermint, bd....	0 11 0	0 12 0	
Spike	0 4 0	0 0 0	
Anniseed, bd. ..lb.	0 6 0	0 6 6	
Cassia, bd.....	1 4 0	1 5 0	
Cajaputa, bd. ..oz.	0 0 4	0 0 6	
Cinnamon, bd.....	0 2 10	0 4 9	
Mace (expd.) bd..	0 0 8	0 0 10	
Nutmegs, bd.....	0 0 6	0 0 10	
Bergamot, dp...lb.	0 11 6	0 12 0	
Lemon	0 6 6	0 6 9	1s. lb.
Orange	0 4 6	0 5 6	
Rosemary	0 1 8	0 2 6	
Thyme	0 2 9	0 3 0	
Otto Roses ....oz.	0 15 9	0 16 6	
Almonds	0 1 7	0 1 11	
Galangal Root, bdcwt.	0 15 0	0 18 0	2d. lb.
Galls, in sorts ....cwt.	2 4 0	2 15 0	
Green or White	1 18 0	2 5 0	1s.
Blue	2 15 0	3 5 0	
E. I. Blue, bd.	2 15 0	2 18 0	
Gentian Root, bd..cwt.	0 18 0	1 4 0	5s. ton.
Glue, Best Town..cwt.	2 9 0	2 12 0	
Inferior	1 18 0	2 4 0	
Foreign	0 0 0	0 0 0	3s. cwt
Guinea Grains, bd.....	1 10 0	2 8 0	15s. cwt
Gums,			
Ammoniac, Lp. bd. ct.	2 0 0	4 10 0	
Drop....	3 5 0	9 0 0	
Arabic, E. I. bd.....	1 5 0	5 0 0	
Cape	0 10 0	0 16 0	
Turkey, fine ..	10 0 0	10 10 0	
2nds and 3rds	5 10 0	7 0 0	
Barbary, Brown, bd	2 15 0	3 2 0	
White.	0 0 0	0 0 0	
Gedda, bd.....	3 5 0	0 0 0	
Animi, washed, bd ..	4 10 0	10 0 0	
scraped.....	7 10 0	10 10 0	1s. cwt.
Copal.....lb.	0 0 10	0 2 7	
Assafœtida, bd..cwt.	1 10 0	5 0 0	
Benjamin, 3rds, bd..	8 0 0	14 10 0	
1st and 2nds....	15 0 0	46 0 0	
Gamboge, bd. .....lb	0 0 0	23 15 0	
Galbanum.....	5 10 0	8 0 0	
Guiacum.....lb.	0 0 8	0 2 3	
Myrrh, E. I. bd.cwt.	4 0 0	16 0 0	
Turkey.....	0 0 0	0 0 0	
Mastic.....lb.	0 2 8	0 4 6	
Olibanum, bd. ..cwt.	1 0 0	2 10 0	
Sandrack, bd.....	3 15 0	4 10 0	
Senegal, garbled, bd.	5 5 0	5 10 0	
Tragacanth, Picked	14 0 0	15 15 0	
Sorts	5 0 0	8 10 0	
Seedlac.....cwt.	1 0 0	1 1 0	
Lac, Sticklac, Bengal	1 10 0	2 5 0	1s. cwt.
Siam, &c..	1 4 6	2 14 0	
Shellac, Liver...cwt.	1 14 0	2 10 0	
DT.....	1 11 0	1 15 0	
Orange.....	2 5 0	3 6 6	
Block	1 10 0	1 16 0	
Hellebore Root ...cwt.	2 0 0	2 10 0	3s. cwt.
Honey, Fine.....	2 10 0	4 10 0	B.P. 5s. F. 10s.
Iceland Moss ..... lb.	0 0 2	0 0 3	5s. ton.
India Rubber, solid ...	0 0 3	0 0 8	1s. cwt
bottles..	0 0 8	0 1 0	
small...	0 1 6	0 1 9	
Indigo....bd.	0 5 6	0 6 3	Indigo
Guatimand	0 4 6	0 5 9	cwt. F. 5s.
Caracca ..	0 2 6	0 4 3	B.P. 1s.

DRUGS,	PRICE. £ s. d.	£ s. d.	DUTY.
Bengal fine blue	0 5 9	to 0 6 6	
Fine purple & violet	0 5 9	0 6 3	
Good ditto	0 5 0	0 5 8	
Middling.....	0 4 6	0 4 10	
Copper Fine	0 5 0	0 5 6	Indigo
good and middling	0 4 2	0 4 10	cwt. F. 5s.
Ordin. violet & copper.	0 2 9	0 4 0	B.P. 1s.
Oude, good and fine...	0 3 9	0 4 6	
low and middling	0 2 3	0 3 6	
Madras, good and fine violet and blue	0 4 0	0 4 5	
ord. and mid. do.	9 2 2	0 3 10	
Java.....	none		
Manilla good and fine..	0 0 0	0 0 0	
ordinary and mid.	0 0 6	0 3 2	
Ipecacuanha, bd....lb.	0 1 9	0 2 6	1s. cwt.
Isinglass Leaf, 1st sort	0 10 0	0 12 0	
2nd sort	0 9 0	0 10 0	5s. B.P. cwt.
Simovia	0 2 6	0 3 0	£2 7s. 6d. F.
Siberia Purse ...	0 5 0	0 6 0	
Short Staple, 1st	0 8 0	0 11 6	
Long ditto.....	0 10 0	0 11 6	
Isinglass, Brazil	0 1 0	0 5 2	
Jalap, bd.....lb.	0 2 1	0 2 2	1d. lb.
Juice of Lemon....gal.	0 2 0	0 0 0	½d. gal.
Lac Dye Fine, bd. ..lb.	0 2 2	0 2 9	
Good	0 1 6	0 2 0	1s. cwt.
Midding	0 0 10	0 1 4	
Ordinary	0 0 4	0 0 9	
Lake.....	0 0 0	0 0 0	
Liquorice, Ital. d.p.cwt.	5 5 0	5 10 0	27s. 6d. c.
Block	3 5 0	0 0 0	£1 cwt.
Madders			
Dutch Crop.. dp. cwt.	3 10 0	4 0 0	
Ombro.....	3 0 0	3 8 0	6d. cwt.
Gamene	2 10 0	2 15 0	
Mull.....	0 15 0	1 15 0	
French	3 2 0	4 8 0	
Spanish	1 5 0	1 18 0	
Madder Roots, Turkey.	0 0 0	0 0 0	3d. cwt.
Munjeet, E.I. bd..cwt.	0 0 0	0 0 0	
Magnesia, English....	3 0 0	3 5 0	
Manna, Flakcy, bd..lb.	0 1 2	0 3 6	
Sicily, bd.	0 0 6	0 0 8	1d. lb.
Musk, good & fine, oz.	0 15 0	1 7 3	d. oz.
Nux Vomicæ, bd..cwt.	0 10 0	0 12 0	5s. cwt.
Olives, F. hf.-bris 12 gls	3 0 0	4 0 0	
Spanish..keg 2 gls	0 9 0	0 10 0	2s. gall
Opium, Turkey, bd..lb.	0 8 6	0 10 0	
Egyptian	0 0 0	0 0 0	1s. lb.
Orchella, Can.....ton	38 0 0	40 0 0	
Cape de Verd .35	0 0 0	55 0 0	
Madeira	0 0 0	0 0 0	1s. cwt.
Orpiment, E. India, bd	0 0 0	0 0 0	1s.
Orange Flower Water .	0 0 8	0 0 0	1s.
Peel .....cwt.	1 16 0	0 0 0	1s.
Orris Root, d. p. ..cwt.	1 0 0	2 15 0	5s.
Pelitory Root.....lb.	0 1 0	0 1 0	1s. cwt.
Pink, Root..... lb.	0 0 7	0 5 0	1s. lb.
Pitch, Burgundy..cwt.	0 10 0	0 10 0	2s. cwt.
Pumice Stone, sorts ton	5 0 0	6 0 0	
Quassia ..... cwt.	0 15 0	0 0 0	
Quicksilver .....lb.	0 4 6	0 0 0	10s. cwt. 1d. lb.
Rhatania Root .....lb.	0 0 4	0 0 6	
Rhubarb, round, bd. lb.	0 1 0	0 3 8	
flat	0 1 6	0 3 9	3d. lb.
Dutch, trimd	0 4 6	0 6 0	
Russia.....	0 8 0	0 11 6	
Saccharum Saturne, lb.	2 4 0	2 6 0	10s. cwt.
affron, Spanish ....lb.	2 0 0	2 5 0	1s. lb.
Sago, common, bd. cwt.	0 11 0	0 12 0	
Pearl	0 13 0	1 5 6	1s. cwt.
Sago Flour.....	0 19 6	1 0 0	
Sal Amm. E. I. bd. cwt.	2 5 0	2 10 0	1s. cwt.
English, Refined cwt.	2 2 0	2 3 0	
Salts, Glauber	0 6 6	0 0 0	
Epsom	0 9 6	0 10 6	
Salep .....cwt.	5 5 0	5 10 0	

DRUGS,	PRICE. £ s. d.	£ s. d.	DUTY.
Sarsaparilla, Bra. bd.lb.	0 0 10	to 0 1 8	
Honduras bd. ..	0 1 0	0 1 10	1d. lb.
Vera Cruz, bd...	0 0 8	0 1 2	
Jamaica, bd.....	0 1 0	0 2 8	
Sassafras Root.... ton	7 0 0	8 0 0	6d. cwt.
saffower, E.I. bd... cwt.	4 10 0	8 10 0	1s. ct.
Turkey	0 0 0	0 0 0	
Shumac, d.p. Mal.. cwt.	0 0 0	0 0 0	
Sicily.....	0 10 6	0 11 6	1s. ton
Trieste....	0 5 6	0 6 0	
Saltpetre, Rhg. bd.	1 1 6	1 6 6	
British Refined....	1 8 0	1 8 6	6d. cwt.
Nitrate of Soda	0 13 6	0 14 3	
Scammony, Smyrna lb	0 0 0	0 0 0	
Aleppo, 2nds, bd..	0 8 0	0 14 0	6d. lb.
fine	0 15 9	1 1 0	
Seeds, Annis..... cwt.	0 0 0	0 0 0	
German, duty paid	1 5 0	1 15 0	BP 2s6d
E. I. Star, bd.....	2 10 0	3 0 0	F 5s. c
Cummin, bd... cwt.	0 19 0	1 5 0	
Carraway, For. bd.	1 6 0	2 14 6	BP 5s F10s
Seneka Root, bd. .. lb.	0 1 8	0 1 9	
Senna, Alexandria.. lb.	0 0	0 0 9	
Smyrna	0 0 9	0 1 6	1d. lb.
East India, bd.	0 0 5	0 0 8	
Tinnevelly....	0 1 8	0 1 9	
Smalts, Saxon, FFFE lb.	0 0 0	0 0 0	
Danish, do. ..	0 1 6	0 1 7	2d. lb.
Other sorts in proportion.			
Snake Root, bd.... lb.	0 1 2	0 1 3	1s. lb.
Soap, Naples, soft	0 1 6	0 1 9	56s. cwt.
Castile, hard..cwt.	3 10 0	3 17 0	30s. cwt.
Soy, bd. .....gallon	0 5 0	0 7 6	20 pr. cent
Sponge, fine..... lb.	0 13 0	1 0 0	F 6d.lb.
ordinary.....	0 2 5	0 19 6	B 1d.
Sulphate of Quinine oz.	0 10 0	0 10 6	6d. oz.
Squills, dry .....lb.	0 0 2	0 0 3	1s. cwt.
undried	0 0 0	0 0 0	6d. cwt.
Spermaceti, English lb.	0 1 8	0 0 0	25 cnt.
American	0 1 4	0 1 6	
Tamarinds, W. I...cwt.	1 15 0	3 18 0	BP. 1d.
E. I. bd. ..	0 15 0	1 5 0	F 3d lb.
Tapioca, bd. ..... lb.	0 0 3	0 0 7	1s. cwt.
Turmeric, bd. Bea.cwt.	0 12 0	1 5 0	
Java	0 15 0	0 18 0	F 5s ton
Java, green ..	0 10 0	0 11 0	BP. 1d.
China	1 1 0	1 8 0	
Terra Japonica, black	0 12 6	0 13 0	5s. ton.
De Sienna.....	0 0 0	0 0 0	10s. ton.
Valonia Smyrna .. ton	14 0 0	18 0 0	5s ton.
Picked Morea.	16 10 0	21 0 0	
Vinelloes, Brazil, bd.lb.	0 10 0	0 11 0	5s. lb.
Vera Cruz ..	3 0 0	4 0 0	
Verdigrease, For. D. P.	0 0 9	0 1 3	1d. lb.
English..	0 1 3	0 0 0	
Vermillion, China, bd.lb.	0 4 9	0 5 6	3d. lb.
English....	0 5 6	0 5 10	
Vitriol, blue .....cwt.	1 16 0	1 17 0	BP. 10s
Foreign, white .	0 16 0	0 17 0	F 1s to n
English, do. ..	1 4 0	1 5 0	
Oil of..... lb.	0 0 1	0 0 0	
Wax Mogadore, bd.cwt	7 10 0	8 0 0	B.P. bleached 10s. no
American, d.p...	7 10 0	8 2 6	do. unbl. 1s. F do.
Russian, d.p...	9 0 0	9 5 0	2s F bl. £1 cwt.
Hambro' d.p...	8 10 0	9 0 0	
East India, d.p..	7 0 0	8 15 0	
African, d.p...	7 10 0	8 0 0	
White Hambro' .	9 15 0	10 10 0	
English ....cwt.	9 0 0	9 15 0	
Cape	7 10 0	9 0 0	
Weld, English ....load	0 0 0	0 0 0	5s. to
Woad .....ton	0 0 0	0 0 0	
Wood, Sapan'Bimas, bd.10	5 0	14 0	2s. ton
Siam	9 0 0	1 0	

WHOLESALE MARKET FOR DRUGS.

(Reported for the Medical Times.)

The Public Sale of Drugs last week having well supplied the wants of the Druggists, we have little to remark at the present moment. There have been no fresh importations of moment since our last, and but little alteration in prices. We quote opium, 9s. to 9s. 6d.; Balsam Copivi, 1s. 4d., 1s. 7d. per lb.; Camphire, £6, £6 10s. per cwt.; Cantharides, 2s. 3d., 2s. 6d.; Castor Oil, 4d. to 9d.; Turkey Colocynth, 1s. 2d., 2s. 4d.; Cream Tartar, 53s. to 64s. per cwt.; Essence Bergamot, 11s. 6d.; Otto Roses, 16s. per oz.; Blue Galls, 56s., 58s. per wtt.; and by Public Sale yesterday, 150 bags Madras Turmeric, taken in at 17s.

SUMMARY.

LECTURES ON THE THEORY AND PRACTICE OF MEDICINE, BY DR. C. J. B. WILLIAMS, M.D., F.R.S.:—
Diseases of the Alimentary Passages, the Mouth, Fauces, &c.—Dyspepsia—Treatment—Tonsillitis, or Angina Tonsillaris—Symptoms and Treatment—Enlargement or Hypertrophy of the Tonsils—Aphtha or Thrush—Angina Membranosa—Parotitis—Symptoms, Treatment, &c. .. 299

ANATOMICAL RESEARCHES ON THE ELECTRICAL ORGAN OF THE TORPEDO, BY A. JOBERT DE LAMBALLE, &c. &c. &c.. 301

PARISIAN INTELLIGENCE:—
On the Diagnosis of Pneumonia, by Professor Rostan.. .. 303
Professor Velpeau on Diseases of the Eye.—Treatment of Cataracta 304
Nomination of Agreges in Surgery 304
Proceedings of the Academy of Seiences, July 1st. 304
Dr. Mayer on the Electrical Organ of the Torpedo 304
Dr. Guerin on Diseases of the Uterus 305
Dr. Lavellee on Vesication of the Mucous Membrane of the Bladder, and Development of Pseudo-Membranes on its Surface, caused by the application of a Blister 305
On Secale Cornutum, by M. Legres.. 305
Proceedings of the Academy of Medicine, July 1st 305
Dr. Pravaz on Deviations of the Spine 305
Discussion on Ophthalmology 305

ON THE SITUATION OF THE ORGAN OF AMATIVENESS, BY HERBERT SPENCER 305

ON THE BILE AND THE PRODUCTS OF ITS DECOMPOSITION, BY THEYER AND SCHLOSSER; Translated by KIRBY O'SULLIVAN 306

TO CORRESPONDENTS 308

LEADER:—
QUACKERY, VERSUS THE PROFESSION 308

REVIEW:—
On Dysmenorrhœa and other Uterine Affections in Connection with Derangement of the Assimilitating Functions, by Dr. Rigby 309

HOSPITAL REPORTS:—
King's College Hospital.. 309
St. Bartholomew's Hospital.. 310

ON MESMERISM.—On the Attack of Liebig on Berzelius, and Evidence of the Correctness of the Opinions of Berzelius, by MR. PRATER 311

STARTLING CASE OF CLAIRVOYANCE 312

THE BOHEMIAN REMEDY FOR HYDROPHOBIA 312

THE CLAIRVOYANCE OF ALEXIS 312

TRANSACTIONS OF LEARNED SOCIETIES:—
Royal Medical and Chirurgical Society 212
Royal Medico-Botanical Society 313

PERISCOPE OF THE WEEK:—
Signs of Pregnancy 315
Poisoning by Arsenic.. 315
Lepra Vulgaris 318
The Process of Labour 316
Case of Eventration 316
The Ergot of Rye 316
Opacity of the Cornea 316
Acute Rheumatism 316
Use of Naphtha in Phthisis 316
Funis Presentation 316
Amputations.. 316
Serophulous Abscess of the Neck 316
Arsenic of the Heart 316
Epidemic Meningitis 316
Spina Bifida 317
Transverse Presentations.. 317
Cancer of the Pylorus 317

GOSSIP OF THE WEEK:—
Gentlemen Admitted to the Royal College of Surgeons .. 318
Ditto ditto Apothecaries' Hall 318
Ditto Elected Fellows of the Royal College of Physicians .. 318
Naval Appointments 318
Obituary 318

METROPOLITAN MORTALITY TABLE 318

A SELECT PRACTICAL FORMULARY 318

COURSE OF LECTURES ON THE THEORY AND PRACTICE OF MEDICINE.

Delivered by C. J. B. WILLIAMS, M.D., F.R.S., Professor of the Practice of Medicine, and of Clinical Medicine, at University College.

Diseases of the Alimentary Passages—the Mouth, &c.—Having gone through the diseases of the chest, we proceed now to consider those of the alimentary canal, beginning with the mouth and the *fauces*. The lining membrane of the mouth and the fauces is very liable to inflammation, and we may divide the inflammation attacking these parts, like that of the air tubes and respiratory apparatus, into the superficial and the deep-seated. The superficial inflammation is accompanied by some amount of redness,—some change in the state of the secretion; first of all, perhaps, there is a deficiency in the secretion, with a feeling of soreness in the part afterwards; there is an undue secretion, attended, perhaps, with irritation and cough, and the taste becomes vitiated.

Inflammation may affect various parts of the mouth. It is, perhaps, commonly seated in the fauces, the tonsils, the uvula, or soft palate, and the root of the tongue. This constitutes one of the common varieties, accompanying catarrh. It sometimes extends to the pharynx, producing painful deglutition. Sometimes, the inflammation affects the lining membrane of the cheeks, and the covering of the gums, producing a considerable alteration in the taste, and causing a general soreness in the mouth. When it affects these parts, it is frequently accompanied by little blisters, formed by the effused serum running under the *epithelium*, and raising it up. This is a very common symptom; sometimes it is the effect of cold, and sometimes of irritation, or slight inflammation, in the stomach.

These catarrhal inflammations are often very transient in their character; but there are some few cases in which these symptoms become chronic, although not deep-seated. In cases of considerable irritation, there is ulceration, great swelling, and soreness, and a disposition in the epithelium to scale off, particularly on the tongue. This is met with in some forms of dyspepsia: a gastritic or inflammatory disposition of a low kind; and sometimes this is very troublesome. This affection of the throat is a common result of exposure to cold, causing a considerable amount of discomfort and fever, as well as other catarrhal symptoms, chilliness, loss of appetite, depression of spirits, and so forth. Sometimes this sort of inflammation descends to the stomach, and dyspepsia occurs very often after an attack of catarrhal inflammation, or sore throat. The treatment should be moderately antiphlogistic: a dose or two of mercurial medicine, antimonials, &c., and if the skin is feverish, saline medicines and a farinaceous diet, confinement to the house, and warm clothing, will suffice to remove the affection in the course of a few days. There are, however, some things in regard to local treatment, which it is useful to bear in mind. In inflammations both of the mouth and the throat, there are two classes of remedies, each useful in their way. One is, the application of lotions applied to the mouth, of an astringent or stimulant kind, alum, diluted mineral acids, capsicum, and so forth. The other consists in demulcent lotions, rendered slightly acid or alkaline, or mucilaginous liquids, used frequently to promote the secretion from the part; and along with this may be associated the internal application of hot water with perhaps a little vinegar in it. The stimulants or astringents are chiefly useful at the outset of the affection; some are especially useful when the affection is of a congestive nature, when the fauces are of a deeper colour, and where there is a little thickening and swelling. Here, the solution of nitrate of silver is used to a great extent. If the disease increases, great benefit will result from the use of demulcent, or slightly alkaline or acid gargles: these promote the secretion and bring the inflammation to a termination in that way. The saturated solution of borax in gruel, with *Liq. Ammoniæ acet.* added to it, answers very well. There are, again, cases of relaxed throat in which the inflammation is submucous and of a low kind, or else it is not inflammatory at all, but merely congestive; under such circumstances, stimulant applications will be of use. We find many very troublesome cases of relaxed throat and tonsils, with the uvula falling down upon the tongue and causing a difficulty in swallowing, projecting, in fact, so far as to irritate the glottis and bring on a cough. These are best treated by stimulant applications: gargles of capsicum, alum, or a decoction of oak bark, or else a strong solution of nitrate of silver. The chronic irritation of the mouth, where there is soreness and a little blistering, is best treated by a solution of borax frequently applied; and if there are any ulcers, they may be touched with a stick of nitrate of silver. These cases are often connected with a diseased state of the stomach, and low inflammation, which has to be treated, likewise.

We now come to *deep-seated inflammation*. This attacks various parts of the mouth and the fauces, but most frequently the loose cellular texture of the tonsils and uvula, constituting *Tonsillitis* or *Angina Tonsillaris*. The symptoms are: great soreness of the throat, difficulty of swallowing, pain often felt in the ear; the pulse full and frequent; various disorders of the system; sometimes the secretions are in an unhealthy state; the urine is high coloured, scanty, and alkaline. With regard to the physical signs: on examining the throat, you find the tonsils much enlarged, and of a very red, inflamed colour; so much enlarged as almost to close the fauces. The uvula is often greatly enlarged, and sometimes so long as to reach the glottis; the prolongation of this organ causes frequent attempts at swallowing, and very often a troublesome cough. There is a difference between the deep-seated and the catarrhal inflammation, that I have been just considering. In the deep-seated inflammation, it is not uncommon to find lymph effused in this form of sore throat. This is a common character with regard to phlegmonous inflammations affecting the cellular texture, particularly of the more acute kind. On the tonsils, you often see patches of a whitish, greyish, or ash colour, and on examining these patches, it is found that they are little filaments of lymph, or a substance between that and mucus, giving a fœtid odour; and the tonsil appears at those parts redder than at others. Sometimes there is ulceration, but this is not commonly the case; and when it does occur, it most frequently is situated at the orifice of the mucous ducts on the tonsils. This has given rise to the opinion, that these particles are indications of a sloughy state. They are, however, nothing more than an effusion of bad lymph. The tongue is, at the same time, very much coated with a slimy fœtid mucus, more so than in any other disease.

This affection may end by *resolution*, or by *suppuration*; in some few instances it terminates by gangrene, but not commonly. Resolution, where it is not the result of active treatment early employed, is accompanied by free secretion, just as I have found in most cases of thickening; where there is a great deal of inflammation and thickening of parts, there must be free secretion from these parts before the inflammation is removed. Suppuration often takes place as the result of tonsillitis, as early as three or four days from the commencement, and is attended by great relief; this is far from being a bad result. The pus is frequently in these cases fœtid. It is a remarkable fact, that though both tonsils are often equally inflamed, the suppuration of one will suffice to remove the inflammation. Sometimes they both suppurate. The causes of this inflammation are chiefly cold; and it is particularly apt to recur in persons who have had it previously. The reason of this is very apparent; a deep seated disease must work some structural change, and then there is a greater liability to the occurrence of vascular obstruction and inflammation.

The treatment of Tonsillitis should be antiphlogistic: when the inflammation is extensive, in the catarrhal variety, venesection may sometimes be necessary, in plethoric subjects; but very rarely. With this species, antimonial medicines are useful. Leeches may frequently be applied to the angle of the jaws—the external part nearest to the tonsils; but their application must be carried to a considerable extent, to produce any material effect on the tonsils. The application of leeches is apt to be followed by a great deal of stiffness, swelling, and soreness of these parts. But by far the most useful effect is produced by bleeding from the tonsils themselves. It appears an awkward thing to apply leeches to the tonsils, but it may be done without any great difficulty, and the advantages arising from them are greater than those produced by scarification, although the latter is more easily accomplished. Many persons are disgusted at the idea of putting leeches into their mouths. The way to do it, is to take a glass tube, of sufficient length to reach down to the tonsils; then in-

troduce a leech, having passed a silk thread through it to keep it under your controul, and allow it to crawl down to the bottom of the tube, and let it remain there until the object is attained. When the leech comes out, there will be a good deal of blood exude from the wound, but this also occurs in scarification; the relief afforded by this mode of applying the leeches is sometimes very remarkable. If the inflammation of the tonsils continues, and the swelling is undiminished after two or three days, there can be no harm, under such circumstances, in scarifying the parts; this may be followed by gargles of *liq. ammoniæ acetatis*, or *muriate of ammonia*, in gruel, not using astringent gargles, which do more harm than good, where the tendency to inflammation continues. There is, however, an exception to this: and that is where you can see inflammation of the tonsils within twenty-four hours after its occurrence. In some persons, this disease comes on very suddenly; and, in this case, I am persuaded it may be stopped effectually by the application of a very strong astringent. Velpeau recommended the application of powdered alum, in very large doses, in the following way:—Take a spoonful of the powder, and, desiring the patient to hold his head back and keep in his breath for an instant, scatter it on the tonsils, and allow it to remain there as long as possible: this may be repeated two or three times in the hour. The effect of this application is to reduce the tonsils to their natural size, and with them the constitutional symptoms disappear: the chilliness and shivering, previously felt by the patient, pass off. A strong solution of nitrate of silver is likewise greatly efficacious, or the application of lunar caustic. The solution should be strong—half-a-drachm to an ounce of water, or sometimes a drachm, has been used with advantage. The utility of these applications is chiefly confined to the earliest form of the disease; but when the inflammation has gone on to the effusion of lymph in the cellular texture, they do no good, but rather lead to harm. They are useful, however, in cases of relaxation which sometimes affects the deep-seated parts, and causes a great swelling of the tonsils. But there is another affection,—hypertrophy of the tonsils, which is not benefitted by these strong astringent applications. If the disease has gone on to suppuration, it is desirable to use demulcent solutions and gargles, to clear the throat of the bad secretions that accumulate there. If the fauces are very much affected, and the pus becomes fœtid, it will be often advantageous to add a little chloride of soda, or creosote. Persons are very liable to a renewal of this inflammation, when they have once had it; and, therefore, it is of great consequence to guard against it; this may be done by gargles of cold salt and water, or alum. In catarrhal inflammation, some benefit arises from the application of ammonia and oil to the throat externally: it is a very common, popular remedy.

Enlargement or hypertrophy of the tonsils is a frequent consequence of a recurrence of inflammation: it occurs particularly in young and scrophulous subjects, in females previous to menstruation, and who have a certain fulness of habit. This latter form of enlargement may be partially remedied by the astringents I mentioned before; the benefit, however, is but partial, and, comparatively speaking, little good arises. The local applications that seem to be of most use are the iodide of potassium, in a solution of from ten to twenty grains to the ounce. It has been proposed to remove it by cauterization, but I have no experience in the matter, and I think you will find it a troublesome operation.

Aphtha or Thrush.—There is another variety of inflammation to be considered, as affecting the mouth and fauces, and that is, the aphthous inflammation or thrush. It is often symptomatic of the state of the constitution, and is very apt to occur in children, in whom it is accompanied by films or patches of lymph, and, in some instances, the epithelium is raised into vesicles by the effusion underneath. Sometimes, there is an effusion of lymph external to the epithelium; and, thus, the symptoms seem to point out this inflammation as something intermediate between the vesicular inflammation affecting the surface, and that deeper form of inflammation which causes effusion under the texture. Sometimes, with this raising of the epithelium, we find effused a little serum, sometimes a little bad lymph, and sometimes a bad, flaky kind of matter. As the disease goes on, this matter is not only found under the epithelium, but it appears on the surface, so that considerable quantities of it may be scraped off from the mouth, where it has been secreted. It seems to be generally accompanied by gastric irritation, and in the case of children, there is a similar affection around the margin of the anus. It shews an acrid state of the secretions, generally, from the intestinal canal. In adults, it is a symptom of a very bad state of the constitution, and occurs sometimes in connection with very fatal diseases, as in the last stage of diabetes or phthisis. It is a bad sign, because it is a proof of the combination of irritation of the membranes with a very low power in the cellular texture, and which may be generally referred to the weakness of the constitution. It is a very ominous sign in adults. In children, however, it is of less consequence; as we see in various inflammations, for instance, of the air-tubes, that they are accompanied by a secretion of a filmy matter, an excess of the nutritive secretion on the surface, so, likewise, do we find, in inflammation of the mouth, the fauces, and the intestinal canal, an overflow of secretion taking place. The treatment, in children, is very simple: the affection may be relieved by mild astringent applications, such as borax, alum, sulphate of zinc, &c., at the same time that the bowels are kept in proper order by mild aperients, doses of castor-oil, and alkalies, occasionally using a warm bath. Where it occurs in adults, it is, as I said before, a bad sign. I have seen it, however, go away under the use of tonics, particularly mineral acids, at the same time that the secretions are kept free. The mouth and fauces may be cleansed, from time to time, by chloruretted gargles.

There is another affection more distinctly occurring in connexion with the throat itself—and that is *angina membranosa*, which is an inflammation accompanied by the exudation of a sort of thin pellicle, sometimes like that of croup, but much thinner and slighter, and attended by signs of debility, instead of intense inflammation. The symptoms may be those of catarrhal sore throat, the soreness being accompanied by a sort of redness, which is soon supplanted by yellowish or brownish patches, very easily detached, and very fœtid; occurring not simply on the tonsils, but spread over a great part of the fauces and lining membrane of the mouth. And this is one of the characters of the inflammation: it is diffused, and, in that, resembles catarrhal inflammation; but it is analogous to the deep-seated inflammation in its products; this diffuseness is sometimes accompanied by suppurative disease, which I have described under the head of "asthenic laryngitis." This affection is apt to occur under an epidemic form, and as a part of the more formidable kinds of scarlatina; the term, *angina*, has been given to this. It is produced under an epidemic influence in bad constitutions. When it assumes the malignant form, it shews itself by eruptions on the skin, generally with fever, which assumes the typhoid form. This species of disease has a tendency to run into gangrene, and in this form a peculiar fœtid odour is given out. Accompanying this affection, if it is of the typhoid kind, the pulse is weak; there is delirium, or a sort of stupor accompanied by wandering, and every symptom of extreme prostration of strength. Sometimes, the larynx and Eustachian tubes are affected. This, in fact, constitutes the worst form of scarlatina. In the simple form of fever, there is great redness of the fauces, but in the malignant form, they are dark, and of a dusky colour. The treatment of the simple affection is both constitutional and local. This inflammation does not appear to be benefitted by blood-letting, although it may be accompanied by much swelling. Mercury seems to have some efficacy in restraining it; and, in order to counteract any serious effects arising from it, local applications are of considerable efficacy, particularly nitrate of silver in solution, the strength being about one scruple to an ounce of water. It is also useful to apply the nitro-muriatic acid, which diffuses and removes the fibrin; it may be used by a sponge, or by adding one part of muriatic acid to three of honey. The mild tonic treatment is useful after the mercury. In malignant angina, it is sometimes necessary to give stimulants.

In connexion with this disease, there is another affection of a dangerous character: namely, a gangrenous erosion of the cheeks. It begins sometimes on the gums, and at others on the cheeks, in the form of a grey, dry patch; and this soon forms a little ulcer, which by-and-bye extends completely over the cheeks, and sometimes down to the jaw. In some instances, this affection is merely ulcerous, without any gangrenous slough being produced. It is accompanied by much weakness, and febrile heat of the skin. In other cases, especially in old subjects, it is of a more malignant character, exciting gangrenous patches in some parts, and gangrenous sloughs in others, of a very bad character. The parts become excoriated wherever the matter runs, producing irritation of the surfaces. It is a highly destructive affection in its worst form, and the fever accompanying it is usually of a low kind, with a rapid pulse. This affection is observed to take place particularly in ill-fed children, or those who are brought up in damp places or very impure air. It has been observed to occur as a sequel to fevers and small-pox. The disease has a great tendency to become fatal. There appears to be really something of a poisonous character causing the death of the part which it affects. These sloughs are frequently at the orifices of the salivary ducts, and this suggests the idea that the secretion of the salivary ducts becomes diseased in some way or another, and thus becomes the source of the irritation that is produced. I do not know that any attempt has been made to prove this. Again, when we see it occurring, not as a result of previous inflammation, but coming on in a sudden manner, and without any appreciable cause, one cannot help suspecting the existence of some foreign seeds of disease derived from without. Some diseases are known to arise from a parasitical creature, and I cannot help thinking it very probable that this disease has some such origin. It seems to plant itself in debilitated subjects, and to work the destruction of the weaker parts. I do not see why, unless it be something originating out of the body, it should select the cheeks and the face of the individual. There must be something in the exposure of the cheek to the air, perhaps, that causes a disposition to run into decomposition. (?) The subject is worthy of enquiry.

The treatment consists chiefly in various applications to increase the action of the part; stimulants should be used from the very first, with strong muriatic acid or nitrate of silver to stop the erosion. The diet should be moderate, and aperient medicines should be given. I should mention, in connexion with common inflammation, that the gums often become the seat of this action, shewing itself in the form of gumboils, causing, in children, suppuration with a considerable amount of pain and distressing feelings. The treatment should be antiphlogistic; leeches, fomentations, and poultices should be applied.

There is another disease, not of such great importance, called *Parotitis* or mumps. This form of inflammatory affection is often epidemic and is supposed to be contagious; it is accompanied by a good deal of temporary inconvenience, and some feverishness and pain. It has but little tendency to suppuration, and subsides in three or four days, under moderate antiphlogistic treatment. The only peculiar thing about it, is that after the swelling of the glands subsides, and the secondary affection of the testicles and the mammæ ceases, on the sudden subsidence of the parotitis, there is apt to be inflammation of the brain. It is of great consequence to keep the parts warm, using fomentations from time to time. There is a diffuse form of inflammation very apt to occur in some cases of tonsillitis, and which becomes very serious, not only from the local injury which it causes, but by the disturbances it creates in some of the organs, producing even temporary deafness. Sometimes, it passes into the ear itself

across the temporal bone, and ends in inflammation of the brain; where it reaches great intensity, it leads to suppuration and a separation of the periosteum from the bone. This form of inflammation is peculiarly dangerous, especially if the fever is intense and does not manifest a disposition to subside. The pain is of a very acute character, accompanied by a beating or pulsation in the head, and generally by a discharge of a purulent nature from the internal ear, and a thickening of its lining membrane. The great object is to subdue the inflammation; and, if it be intense, this should be done by antiphlogistic measures. Cupping in the neighbourhood of the ear is advisable, the secretion being promoted by warm water.

ANATOMICAL RESEARCHES
ON THE
ELECTRICAL ORGAN OF THE TORPEDO.

By A. J. JOBERT DE LAMBALLE, D.M.P., M.A.M, Officer of the Legion of Honour, Consulting Surgeon to His Majesty the King of the French, Chief Surgeon of the Hospital St. Louis, &c. &c.

(Continued from page 273.)

Having thus enumerated all the authors who have written on this subject, I will now proceed to describe my researches on the different parts of the torpedo.

Skin.—The skin covering the electrical organ of the torpedo is perfectly similar to that found on all the other parts of the body. It is covered by a mucous liquid, which is thrown out by an immense number of openings, irregularly placed on the back, and under the abdomen of the fish, but with more regularity on the external edge of the semi-lunar cartilage, which limits the electrical apparatus outwardly. The skin is easily removed; it is united to the subjacent parts by a loose and filamentous cellular tissue, and by numerous canals which arise from others much larger, and which open on the surface of the skin. They might, at first sight, be confounded with filaments of condensed cellular tissue; but the slightest attention is sufficient to avoid the error. On the edges of the cartilage, near the electric apparatus, and especially towards the snout, the skin seems to me to be more adherent, and united to the parts beneath it by a series of stronger tendinous fibres. It is under the skin, and on the subjacent organs, that the excretory canals of the numerous glands which will presently be described, are to be found.

Glands and Muciferous Canals.—They are highly developed in the torpedo, and may be divided into two parts:—The first formed by a considerable number of follicles, and placed before the snout on each side of the nostrils, forming anteriorly a separation between the two electrical organs. Numerous ramifications arise from these glands, and form apparent canals, which, after a short distance, open on the skin, in the manner I have already described. The second are developed over all the circular arch, which protects externally the electric apparatus; their elements are not agglomerated, but scattered and disseminated under the form of numerous mucous crypts, which, by small canals, end in the principal one. The structure of these glands is similar to that of all the other organs of this species. The secretory ducts are distributed in the following manner: two canals, the one deep-seated, and contained in a furrow whose walls are formed exteriorly by the internal edge of the circular cartilage, and interiorly by the external edge of the electrical organ; the other, immediately under the skin, somewhat inside the former. Both are parallel, follow the same direction, and give rise to canals. which, from the latter, open immediately on the surface of the skin; whilst, from the former, some communicate with the superficial ducts, and others terminate on the tegumentary surface. It is from the canal situated immediately under the skin, on each side, that the greatest number of branches arise, so that it represents a trunk giving off laterally a great quantity of branches. There are sometimes very curious anastomoses between the branches of the ducts, which form loops, or complete meshes, thus:—

I remarked that, comparatively speaking, these ducts were larger as the animal was smaller. They cover the nervous filaments of the large trunk which goes round the semilunar cartilage, and which furnishes some branches to the muscles of this part. On the passage of the principal excretory duct, small granulations are to be found, which communicate together by small tertiary canals. They are placed in the midst of a dartoid tissue.

General Description of the Apparatus.—After removing the skin, the sub-jacent cellular tissue, the glands, and the muciferous ducts, a whitish mass is seen on each side of the head, about the size of a large bean, and covered by a special membrane. It forms an irregular elliptical figure, the large circumference of which is external, offering internally a small hollow space, destined to contain the cartilage of the gills, and which Redi compared to the blade of a scythe. This thick whitish mass is kept in its place, and protected externally, by a cartilaginous arch, which, from the side of the cranium, descends along the outer edge of the organ, and unites itself with that of the opposite side at the inferior extremity of the animal. Internally, it is *en rapport*, proceeding from before backwards, with the sides of the cranium, the gills and the digestive organs, but it is separated from these parts by strong cartilages, so as to be contained in a special and distinct space. The parts which unite it to the neighbouring organs, are the nerves, the blood-vessels, the membranous adherences, and the anastomoses, which, from its interior, go to the surrounding parts.

Membrane Enveloping the Organ.—This membrane, which I call *sero-albuginous*, from its structure and appearance, and from the functions which it performs, is one of the most important parts of the electric organ of the torpedo. It is thin, transparent, resistent, and formed of fibres crossing each other, under which the areolar form of the organ is to be seen, smooth externally, unctuous internally, and adherent to the edges of the space just defined; no cellular tissue between it and the organ; a great number of polygonal cells, in which are received the eminences presented by the organ, offering a sort of imbrication, and contributing to make their union more solid. This membrane, which I will not call an aponeurosis, has no prolongation of any kind into the interior of the subjacent tissue, and a few blood-vessels only are distributed on its internal surface.

On examining attentively the bottoms of these polygonal cells, they are perceived to be villous, and full of an albuminous and viscid liquid, presenting a certain analogy with the matrix of the nail, and it is on this account that they are all placed on the internal surface; in a word, they are organs of secretion.

This membrane is composed of two distinct portions, one dorsal, the other abdominal. Both are similarly organised, and fixed to the snout and the semilunar cartilage, by a series of strong tendons, and it is in the space contained between the two that the electric organ is to be found.

Electrical Organ.—When the membrane covering the electrical apparatus is removed, a whitish, soft substance, nearly pulpous, is perceived, and of which the aspect is similar to that of the polygonal areolæ on the internal surface of the membrane. All the space between the superior and inferior membrane is occupied by a substance, apparently homogeneous, formed by the reunion of a great number of small, *solid*, prismatic columns. These columns only touch each other, and, with the exception of the large nervous trunks, their branches, and filaments, nothing exists between them: no blood-vessels, no cellular tissue, no mucous or gelatinous liquid effusion, nor any tendinous aponeurotic filaments. They are kept in place by the mutual pressure they exercise on each other, by the perpendicular support offered by the membranes, and by the species of insertion of the extremeties of the prisms in the hollow polygonal spaces observed on the internal surface of the membrane.

This whitish mass being an ellipsoid, its greatest diameter is parallel to the axis of the body, and convex on each side; it naturally results that the height of the prismatic columns varies; that their *maximum* is in the centre, and their *minimum* at the peripheric extremities. This remark has already been made by all the authors who have written on this subject.

Hitherto, the prisms were considered as hollow columns, full of a liquid of a particular nature, or divided by transverse diaphragms, which, in their interior, contain a peculiar liquid. But the results of my researches are as follows:—The solid prismatic columns are formed by granulations of equal size, placed on each other, so as to resemble at first sight a column of a single piece. The upper surface of the first, with the under one of the last, granulation of a column, is convex, and is received into the polygonal cavity on the anterior surface of the covering membrane. All the other granulations are concave superiorly, and convex inferiorly, so as to be received successively the one in the other. Their mode of union is the same as that of the prismatic columns with the membranes, and of these columns with each other, viz.: by means of the nervous filaments which surround them, no cellular tissue being present. The central columns offer from ten to twelve of these granulations, which have no peculiar membranes. They are *solid*, and contain no liquid: when crushed, all seem to be converted into an apparently muco-gelatinous, or albuminous, substance, uniform, and without any fragments. All that can be observed—and this is not constant—is, that the external part of this substance appears to be somewhat firmer than its centre. No liquid is effused either between the prisms or the granulations which compose them. All the mass presents a certain degree of humidity, which seems to be nothing more than a phenomenon of general endosmosis and exosmosis, and which takes place, at the same time, in all parts of the apparatus and the enveloping membrane.

No traces of Blood-vessels are to be seen in the Electrical Organ.—The nerves alone ramify in its centre; they constitute, as it were, the groundwork, the skeleton, in whose minute divisions the granulations are contained. But before studying the mode of distribution of the nerves, I will first point out their origin, and follow them from thence to the terminations of the organ.

Origin of the Nerves.—The superior surface of the brain being laid bare, four distinct lobes are perceived, disposed thus: the two anterior, of almost equal size, the difference being in favour of the first; the third much smaller, and as if placed on the second and fourth, overlapping posteriorly the former, and anteriorly the latter; the fourth, the largest of all, is composed externally of cortical substance, which forms a striking contrast with the white colour of the nerves arising from the encephalon.

But, is this last a distinct cerebral lobe? or ought it to be considered as a dependency of the cerebellum, as M. de Blainville asserts; or as a separate lobe, the respiratory lobe of M. Flourens; or merely as a peculiar development of the medulla oblongata, as Carus, MM. Matteucci and Savi advanced? If we content ourselves with observing superficially, without disturbing the arrangement presented by the brain, on removing the solid envelopes, it *seems evident* that the greater part of the nervous trunks *arise* from the *fourth cerebral lobe*, just described. Almost all modern authors carried their researches no further; Hunter alone extended them beyond the external appearance. If the brain and the medulla oblongata be removed, and examined from below, upwards, and from without, inwards; after pushing aside, and raising the fourth lobe, an oblique furrow, formed of medullary substance, is seen on the inferior and lateral side of the brain. This furrow is directed towards the medulla oblongata, and is united with it, in its central and deep-seated part, placed under the fourth lobe. All this part is

composed of the *medullary* substance, whereas the fourth lobe is composed of the *cortical* substance!

But, let the mode of penetration of this white substance, and the composition of the fourth lobe, be as it may, it is easy, after having noticed the direction of this inferior and lateral white band adjacent to the medulla oblongata, to describe the origin and mode of distribution of the nerves when they leave the furrow, of which I have just spoken. It is on the crooked lines which limit the external and inferior border of the fourth lobe, that the nervous trunks, which I am now describing, arise. They take, in the cranium, the direction they follow afterwards in the organ. At first sight, and in a general manner, it may be said that there are two principal trunks, the one anterior—smaller, the other posterior—more voluminous, which take their origin in the furrow just mentioned, and follow contrary directions. The anterior trunk is divided into three branches: the two superior ones are destined to the anterior portion of the organ, and extend vertically upwards and towards it; the third is distributed to the central portion, and is crossed in its passage by the two anterior, which pass under it; these two last likewise cross each other soon after their origin. The posterior trunk, very voluminous, is divided into three large branches, but only after a short distance; until then, they are united, so as to appear to form a single trunk; they are distributed to the inferior portion of the organ, the first superior branch alone sending some filaments to the central portion of the apparatus.

The trunks of the nerves at their origin are furnished with a neurilemma, until they enter the organ; they are likewise, on leaving the white furrow, divided into several small filaments, quite distinct from each other, and which are united in a bundle by the neurilemma. These filaments remain parallel to each other for some time, and cease only to be so when the nerve gives off branches in different directions. Each of these branches escapes, out of the cranium by a peculiar opening.

Progress and mode of distribution of the nerves in the interior of the electrical organ. I have already mentioned the number of branches which arise from the oblique furrow, formed of medullary substance, situated laterally under the fourth lobe; their primitive divisions, and the directions they take at their origin; and it thereby results that two trunks, the one anterior, the other posterior, preside over the functions of the electrical organ. The anterior or superior trunk is divided into five branches: the first which arises near its origin does not enter the organ, but belongs evidently to it, on account of the numerous anastomoses which it has with the nerves of the apparatus. It advances directly upwards, and shortly after surrounds the cartilaginous arch, which protects outwardly the electrical organ; in its progress, it gives off several filaments to the neighbouring organs: to the muciferous ones situated beside the sub-cutaneous canal; and to the external muscles destined to move the cartilaginous arch. But the most important filaments which they furnish, are those which return to the interior of the apparatus, pierce the enveloping membrane, and anastomose directly with the ultimate, minute filaments arising from the branches belonging to the organ itself. The two other branches of the anterior trunk penetrate after a short oblique course, from below upwards, into the organ, almost perpendicularly to its transverse arch. The first, divided into two filaments, is destined to the superior part, and the second goes directly to the central portion of the organ. The posterior or inferior trunk is divided into three voluminous branches: the superior is distributed partly to the centre, and partly, with the two others, to the inferior portion of the organ. All the fibres of these branches, perfectly isolated, and only placed beside each other, penetrate between the prismatic columns, so as to form between their ramifications, divisions which may be compared to lobes or lobules. Generally, the different branches, before giving off their principal ramifications, extend some distance between the prisms. The filaments which are distributed to the columns, placed near their entry in the organ, are divisions of branches situated at a distance, or, sometimes, recurrent filaments given off to the right and left, which retrograde and anastomose with the neighbouring filaments. Be this as it may, it is easy to follow the nerves in the interior of the organ. Some voluminous branches reach either the peripheric extremities of the prismatic columns, or the anterior or posterior surfaces, in different parts of their extent, and the simple pressure of the finger is sufficient to push aside the prisms and follow the course of the nerves in their most minute sub-divisions. In this manner, the mode of distribution, already indicated by Hunter, viz.: that of the filaments around the columns and their component parts, may be perceived. But what Hunter described under the denomination of tendinous fibres surrounding the columns, is evidently nothing more than the extreme divisions of the nervous system. The trunks soon ramify, first in a dichotomous manner, and afterwards into filaments whose composition can only be compared to the meshes of an immense net-work, forming the base of the organ. In following attentively the distribution of an isolated filament, I observed that, on reaching one of the granulations of a column, it divides itself into two branches, which, after surrounding them, are united again on the opposite side, so as to form a complete circle, which anastomoses with the neighbouring circle, or meshes of the same nature and same form. Sometimes, there are several granulations contained in the circle: at other times only one. Consequently, it is evident that at the extreme divisions of the nerves, there is a network of polygonal meshes in which are contained the numerous isolated granulations whose union forms a prismatic column. Therefore, when any cause produces an excitation of the parts in which originate the principal trunks that penetrate into the apparatus, it must likewise act on the extremities of the same trunks, since all are closely united. It is at the periphery of the organ that the filaments, which belong to the apparatus alone, anastomose with the filaments of the external circular branch. These anastomoses take place, as in the interior of the organ, by a circle, and may be compared to what is observed in the same animal in the optic nerves at their origin; as to the columns, situated around the spot where the nerves emerge, they are vivified and supported by means of *recurrent* branches. And, if I reflect that Hunter reckoned as many as 500 prismatic columns in the adult torpedo, and that on an average, 10 granulations may be supposed to exist in each, there will be 5000 anastomoses or meshes, in which all the granulations will be contained. For my own part, my researches show that there are an immense number of meshes, but I was unable to reckon them.

From this mode of distribution, very different from that indicated by preceding authors, it is evident that the nerves do not end in the organ, or in a gelatinous or albuminous substance. It is likewise positive that the elementary basis of the organ is not composed of a vesicle full of an alcaline liquid, and on the surface of which a blood-vessel and a nerve are ramified; for my researches indicated nothing analogous. The nervous system of the torpedo has not then, strictly speaking, a termination; but it forms a circle whose extremities bring back to the principal trunk the current which runs through, and which, in so doing, returns to the source from whence it originated. The anatomical facts which I have just pointed out, form a proof of the exactitude of the opinions announced by MM. Prevost and Dumas; and, here, the albuminous granulations perform the functions of the elementary muscular fibres. As to the existence of blood-vessels, announced by all the authors who have written on this subject, and who, since Hunter, have merely repeated the same opinion, the fact appears to me to be hypothetical, and advanced only in behalf of the theory that the nervous and circulatory systems are united with each other and present, in every organ, an equal energy in the performance of their respective functions.

Physiological deductions.—If the anatomy of the electrical organ, which I have given in the preceding pages, differed but in some minor points only from those transmitted by our predecessors, the same theory might be applied, and the same conclusions adopted. But the problem is not so easily solved. Unfortunately for the history of this part of comparative physiology, it is not on their anatomical researches that the authors have established their conclusions. The discoveries of Volta influenced the opinions of the naturalists and *savants*, who sought to find in the torpedo an apparatus analogous to the galvanic pile. There, the theory was the basis of the anatomical researches, and when M. Matteucci began to study the torpedo, he felt that it was necessary, in order to give his researches some weight, to found them on structural anatomy. His opinions, notwithstanding, were formed previously to his undertaking these researches, and it is impossible, on reading the work of M. Savi, not to recognise that the conclusions of this anatomist were subservient to his theory. Where, in fact, could M. Savi have seen that the elementary part of the organ was constituted by a vesicle full of an albuminous fluid, and on the surface of which the blood-vessels and nerves were distributed? Evidently, it was not on the animal; but this opinion was advanced in order to enable him to explain the fact according to his theory. The anatomical facts, contained in this memoir, show how much my researches differ from those of M. Savi, and that the electrical organ of the torpedo resembles none of those of a somewhat analogous nature, met with in other animals; it is, then, not astonishing that a peculiar organ should be arranged in a peculiar manner. Thus, we may confidently affirm, that, in an animal placed in an exceptional position, *the quantity of electricity produced is not in proportion to the activity of the circulation*, since I discovered none of the blood-vessels described by M. Savi and his predecessors.

Natural philosophers may, perhaps, from these facts, determine positively the mode in which electricity is produced, modifying their theories according to the modifications observed in the organs; I will merely affirm, that the origin of the nerves, the composition of the organ, the mode in which the brain acts on the apparatus and the surrounding parts, seem to prove the unity of the functions of the nervous system. As to this mode of action of the nervous fluid, and the laws which regulate its progress through the electrical organ of the torpedo, the description which I have given of the termination of the nerves shews that the opinions advanced, as to their ending in the substance of the prismatic columns, ought to be abandoned. The theory of currents is here the most feasible, and the quantity of electricity developed *evidently appears to be in proportion to the large size of the nerves distributed to the apparatus.* This is the only law applicable in the present instance, and it is confirmed by the anatomy of the other parts of the torpedo. Thus, the spinal marrow and nervous branches which arise from it are highly developed, and the contraction is greatest in those muscles in which these nerves ramify.

Conclusions.—From what precedes, it may be concluded:—1° That the torpedo possesses a peculiar organ, which has *no analogy* but in the series of animals to which it belongs—2° That its roving existence necessitates the presence of a peculiar organ, and Nature has furnished it with a suitable one—3° That the idea of searching for a similar structural and functional arrangement in animals, differently organized, has probably led to many learned and remarkable works, but has, in the present instance, not been supported by observation—4° That one of the errors of science is to endeavour to make facts correspond with a system previously formed—5° That the theory of electrical currents, as indicated by MM. Nobili and Ampére, is confirmed by the facts contained in this memoir; and, as Professor Dumas asserts in his lectures, the torpedo, the silurus, the gymnotus, and the electric frog, possess peculiar organs, and are exceptions to the general rule established by Nature; also, that it is impossible to explain the phenomena remarked in them, by what takes place in other animals placed higher in the scale. In fact, in these last, as Professor Dumas justly remarks, the circulation acts an important part in the production of the electric fluid; and, in another memoir, I hope to be able to prove, beyond doubt, the exactitude of this opinion.

PARISIAN INTELLIGENCE.

(FROM OUR OWN CORRESPONDENT.)

Paris, July 4, 1844.

On the Diagnosis of Pneumonia. By Professor Rostan. The diagnosis of the phlegmasia of the parenchyma pulmonaris is not always so easy as is supposed; on the contrary, certain difficulties very often present themselves; I, therefore, intend today briefly to enumerate its symptoms, and the affections with which it may be mistaken. The thoracic diseases, three in number, are pleurodynia, pleuritis, and bronchitis; I purposely omit pericarditis and endocarditis, because they may be recognized, without much difficulty, by auscultation. It is very useful to establish the diagnosis in diseases of any given organ, even when their nature is the same; thus phlegmasia, when it attacks the component elements of the pulmonary organs, does not always require the same mode of treatment: moreover, the prognosis (always deserving our serious attention) varies likewise. The remedies, then, must not always be chosen according to the general phenomena. One of the first symptoms, common to all these affections, is *pain.* In *pleurodynia*, it is seated in the thoracic parietes; increases on the least motion or muscular contraction, and on pressure. In *pleuritis*, it is more severe, more violent, lancinating and pungent; does not increase on pressure; on the contrary, is more intense during inspiration, and when the patient coughs; this is easily explained: the lung, in dilating, presses on the part of the inflamed pleura, whether it be the costal or pulmonary portion, or both, which are affected; finally, strong pressure or percussion on the thorax augments it, when the inflammation occupies the costal pleura. In *pneumonia*, it is deeper seated, obtuse; it has been erroneously asserted of late, that pain exists only in peripneumonia, and never in pneumonia; however, it exists here, without a doubt, and is what the ancients designated under the name of *dolor obscurus et gravativus:* in general, it affects only one side of the chest; yet, when the inflammation is double, and very intense, it may be felt on both sides at the same time. In *bronchitis*, it is not so frequent, except in very severe cases, and then it occupies the centre of the chest, under the sternum, or between the two shoulder-blades: which is not astonishing, as these parts correspond to the large bronchi; when, on the contrary, it is seated in the capillary division, there exists an obtuse pain in both sides of the chest at the same time. All that you can discover, from the replies of the patient, is the existence of a central, general pain in the chest, of which the limits are not easily defined. Thus, as you may perceive, the difference of the character of the pain, in thoracic disorders, constitutes an element by which the diagnosis may be established.—*Cough* does not exist in pleurodynia; thus, if you have a patient affected with severe pain in the side without cough, you may diagnosticate with certainty pleurodynia. Pleuritis is always accompanied with a dry, painful cough; no expectoration; indeed, what could a patient affected with pleuritis spit up? Pinel, in stating that pleuritis terminates by an abundant expectoration, asserts a fact in too general a manner; for if it be true that, in some cases, consecutive bronchitis takes place, it is equally so that, in uncomplicated pleuritis, the cough is very painful, but quite dry. In pneumonia, the cough is less painful, and is followed by the characteristic bloody sputa. In bronchitis, the cough is accompanied by expectoration, but the sputa are of a different nature.— *Sputa.* In pneumonia, they present the following characteristic signs: not very abundant, aerated, transparent, frothy, and so viscous that they adhere sufficiently to the vessel, not to flow out when it is turned over; they are of a rusty colour, more or less yellow, and approaching to the saffron red. When the sputa present these characters, it is impossible not to recognize the presence of pneumonia; but the diagnosis is not always so easy; thus, in the first stage, it may be taken for pleuritis, the cough being then dry. It was M. Marandel who first pointed out the fact of the absence of a secretion in the commencement of a phlegmasia. In bronchitis, they are at first ropy, transparent, not bloody; and if, in some cases, a slight quantity of blood exists, it is not combined with the bronchial mucus as in pneumonia. At a more advanced stage, they become opaque, of a yellow green colour, and when the disease ends by resolution, they offer the characters of the first stage anew.

Having thus shown that it is not impossible to diagnosticate the disease, without the aid of auscultation and percussion, still as these two methods give a degree of precision and certitude to the diagnosis, unknown before their discovery, I will now examine the signs which they furnish. *Percussion.* In performing it, you must not forget that the sound varies in intensity according to the part percussed; thus, it is duller on the pectoral muscles, on the mammæ, on the scapulæ, &c. In pleurodymia, the sound is normal in all parts of the thorax, over the seat of the pain, as elsewhere. In pleuritis, it varies according to the nature of the local lesion: in the first stage, there being no effusion, the sound is normal; but as soon as the pleura contains a liquid, it becomes dull. This does not take place before some days have elapsed, and Laënnec evidently was mistaken when he stated that it began after a few hours only. In all probability, the facts on which he founded his opinion were furnished by patients, who were mistaken when they asserted that they had been ill only a few hours; for, as I have already stated, in the commencement of the phlegmasia, the secretions are diminished rather than increased. When the effusion is perceptible, the sound is dull. Now, before going any further, how are we to recognise that the dulness is produced by a liquid effusion, and not by any other cause?—such as the hypertrophy of the spleen in intermittent fever? This subject attracted the attention of Laënnec, and it is curious to see with what satisfaction he seeks to establish the superiority of auscultation over percussion. "Percussion of the chest," said this eminent physician, "is doubtless one of the most important modern discoveries; but still it is far from being complete. It gives often but negative results in phthisis pulmonaris, and cannot enable the physician to establish the diagnosis between this disease and chronic pneumonia. In peripneumonia, it is of but little use when the phlegmasia is seated in the centre of the lungs, or when both are slightly, and equally, affected. It gives no sign by which pneumonia may be distinguished from pleuritis, hydrothorax, or any other effusion in the cavity of the pleura; and in pneumothorax, it is not only useless, but likewise may become a source of error, &c. Auscultation, on the contrary, enables us to recognise diseases in which percussion is of no utility, and to establish the diagnosis of almost all the affections of the lungs, heart, and pleura, with as much certainty, perhaps, as that of surgical cases, by means of the introduction of a sound, or of the finger." (Laënnec.) Notwithstanding, there are cases in which percussion will enable you to discover if the matity be produced by effusion, or by some other cause. Thus in pneumonia, dulness may exist, but it differs from that in pleuritis with effusion; inasmuch as in the latter it is seated in the inferior portions of the chest, whereas, in the generality of cases, this does not take place in pneumonia. It has been asserted that it is possible to alter the part in which the matity is observed, by making the patient lie alternately on the back, the abdomen, the side, &c. All this sounds very well in theory, but it is not so easy in practice; and the manœuvres requisite are often very fatiguing, if not injurious, to the patient. It has likewise been said, that the effusions may be circumscribed by false membranes; this, though not impossible, still is, I think, very uncommon, and perhaps not more than one or two authentic cases can be recorded. To resume: in pleurodynia, and pleuritis without effusion, sound normal on percussion; in pleuritis with effusion and pneumonia, matity; in bronchitis, sound normal. *Auscultation.* In pleurodynia, respiration to be heard in all parts of the thorax. Here a practical reflection may be made, and which you will find useful; for instance, suppose you are called to see a patient suffering from a superficial pain in the side, increased on pressure; no cough, nor expectoration; nothing on percussion or auscultation. You naturally diagnosticate pleurodynia; but, a day or two after, you discover evident signs of pleuritic effusion, shewing that the former, though perhaps rheumatismal, is capable of extending from the parietes of the chest to the pleura itself. Thus, when a liquid is effused, we find dulness on percussion; auscultation gives no vesicular murmur, or else one which is very distant and obscure; on the part corresponding to the surface of the liquid, bronchial respiration replaces the vesicular murmur; and when the patient speaks, a noise, similar to the bleating of the goat or œgophony, is heard. Laënnec rightly considered this phenomenon as produced by the vibration of the voice on the surface of the liquid, and that it constituted a pathognomonic symptom. But, though highly important, it cannot be considered as decisive; for, in some individuals, the voice at the root of the lungs naturally offers this character; this, however, is not of frequent occurrence, and you ought only to conclude that such is the case, when percussion, and the other general symptoms, indicate nothing abnormal. In the immense majority of cases, œgophony is a distinctive sign of pleuritic effusion. To resume: if a patient present pain on one side of the thorax, increased on inspiration; if percussion indicate a matity in the inferior portion of the chest; if the level of this matity change according to the position of the patient; if the vesicular murmur be replaced by bronchial respiration; if œgophony exist when the patient speaks loud; evidently, there is pleuritis with effusion.

And now, having indicated the diseases with which pneumonia may be confounded, I will examine the signs by which it may be recognized. First stage: the pulmonary cells are still permeable; on dividing the parenchyma pulmonaris, a ropy, viscous, mucosity escapes, in small quantity, and adhering to the finger when touched. Second stage: the air does not penetrate into the final pulmonary cells; the organ, placed in water, no longer swims; its tissue resembles that of the liver, and it is on this account that it is said to be *hepatized;* it is redder, and its resistance on pressure is less, though its weight is greater, than in the normal state. Third stage: the density of the pulmonary tissue is the same as in the former, but, when divided, the appearance is no longer similar; instead of being red, it is yellow, livid,—sometimes of a yellowish white; the finger easily penetrates into its substance, and the cavity, thus formed, is soon filled with an abundant seropurulent liquid. Finally, there is another condition of the lungs, which offers great interest: I mean the stage of resolution, in which they gradually assume their normal state. Here, the air penetrates by degrees more and more into the pulmonary cells, and the tissue assumes its natural consistency and colour. Percussion, in the first stage, produces a sound somewhat duller; auscultation—the crepitant rhonchus, more or less humid. In the second degree—matity, *tanquam percussi femoris*; no crepitation; no vesicular murmur, nor crepitant rhonchus; bronchial respiration, as if the patient breathed in a tube of a certain calibre placed under the ear of the physician: this is produced on account of the difficulty the air experiences in penetrating beyond the larger bronchi. This bronchial respiration, in pneumonia, is to be distinguished from that observed in pleuritis, by making the patient speak; in the former, bronchophony takes place, accompanied by a resounding voice, owing to the hepatization of the pulmonary tissue; and, when pneumonia is complicated with pleuritic effusion, œgophony may be met with. Finally, in order to complete the diagnosis, you must unite all the signs just enumerated, and not content yourselves with two or three only.

As to the signs of bronchitis: percussion gives a normal sound, but different ones are heard by auscultation, according to the stage: in the first, a sibilant rhonchus, somewhat humid, as if the air had to pierce a viscous substance ere it could penetrate into the pulmonary cells; in the second, mucous râle, sputa thicker, and in greater quantity, and sometimes absence of every sound, until the patient is made to expectorate, so as to permit the entry of the air in the cells. The general symp-

toms are very slight in pleurodynia; but, in pleuritis, bronchitis, and pneumonia, the fever is more intense, especially in the last; and it would seem that nature develops greater powers of resistance, according to the gravity of the affection, and the importance of the part. I have thus rapidly enumerated the various symptoms by which the diagnosis of pneumonia may be established; in another lecture, I will indicate the treatment.

On diseases of the eyes, by Professor Velpeau. *Treatment of Cataracta.* In enumerating the various modes of treatment for the cure of cataract, I will not detain you with the reasons why it is in general impossible to cure, except by an operation; although certain quacks affirm that they can succeed by other means. This every surgeon knows to be impossible. It is however useful that you should be acquainted with the mode in which some of these persons proceed; they are well aware of the action of *belladonna* and the other *solaneæ* on the pupil; they, therefore, make an arrangement with the patient, that one half of the fee be paid before-hand, the remainder after the cure; this done, they cause the pupil to dilate, the patient sees better, and pays his money; but, to his great dismay, the next day he is as blind as ever; the trick however is accomplished. But, certain facts have been recorded, which prove without a doubt, that cataract may remain stationary in the first stage, and even diminish in intensity. I have myself seen two or three patients, on whom, under the influence of an energetic revulsive treatment, a cataract has disappeared completely. M. Gondret has obtained similar results by his ointment, applied on different parts of the scalp. In others, it has been seen to yield to a seton on the neck, to an intercurrent disease, or to purgatives frequently repeated; but you must bear in mind, that this is in cataract in the first stage. It happens, sometimes, that a cataract at an advanced stage disappears without an operation being performed: by a cause which, acting violently on the eye, changes its position. The following case is a proof: a young chemist, in endeavouring to convert charcoal into a diamond, burst a phial; one of its fragments struck him in the eye, dividing the sclerotica and cornea; the wound healed without suppurating, but a cataract resulted. This occurred in 1827 or 1828, and in 1830, during the revolution, he played an active part in the *Rue St. Antoine*, and all at once he found that his eyesight was restored; on examination, the cataract was found to be in the camera anterior. Boyer quotes the case of a notary, on whom a similar result took place; the cataract placed itself horizontally. I saw, once, a patient who assured me, that he could cause his cataract to disappear when he pleased. Not believing this to be possible, he attempted it in my presence; on a first trial he failed; but, on a second, by bending forwards, he caused it to pass into the camera anterior; and in throwing his head back, it again fell into the camera posterior. The crystalline lens was here reduced to a very small size. I have thus pointed out to you, the mode in which cataract may be cured without an operation, but no prudent surgeon would trust to such means; it may be established as a general rule, that the opacity of the lens cannot disappear spontaneously; a conclusion to which we are led, on considering the nature of the disease. What is the opaque lens? Is it not evidently a part of the body which has lost its vital properties? And what can we expect from internal remedies? Nothing whatever. All idea of curing the cataract must necessarily be abandoned, or the opaque body must be removed; it is a problem which can be solved but in one way—by a surgical operation. But, which operation is the most appropriate? Three methods have been proposed:—1° that by *crushing*, by *rescission*, or by *laceration*, in which the opaque lens is neither removed, nor depressed, but is broken to pieces, the capsule having been torn. This method, if history be exact, was known to the Arabians, who employed an instrument round which they twisted the opaque body, or after lacerating the capsule, abandoned the cure to nature. Without saying aught of the story of the goat which cured itself by means of a thorn, I find, in the last century, a thesis by Zehee, in Haller's Collection, in which are recorded the cures obtained by simply perforating the capsule, or laccrating it; the aqueous humour dissolves the opaque body, if we take care to perform the operation as often as necessary, and the cataract thus disappears. In the German authors, we find nothing conclusive on this subject; and while speaking of Germany, I will add, that the practitioners in that country are bold; for did not one propose a seton, by means of a thread run through the eye! It must be confessed, that it is an odd idea, to say nothing more. New methods may be invented, but to be employed, they ought to be superior to those formerly recommended. It has never been employed in France, because the two other methods are far superior. 2° By *couching*, *depressing*, or rather *displacing*, in which the opaque body is pushed aside, so as to prevent its hindering the rays of light falling on the retina. 3° By *extraction*, in which the lens is removed. Each of these presents several varieties; thus, operators have designated under the names of *sclerotonyxis* and *keratonyxis*, for the first, and *sclerotomia* and *keratomia* for the second, the methods according as the instrument penetrates the eye through the sclerotica or cornea. The former, whether performed by penetrating through the cornea (*keratonyxis*), or through the sclerotica (*sclerotonyxis*), is done with the intent of lacerating the capsule of the lens, and displacing it by pushing it upwards, downwards, or sideways. This operation was first done in Germany, or rather in Arabia, from whence it was made known in Germany and France. In France, Dupuytren, about 1812, brought it into notice. On comparing the two methods, we find that in penetrating through the sclerotica, the following parts may be wounded:—iris, and, sometimes, the vitreous humour, and the retina; through the cornea, they are easily avoided, and the wounds of this membrane heal readily. But I must not omit stating, that here the lens is depressed with greater difficulty, and, generally, it becomes necessary to break it to pieces, which renders the operation far more uncertain, as the bits of the opacity may unite together again, and render the operation fruitless; again, many of the inconveniences, attendant on the operation by the sclerotica, may be avoided. Therefore, I consider it the more advantageous of the two. As to the methods anciently employed, it is impossible to state precisely in what they consisted; but were I to judge from the results obtained from the 15th to the 18th centuries, I should conclude, that they were generally unfortunate, for Heister says, that there was one cure in ten cases. This was, in all probability, owing to the imperfections of the instrument employed, it being similar to that made use of in the operation for tenotomy. Properly speaking, the operation for cataract may be said to have been discovered in the middle of the last century. Discussions took place in the Academy of Surgery; the cataract was studied with attention, and its seat was found to be in the crystalline lens, or its capsule; its physical characters were carefully examined, and it thus became evident, that the only means by which it could be cured, were extraction or couching. Daviel proposed the former; he proved to the Academy of Surgery, beyond a doubt, that cataract could be cured by extracting the opaque substance. After piercing the cornea with an instrument terminated like a lance, he enlarged the opening with a blunt-pointed knife, or a pair of scissors, and then forced out the crystalline lens. But it is easy to conceive the danger attendant on this operation, and the escape of the various humours, on account of the pressure exercised, and that, consequently, he could not succeed often. Notwithstanding its imperfections, the idea was found to be good, and, therefore, several operators endeavoured to improve it. To this end, Lafaye, Mery, Wenzel, Richter, invented instruments to facilitate the operation. Richter's knife for incising the cornea is that generally employed to this day; Lafaye's has been abandoned. The former has two equal sides, slightly convex. Wenzel's resembles a lancet, but is a little longer, and not quite so broad; it was for a long time employed, until that invented by Richter was preferred, because it acts by a horizontal pressure, and cuts with less effort; finally, the difference, though very slight between the two, is yet enough to justify the preference. This knife is sufficient to divide the cornea, which must be done to a quarter, or even one-third of its extent. Now, this is impossible with Daviel's lance.

In consequence of these different improvements made successively in the operation by extraction, that by couching lost somewhat of its vogue; but, when the inconveniences necessarily resulting from the former were perceived, couching came again into notice, and it is to Pott and Scarpa that we are indebted for the ameliorations obtained. Pott invented a small straight needle, with which, on an average, he succeeded thrice in five cases. Scarpa employed a very slender needle, curved, offering an eminence on its concave, and being flat on its convex, surface; he simplified the operation, and affirmed that he succeeded in four-fifths of his cases. Couching gained so many partizans, that Europe may be said to be divided into two rival camps. In England and Italy, extraction is employed; in France, Professor Roux operates by extraction, whilst other surgeons prefer couching. Both, however, have been considerably improved by the most distinguished scientific men; thus, the precepts for couching were laid down by Pott, Scarpa, Dupuytren; for extraction, by Lafaye, Richter, and Professor Roux.

The comparative value of the two methods can never be determined; because, in every case, one cannot be preferred to the other: there being some in which couching, and others in which extraction, is preferable. With children, and unruly patients, in those in whom the eyes are very prominent, or inflame on the slightest cause, couching ought to be preferred. On the contrary, you may have recourse to extraction, when no complication exists; when the eye is not greatly developed, nor prominent: this last circumstance is of the highest importance, because, in this condition, the contraction of the muscles of the eye is sufficient to force the humours out, and sometimes to empty the globe of the eye. As to the result: evidently that obtained by extraction is more complete, as the opaque body is removed; while, by couching, it is left to be absorbed: consequently, it forms a foreign body, and becomes a cause of phlegmasia; moreover, the opacity may re-appear and necessitate a second operation.

To resume:—Extraction, when it succeeds, is more advantageous, for the pupil is clearer, and the sight better; but it may produce very serious accidents, which are sometimes irremediable. Thus, the eye may empty itself and be lost; the cornea become opaque, and sight abolished. In couching, if the result is not so good, the accidents are less numerous; thus, it rarely determines the loss of the eye, and if the sight is not perfect, the operation may be repeated. The precautions necessary in the two, are far from being the same; thus, in couching, it is useful, and even indispensable, to dilate the pupil by means of belladonna; because the pupil, by its contraction, on the introduction of the instrument, will hide the opacity; on the contrary, in extraction, it is injurious, because it facilitates the escape of the humours. Couching may be performed on the patient while standing, sitting, or lying down; for extraction, he must always be lying down; in the former, pressure may be made on the eye, and docility of the patient is not so requisite, as the eye cannot empty itself during a sudden movement; in the latter, on the contrary, all pressure must be avoided; the patient must remain motionless, not only during the operation, in order that the whole interior of the eye may not escape, but likewise after; otherwise, the wound will not heal, and suppuration and other serious accidents may come on. Thus, in comparing the two operations, it is impossible to prove that the one is decidedly superior to the other.

Nomination of Agrégés in Surgery.—After a brilliant *concours* at the Faculty of Medicine, the following gentlemen were named:—MM. Gosselin, Voillemier, Giraldes, Marschal, and Cazeau—the last named for Midwifery.

Academy of Sciences. Sitting of the 1st July.—Baron Ch. Dupin in the Chair.

On the Electrical Organ of the Torpedo.—Dr. Mayer addressed a printed memoir, and a letter,

in which he states that he is not of Dr. Jobert's opinion on the anatomy of the electric organ of the torpedo, viz.: that the rays and the *septa fibrosa* are very visible, and that the nerves, which ramify and anastomose in the intervals of the hexagonal columns, are distributed on the interior of the hexagonal cells.

On Diseases of the Uterus.—Dr. Numa Guerin, of St. Severin d'Aubeterre, Charente, addressed a letter, in which he announced having, by means of sounds and speculums, introduced the liquid of a general bath into the uterine cavity and vagina.

Vesication of the Mucous Membrane of the Bladder, and Development of Pseudo-Membranes on its Surface, caused by the Application of a Blister.—Memoir read by Dr. Morel Lavallée, containing several cases. The first was in his own person: ten hours after the application of a large blister on one side of the thorax, the following symptoms occurred:—pain and heat in the hypogastrium, and especially in the urethra and fossa navicularis whilst making water, accompanied with fever, agitation, &c., until a portion of pseudo-membrane escaped, which, when unrolled, was about the size of a shilling; it was easily torn, white interiorly, of a filamentous texture; in short, similar to what is seen under the epidermis of certain blisters. Three other similar cases are recorded; in some, camphorated blisters had been applied. From these facts the author concludes:—that the action is the more intense according to the size of the blister; that cantharides acts on the bladder, only after passing through the circulation; consequently, it is necessary to add camphor to it when it is applied near the heart; that, as yet, this occurrence has not been observed in females, whether this be owing to the accidents not taking place, or because the pseudo-membranes escape more easily, and without giving rise to any serious accidents; that the anatomical characters in a case observed by Dr. Vidal (de Cassis) were; redness and swelling of the mucous membrane, like the conjunctiva in ophthalmia blenorrhagica, with secretion of false membranes; that these membranes vary from the size of a sixpenny-piece to two inches square, and from 0·039 to 0·118 of an inch in thickness; that the smaller ones are formed of a greyish rosaceous mucus, with streaks of blood, of a slight fibrous texture, and which harden in alcohol; the larger ones of a dull white colour, firm, elastic, resistent, organised, and somewhat similar to the buffy coat of the blood; that, in all probability, they are formed of concreted albumine; that the symptoms appear from three to eight hours after the application of the blister, and resemble those of cystitis, accompanied with the expulsion of a false membrane; that the diagnosis is easily established, the cause being the application of a blister; that the prognosis in general is not very dangerous; that the treatment consists in taking off the blister, as soon as these effects appear; finally, that perhaps the action of cantharides on the bladder may become a means of cure for another affection of this organ, viz: paralysis; should its outward application and its administration be without effect, might it not be injected into the bladder?

On Secale Cornutum; memoir by M. Legres. The author, after enumerating the practitioners who have employed it, the diseases in which it has been administered, the causes which produce it, its nature, &c., adopting the opinion which attributes it to an alteration in the grain, continues thus: it results from the analysis of 100 parts of secale cornutum, dried at 122° F, that it is composed of:—A thick oil, fluid at 73½° of a bright yellow colour, 34·50—Amidine 2·75—Albumen 1·00—Inuline 2·25—Gum, 2·50—Non-crystallizable sugar 1·25—Dark brown resin 2·75—Fungine 3·50—Vegeto-animal matter 13·50—Osmazone 0·75—Acid fat 0·50—Ligneous fibres 24·50—Colouring principles (2 species: one becoming red, violet, or brown by an alcali, yellow or rose by an acid, insoluble in alcohol; the other, bright yellow in ammonia, unchanged in acids, soluble in alchohol) 0·50—Non isolated odorant principle—fungate of potass 2·25—Chloride of Sodium 0·50—Sulphate of lime and magnesia 0·50—Sub-phosphate of lime 1·25—Protoxide of Iron 0·25—Slight traces of copper—Silica 0·15—Water 2·50—Loss 2·35. Finally, in order to test the oil of secale cornutum, which, according to M. Bonjean of Chambery, is poisonous, ʒiss was given to a rabbit, and the animal was made to fast during 4 hours; nothing occurred.

Academy of Medicine. Sitting of the 2nd July.—M. Caventou, V.P., in the chair.—M. Pariset read the speech delivered by him at the interment of M. Geoffroy St. Hilaire, in the name of the Academy. It was followed by loud and unanimous applause. The President informed the Academy of the death of one of its members, M. Demangeon.

On Deviations of the Spine.—Dr. Pravaz, corresponding member, read a memoir on a physico-mechanical method to remedy the deformities of the thorax, caused by deviations of the spine.

Discussion on Ophthalmology.—Professor Gerdy continued his speech, but was obliged to leave the Academy before its close, his duties requiring his presence at the Faculty of Medicine; (in my next, an analysis of this speech shall be given.) M. Rochoux:—In a late discussion on fibrous tumours of the breast, a great many distinguished surgeons were heard, and numerous interesting facts communicated, but without resolving the doubts on the subject, which remains as problematic as ever. Fearful of a similar result in the present instance, I proposed closing it, but this proposition was not adopted; and if I raise my voice to-day, it is in the hopes of shortening it, if possible. A colleague, after the sitting in which my proposition was made, said that this discussion was very important;—another that it would be of no use whatever; in my opinion, it will prove simply, that in the classification of the different species of ophthalmia, two considerations must never be lost sight of—the causes, and the part of the organ which is the seat of the disease. The speaker next proceeded to discuss the necessity of admitting different species in pathology, and concluded that they are in that science as applicable as to any other part of natural history, and then continued as follows:—It is well known, and generally admitted, that the same morbid cause affects organs according to their structure; and that different causes act differently on the same organ. Thus, inflammation, supposing it to be always of the same nature, will affect differently the pleura, the lungs, the brain; and the same organ, the skin for instance, will present marked differences, in erysipelas, rubeola, scarlatina, &c. And why should this not exist in the eye? Though convinced that such is the case, still I cannot but allow that it is difficult, if not impossible, to establish the fact. While speaking of general causes, Professor Velpeau says he cannot admit of a scrophulous virus: so far I am of his opinion; but I differ from him, when he says, that there may be a scrophulous temperament. Now, if anything has been proved in medicine, it is that a temperament does not constitute a morbid state; whereas that presented by a person affected with a scrophulous diathesis, forms a real pathological condition. Here, I will add, that in these individuals, ophthalmia presents characteristic symptoms, and that the same remarks are applicable to syphilis; for, as M. Lagneau justly observes, the examination of the eye is sufficient in some cases to indicate the nature of the disease. And now a few words on an opinion expressed by Professor A. Berard, who thinks that diseases of the ciliary circle will give rise to peculiar symptoms; in this respect I am entirely of his opinion, for the following reasons. The ciliary circle, as many anatomists have asserted, is a real ganglion; for, when examined with the microscope, it always seemed to me to be composed of a nervous tissue. It is evidently continuous with the two layers of the iris, which, like it, are plainly nervous. These two layers, at the small circumference of the iris, are united by numerous anastomoses, easily seen in the rabbit; everywhere else they are separated by a vascular net-work, forming, as it were, a third layer of a different nature. Now, if an organ, offering so peculiar a structure, has not a peculiar mode of being affected, no pathological principle would exist, in which we could place the least confidence. This fact, alone, proves that it is indispensable, notwithstanding the difficulties attendant on the subject, to establish numerous divisions in ophthalmology. In this case, as in everything that appertains to the study of the sciences, the victory, that is to say, the truth, will finally prevail, if followed up with energy and perseverance.

The Academy now formed itself into *Comité Secret*, to hear the report of the Commission concerning the list of candidates for the vacant place in the section of operative surgery.

GARLAND DE BEAUMONT, D.M.P, B.L., & S., &c.
Honorary Physician to the Spanish Embassy.

ON THE SITUATION OF THE ORGAN OF AMATIVENESS.

BY HERBERT SPENCER.

Considerable doubt has long been entertained by phrenologists respecting the real function of the cerebellum. Amongst other arguments that militate against the commonly received opinion that it is the organ of Amativeness, are these.

1. It has been in several cases the seat of extensive lesions, without there being any corresponding disorder of its supposed function. We have one instance on record where disorganization had been so complete, as to transform this portion of the brain into a mere sack of fluid, and yet there was no apparent diminution of the propensity assigned to it.

2. An *à priori* view of the case is unfavourable to the supposition that the sexual instinct is thus located. Any mental power resident in a part of the brain mechanically separate from that occupied by the others, might be fairly assumed to be generically distinct from them. If therefore the cerebellum be the organ of Amativeness, it must be presumed that this passion is not only specifically different from all the rest, but that it is absolutely of another genus. There appears however Gustativeness and Conscientiousness, as between Amativeness and Adhesiveness; and yet Gustativeness and Conscientiousness are situated in the same cerebral mass.

3. The theory seems to be irreconcilable with the phenomena of communicated actien. Phrenologists have taught that any portion of the brain when in a state of activity tends to arouse the organs located in its neighbourhood, and amongst other illustrations it is shewn that excited Amativeness frequently awakens the adjacent propensities. Mr. Sydney Smith quotes the saying—

Nippin' and scartin' is Scots' folks wooin,'

as bearing evidence of the activity of Destructiveness thus induced, and various examples are given where other animal propensities have been similarly influenced. But to render such an explanation consistent, it is necessary that the organs influenced by this diffusion of excitement should form part of the same cerebral mass with the one stimulating them, seeing that the effect in question is considered as arising from the increased circulation in the acting organ, spreading itself through the anastomosing blood-vessels into the neighbouring parts of the brain. How then can it happen that an excited cerebellum should awaken the adjacent parts of the cerebrum, when the two are separated from each other by the *tentorium*, and a double thickness of the *pia mater* and *arachnoid* membranes?

4. It is well known that the cerebellum in some way or other presides over the action of the muscles, although the specific nature of its influence has not as yet been satisfactorily determined. To suppose that, at the same time that it exercises this control over the motor powers of the body, it likewise serves as the seat of a mental emotion such as that attributed to it, is subversive of one of the essential doctrines of phrenology. It is a fundamental axiom of the science that one organ can have but one function, and not only do the observations of phrenologists go to prove this, but every fresh investigation into the physiology of the nervous system tends still more clearly to demonstrate the universality of the principle. If however it be admitted that the sexual impulse and the superintendence of muscular motion may co-exist in the same portion of brain—that is, if it be conceded that one organ can have two functions—

then it must also be conceded that it can have three, or four, or any greater number, and thence we may be gradually led to the admission of the unphilosophical dogma, that "the brain is a unit."

In answer to these several objections it will perhaps be urged, that the question must be ultimately determined by observation; and that as the majority of known facts countenance the generally acknowledged doctrine, that doctrine must be received notwithstanding the apparent inconsistencies involved. It is replied, that an explanation may be given, which, at the same time that it avoids the above-mentioned discrepancies, is fully as much in accordance with the results of experience as the old one. The theory alluded to, as fulfilling these conditions, is this,—that the amative propensity is located in those convolutions of the *cerebrum* that are situated upon the under side of its posterior lobe, next in contact with the cerebellum.

The reader will at once see, that such an arrangement must give rise to external appearances very similar to those which are supposed to favour the commonly received opinion. For, assuming the organ of Amativeness to be large, that is, assuming the under side of the cerebrum to be unusually convex, (or it should perhaps be said, less than usually concave), it must follow that the cerebellum will, in relation to the rest of the brain, be depressed below its ordinary position, thus occasioning that thickness of neck commonly observed in such cases. A careful examination will, it is believed, shew that the appearance in question *does* result, not from the greater magnitude of the cerebellum, but from the inferiority of its position. My own observations have hitherto clearly indicated this. In all cases of large amativeness that I have met with, the horizontal depression that traverses the occiput from ear to ear, coinciding with the lateral space that intervenes between the cerebrum and cerebellum, has been *much more marked than common*, giving to the hand an unusually distinct impression of the separateness of the two internal masses. This is evidently the appearance that would result were the organ situated as here supposed, seeing that any increase in the convexity of the under side of the cerebrum must necessarily be accompanied by an enlargement of the lateral space between it and the cerebellum.

It will scarcely be expected that any generally known examples can be cited in support of this view, because the structural peculiarity here pointed out as the index of large amativeness has not been phrenologically observed. There is, however, one illustration open to general reference. I allude to the case of Mr. B.. related in the 8th volume of the *Phrenological Journal*. The character deduced from the development of this gentleman is admitted by himself to be in the main remarkably correct, but he considers it in one respect erroneous. It was predicated from his large cerebellum, that he possessed strong amatory feelings;—this he denies. In the endeavour to account for the disagreement, it is, however, remarked that the cerebellum might not, perhaps, be so large as it at first sight appeared, for that though broad, it was *not deep*. Viewing this in connexion with the preceding remarks, it appears probable that the cerebellum was situated high up in relation to the rest of the brain;—that is, the under side of the cerebrum was not more than usually convex; or, in other words, the supposed organ of amativeness was not large. An accompanying diagram of the head quite bears out this view.

The proposed theory, then, avoids the several objections to which the old one is liable,—necessarily infers external appearances similar to those involved by it,—and will, it is believed, be ultimately found to accord still more satisfactorily with the results of observation.

Derby, 7th June, 1844.

It has always been considered that Gall's facts shewing the feeling of sexual love to be seated in the cerebellum are more numerous and diversified than his proofs of the situation of any other cerebral organ, and true cerebral physiologists have all regarded the cerebellum as the organ of the sexual feeling, though many have supposed with other writers, old and recent, that it is also greatly concerned with sensation and motion. Even Gall says, "The cerebellum may participate in the vital function of the medulla oblongata and spinalis, may give rise to disturbed motion when injured, and yet have its own particular animal function." (8vo. vol. iii., p. 385.) Mesmeric excitement and depression of the corresponding portion of the head in the experiments of Mr. Atkinson, repeated by others, have produced and removed common sensation and muscular power at pleasure. From his experiments this gentleman regards voluntary motion to be connected with the outer portions of the cerebellum, sensation with the more central, and the sexual feeling with the central.

1. It may be objected to Mr. Spencer's first argument, that the cerebrum has often been extensively injured without evident lesion of the function of the part injured—sufficient remaining for a high degree of function; just as very diseased stomachs will sometimes digest large quantities of food, and very diseased livers secrete an apparently due quantity of bile. The case of totally destroyed cerebellum with sexual desire avails nothing. The sac of fluid was cerebellum so reduced by continued inflamatory irritation as to resemble a gelatinous membrane. During this process there might have been sexual irritation enough before the cerebellum was liquified." (See Combe's *Translation of Gallon the Function of the Cerebellum, &c. &c.* p. 171.) Again the same argument would tell against the doctrine of the cerebellum presiding over the action of muscles; for the patient to the last had voluntary motion sufficient for her wants and even for progression. The tender Dr. Magendie declares, he has over and over again seen animals perform very regular movements after he had disburthened them of the whole of their cerebellum, (*Précis de Physiologie*, vol. 1., p. 408); and after having robbed hedgehogs and guinea-pigs of their whole brains—cerebrum and cerebellum, and kindly held a bottle of aromatic vinegar to their nostrils, they actually rubbed their little noses with their paws.

2, 3. Amativeness and Adhesiveness have no necessary affinity. In many animals, the former is never associated with the latter; even in man, either of these may be excited in the highest degree, without any excitement of the other. But Amativeness produces and requires the most exquisite excitement of the sense of common feeling, and an almost epileptic excitement of the voluntary muscles. There is, therefore, the strongest reason for its being situated in the cerebellum, which appears essentially concerned with sensibility and voluntary muscular motion. These are so indispensable to Amativeness, that, wherever their organs be, the organ of Amativeness ought to be. Destructivness and Adhesiveness are not necessary to its action, though they may sometimes be associated with it.

4. This argument drops to the ground if the cerebellum is regarded not as one organ, but, like the cerebrum, a compound of organs.

Mr. Spencer has overlooked the mass of examples of correspondence between the degree of the sexual feeling and, not the external form of the skull but, the positive size of the cerebellum itself; as well as the mass of pathological facts which support the received doctrine. In animals emasculated or equivalently injured when young, the *cerebellum* does not attain its due growth: and Gall adduces many facts to shew that the effect takes place upon the opposite lobe to that where the injury is. He also presents us with a large number of cases of injury, inflammation, and apoplexy of the *cerebellum*, characterized by remarkable disturbance of the genital organs; and similar cases most medical men are acquainted with.—*Editor of the Zoist.*

In answer to a question from Mr. Macauley, Sir J. Graham stated, that the House ought to recollect he had on more than one occasion expressed his intention of bringing in the medical bill. He did not, however wish to bring it in without having the opportunity of stating the grounds of it, and its provisions in detail. He should, however, ask leave to lay such a bill on the table before the close of the session.

ON THE BILE AND THE PRODUCTS OF ITS DECOMPOSITION;*

By THEYER AND SCHLOSSER.

(Translated for the "Medical Times," by Wm. Kirby O'Sullivan, Esq.)

BILIN.

Although the identity of bilin with bilic acid had been already placed beyond doubt, still the final proof was wanting—the analysis of the bilin. This, and the following researches, were performed under the direction of Professor Liebig in the Giessen Laboratory. A large quantity of solution of bile was treated with acetate of lead, filtered, and the solution which, according to Berzelius, contained the bilin, treated with sulphuretted hydrogen. The solution containing bilin and acetate of soda, was separated from the sulphuret of lead, evaporated to dryness, dissolved in absolute alcohol, and sulphuric acid added until a precipitate ceased to be formed, and the solution re-acted slightly acid; the precipitate of sulphates of the alkalis was then separated by filtration, and the solution freed from the excess of sulphuric acid, by gently heating it with fresh precipitated, well washed, carbonate of lead: filtered, the filtrate again treated with sulphuretted hydrogen, in order to purify it from any oxide of lead taken up, and then evaporated to dryness. The dried mass dissolved perfectly clear in water, and also in alcohol; dried at 212° Fah. and burned:—

0·3643 substance gave 0·7675 carbonic acid, and 0·276 water.

0·2994 substance gave 0·1485 ammonio-chloride of platinum, according to the method of Will and Varrentrapp.

0·238 substance gave 0·022 ash consisting of sulphate of soda.

This gives in 100 parts:

Carbon	57·93
Hydrogen	4·80
Nitrogen	3·14
Oxygen	21·29
Ash	9·24

If the ash be subtracted and the remaining elements calculated in 100 parts, the following numbers will represent the composition:—

Carbon	63·83
Hydrogen	9·26
Nitrogen	3·47
Oxygen	23·44

A closer agreement with the composition of bilic acid is scarcely possible; thus, placing beyond all doubt, the identity of bilic acid with the bilin of Berzelius. We also find it necessary here again to repeat, that it is also identical with Demarçay's choleïc acid, and Kemp's bilic acid, although the latter very lately again denies the identity of his acid with that of Demarçay's, on the ground, that his acid contains one per cent. of carbon more than Demarçay's. Dr. Kemp, however, never isolated his acid, and yet appears, in his view of the matter, to completely forget, that Demarçay's acid is a *hydrate*; while in the bile, this water is replaced by soda, and, consequently, the composition, after subtraction of the soda, expresses that of the anhydrous acid. If Dr. Kemp had separated the soda, and analysed his acid, he would have certainly obtained the same numbers as Demarçay.

TREATMENT OF THE BILE WITH OXALIC ACID.

It is well known, that an aqueous solution of the bile is not precipitated by organic acids. It behaves differently, however, if an excess of them be employed, with assistance of heat. Oxalic acid was dissolved in the smallest possible quantity of water, and a concentrated solution of pure bile added to it, leaving the oxalic acid, however, in considerable excess, and the whole well shaken; the mixture afforded a clear yellow solution, which

---

* (This paper, which appears in print now for the first time, has excited a great deal of interest among the chemists and physiologists of Germany; and I am convinced, that the scientific men of Britain will agree with their German brethren in saying, that Theyer and Schlosser have perfectly proved the composition of the bile a secretion—a matter upon which all the first chemists of Europe have for years been at loggerheads.)—TRANSLATOR.

shewed no appearance of change. Left for some days in a warm place, it deposited a brown resinous substance; the solution was decanted, and allowed to digest anew. The brown body was boiled with water, which dissolved very little; it was at first rendered milky; this milky liquor was removed, and fresh water added, until it ceased to be rendered turbid. These milky liquors were evaporated, mixed with oxalic acid, and allowed to digest. The boiled mass was nearly insoluble in water and æther; readily soluble in hot alcohol; tasteless; the alcoholic solution re-acted acid, and became somewhat turbid on cooling. Acetic acid dissolves but little of it; it does not appear to produce effervescence of carbonic acid, with alkaline carbonates; when dry and pulverized, it affords a light yellow powder; *sinters* at 194° F., and fuses under 212° F.; when burned with soda and lime, it yields no ammonia. The solution, allowed to digest, again deposited a similar mass, which was separated, in order to submit the remaining fluid to the same operation. This was repeated several times; each of the masses thus obtained, was separately treated, as described above, dried at 248° Fah., and burned with oxide of copper and chlorate of potash.

	Substance.		Carbonic Acid.		Water.
I. ..	0·347	gave	0·9115	and	0·316
II. ..	0·3013	"	0·7955	"	0·2667
III. ..	0·4598	"	1·2045	"	0·405
IV. ..	0·3365	"	0·881	"	0·2823
V. ..	0·4765	"	1·256	"	0·3878
VI. ..	0·5427	"	1·4335	"	0·4628

In 100 parts.

	I.	II.	III.	IV.	V.	VI.
Carbon..	72·23	72·60	72·03	71·99	72·48	72·63
Hydrog.	10·10	9.82	9·77	9·30	9·02	9·46
Oxygen..	17·67	17·58	18·20	18·71	18·50	17·91

The solution, from which no more resinous matter could be separated, was partially evaporated, and set by to crystallize. Oxalic acid and oxalate of soda crystallized, and were removed from the liquor. A small portion of the concentrated solution gave off ammonia, when mixed with soda-lime. The solution was then treated with carbonate of lead, in order to separate the excess of oxalic acid, filtered, and the remaining traces of oxalic acid completely thrown down with a solution of nitrate of lime. The liquid, thus freed from oxalic acid, was then evaporated to dryness, and heated with spirits of wine, which dissolved the excess of nitrate of lime; a white granular mass remained behind, which was washed with alcohol, dissolved in a little water, and again precipitated by strong alcohol. The substance crystallized from water, gave, when burned with oxide of copper, 1234 cubic centimetres of mixed gases, containing 254 cubic centimetres of nitrogen; this expresses the proportion of one volume of nitrogen to four volumes of carbonic acid, being the same as that yielded by *taurine*. The resinous body, above described, was next dissolved in potash, which was effected, without difficulty, at a moderate temperature; the solution filtered, and decomposed with dilute sulphuric acid. The mass separated in white voluminous flakes, which, when taken from the liquid, did not differ in external appearance from the original body, but yet had undergone a change, being now somewhat soluble in hot æther. Its composition was not, however, altered, as it gave, when dried at 248° F., and burned with oxide of copper and chlorato of potash:—

	Substance.		Carbonic Acid.		Water.
I. ..	0·3106	gave	0·820	and	0·284
II. ..	0·4569	"	1·1985	"	0·416

This is equivalent, in 100 parts, to—

	I.	II.
Carbon	72·60	72·29
Hydrogen	10·14	10·12
Oxygen	17·26	17·59

This body agrees very nearly in its composition, and in its properties, with Demarçay's choloïdic acid, only the latter contains nearly 1 per cent. more of carbon. He obtained it by the treatment of the bile with hydrochloric acid, and we are, therefore, of opinion, that his body was contaminated with a substance richer in carbon—*dyslysin*—the formation of which will be subsequently mentioned. Besides, we obtained, by the treatment with oxalic acid, exactly the same secondary products, as Demarçay by treatment with hydrochloric acid.

CHOLOIDATE OF SILVER.

If chloïdic acid be dissolved in an aqueous solution of ammonia, heated until it no longer smells of this alkali, or re-acts alkaline, allowed to cool, and neutral nitrate of silver be added to the cold solution, a white voluminous precipitate is produced, which forms a gelatinous mass, when thrown on a filter; when dry, it shrinks into yellowish brown lumps; pulverized, and dried at 212° Fah., it yields a reddish brown powder, and is with difficulty dissolved in alcohol.

I. 0·57 substance burned with oxide of copper, gave—
1·2275 carbonic acid, and 0·4197 water.

II. 0·5115 substance burned with chromate of lead, gave—
1·099 carbonic acid, and 0·372 water.
0·388 gave 0·0699 silver.
0·418 substance gave 0·076 silver.

This yields, in 100 parts—

	I.	II.
Carbon	59·22	59·08
Hydrogen	8·16	8·06
Oxygen	13·27	13·33
Oxide of Silver.	19·35	19·53

The atomic weight of the acid is, therefore, 6051.

CHOLOIDATE OF LEAD.

When the solution of choloïdic acid in potash was decomposed with acetate of lead, a thick white precipitate was obtained, which, washed with water, dissolved in boiling alcohol, filtered, evaporated, dried at 248° Fah., and burned with chromate of lead, gave the following results:—

	Substance.		Carbonic Acid.		Water.
I. ..	0·5632	gave	1·0432	and	0·3455
II. ..	0·7353	"	1·3585	"	0·451

0·8133 gave 0·324 sulphate of lead.
0·6987 " 0·2785 "

In 100 parts—

Carbon	50·94	50·80
Hydrogen	6·80	6·80
Oxygen	12·95	13·08
Oxide of Lead ..	29·31	29·32

The atomic weight, deduced from this, is 3362.

Choloïdic acid was boiled with a solution of caustic potash, and the operation continued for four days, in hopes of obtaining, by its treatment with potash, as in the case of the bile itself, a crystalline body. On the concentration of the ley, a mass separated, in brown lumps; this was dissolved in boiling water, and decomposed with sulphuric acid, by which a white adhesive mass was thrown down, which, on being heated with water, became milky. Dissolved in alcohol, and thrown down by water, nothing crystalline could be obtained. This substance was more soluble in alcohol and æther, as also in acetic acid (although, in the latter, but slightly,) than the original body; the solution in ammonia gave, with nitrate of silver, a white gelatinous precipitate; with chloride of barium, chloride of calcium, sulphate of magnesia, a white precipitate; with chloride of iron, a reddish white precipitate. All these precipitates were soluble in alcohol and acetic acid. Its composition was also the same as the original substance; as, when dried at 248° Fah., and burned with oxide of copper and chlorate of potash:—
0·249 substance gave 0·652 carb. acid, & 0·222 water.

In 100 parts—

Carbon	72·01
Hydrogen	9·89
Oxygen	18·10

TREATMENT OF THE BILE WITH HYDROCHLORIC ACID.

By a short or long-continued treatment of the bile with dilute hydrochloric acid, Demarçay obtained the cholëic and choloïdic acids. The question arose; what would be the action of concentrated hydrochloric acid on the bile? For this experiment, pure bile was dissolved in a small quantity of water, and boiled with an equal quantity of concentrated hydrochloric acid; the liquid, at first clear, deposited, on heating, a soft dough-like body, which did not dissolve on continuing the boiling; it was then washed with water; boiled in water, it nearly dissolved to an opaque, white fluid, which shewed that the decomposition was not complete. The whole liquid was, therefore, evaporated, on which the whole body again separated; concentrated hydrochloric acid was then added, and boiled. After the boiling had been continued for a whole day, the mass was again treated with water; at first, the fluid was rendered milky, afterwards, however, it remained clear, and dissolved none of it. When taken from the hot water, it perfectly resembled a resin, of a light yellow colour, and when drawn asunder, it appeared green by transmitted light. The greater part remained undissolved in boiling absolute alcohol, and even of what was dissolved, the greater part separated as the alcohol cooled. This was removed, dissolved in æther, filtered, and evaporated; what the alcohol contained, in solution, was also desiccated, and re-treated with hydrochloric acid, as also that which was already taken up by the boiling water. In this way, the whole bile was converted into a body, insoluble in water and alcohol. The fluid which was separated from this body, as also the water which had served to wash it, was evaporated, in order to drive off the hydrochloric acid; common salt at first separated, but, when further evaporated, a mixture of a little undecomposed bile, and fine needles of taurine, were obtained; the presence of a little ammonia was also detected, by means of lime. This resinous body is, in addition, insoluble in potash, ammonia, acetic acid, and hydrochloric acid, even by boiling with these acids, and only with difficulty dissolved in æther. It contains no nitrogen; is tasteless; when pulverized, forms a yellow powder; *sinters* at a temperature above 212° Fah.; melts at 284°; gives, on combustion, a smoky flame, and a scarcely combustible, voluminous coal.

Dried at 248° and burned with oxide of copper:—

	Substance.		Carbonic Acid.		Water.
I. ..	0·4485	gave	1·2565	and	0·382
II. ..	0·3685	"	1·0385	"	0·3166
III. ..	0·514	"	1·4476	"	0·4438
IV. ..	0·4854	"	1·3808	"	0·4235

In 100 parts—

	I.	II.	III.	IV.
Carbon....	77·03 ..	77·49 ..	77·44 ..	78·22
Hydrogen..	9·44 ..	9·53 ..	9·57 ..	9·68
Oxygen...	13·53 ..	12·98 ..	12·99 ..	12·10

This is the same body as that which Berzelius has named *dyslysin*; all its properties, and the decompositions by which it is formed, and which he attributes to it, agree fully for this body; it is an indifferent body, and forms the last product of the action of hydrochloric acid on the bile.

TREATMENT OF THE BILE WITH NITRIC ACID.

A solution of bile, heated in a retort with concentrated nitric acid, shewed an active re-action,—a strong frothing, with evolution of nitrous acid vapours, and perfect solution of the substance ensued. A white, granular, crystalline body separated from the cold solution, and deposited itself on the bottom of the retort; a minute layer of a body, which appeared unctuous to the touch, was observed on the surface of the liquid. The crystalline body was separated, and affused with water, to remove the nitric acid; dissolved in a little hot alcohol, and filtered; on cooling, it again separated in exceedingly fine needles.

In order further to purify them, they were treated with ammonia, and filtered from the insoluble part; one part of the solution employed for the separation of the acid, and the other for the preparation of the silver compound. On the addition of sulphuric acid, a white, flocculent, body was thrown down, which, washed and dried, at 338° F. formed a white tasteless powder; placed on moistened litmus paper, it gave a decided acid re-action, and possessed the following composition:—

	Substance.		Carbonic Acid.		Water.
I. ..	0.2726	gave	0·5885	and	0·192
II. ..	0.2877	"	0·6203	"	0·2003

	I.	II.
Carbon	59·37	59·31
Hydrogen	7·81	7·72
Oxygen	32·82	32·97

The silver compound was obtained by precipitating the neutral ammoniacal solution with nitrate

of silver. Dried at 212° F., it gave the following results:—

Substance.	Carbonic Acid.	Water.
0·453 gave	0·4915 and	0·145
0·4904 "	0·2404 silver.	

This makes the atomic weight 1305.

In 100 parts—

Carbon	29·84
Hydrogen	3·55
Oxygen	13·96
Oxide of Silver	52·65

The part which did not dissolve in ammonia was heated by water, with a little dilute sulphuric acid, and washed, in order to purify it from ammonia; it fused under 212° F. Only a very small portion of it was dissolved in boiling caustic potash; decomposed with sulphuric acid, it separated again in white flakes, which floated on the liquid, becoming, in the air, first green, and after some days, of a perfect indigo-blue colour.

These bodies could not be obtained on a second trial, with the same materials.

(To be continued.)

NOTICES TO CORRESPONDENTS.

A Subscriber (Brighton) *is thanked, but we have received so many requests to adopt our present plan, that we must perforce retain it. The ornamental part was intended but as a temporary expedient.*

Dr: Holland.—*The work has been received. A Pencilling will appear next week. Best acknowledgments are offered.*

A Subscriber.—*We must decline, under present circumstances, recommending any specific School of Medicine or Hospital. Our correspondent should await the publication of each School-prospectus. In the "Student's Number," for October, the subject may come under general consideration.*

Mr. Ilott *obligingly adds to his former statement of the case of Compound Dislocation, the following particulars:*—"The articular surfaces of the tibia were completely driven from their attachments below, and forced inwards; though they did not, at first, protrude through the external wound. When the patient, rendered irritable by pain, suddenly drew up his leg, the end of the tibia was forced more than an inch beyond the skin, and the capsular ligament was found to be completely torn through. A portion of the capsule was obliged to be removed, to enable me to bring the edges of the wound together. At the same time, neither tibia nor fibula were fractured."

M.A.—*The expence, in Paris, of a course of studies sufficient for a degree, is about £40. A M.R.C.S must study two years at Paris before he can become a Doctor of Surgery or Medicine.*

A great number of communications have been received, and are under consideration.

"Amicus in re incerta," *assures us that the Council of the College of Surgeons have, the last week, declined entering into any correspondence with a Society represented by Mr. Rugg, as chairman.*

Mr. J. H. Perry (of Worthing) *writes to us about the youth,* "ingenui pudoris," *Alexis: he affirms that, notwithstanding Mr. Healey's letter, he cannot but consider the young gentleman's performances as an inferior kind of "Wizard of the North" diablerie. He swallows no swords, eats no fire, &c. Mr. Perry thinks the pretensions of Alexis opposed to the enlightenment of the nineteenth century. We shall, ourselves, forbear all opinion, and imitate the prudence of Mr. Perry in forbearing, also, any explanation of the means by which such marvellous "diablerie" can be so cleverly managed. We may take this opportunity, however, of announcing that it is not improbable that there will be a scientific examination, at a public institution, of the powers of Alexis—when, of course, all the adjuncts necessary to a piece of legerdemain, &c., will be made impossible. We shall take care not to suppress the results.*

Dr. Borrett.—*We agree with our correspondent in the opinion, that the eighth rule of the Yarmouth Hospital is laid down in terms most offensive to the gentlemanly self-respect of every high-minded physician or surgeon. Dr. Borrett's suggestion is worth being extended into an article, for which our columns will be open.*

A Surgeon.—*We are of the same opinion. The cases would seem to shew, that where a slight wound, maliciously given, becomes fatal by gangrene, or other like mischief supervening, the offending party is guilty of an aggravated form of manslaughter, and liable to its severest punishment.*

We shall publish next week the names of all the English gentlemen who have recently received scientific diplomas from Giessen. This will settle some doubts as to the contested genuineness of some of the diplomas.

Gentlemen *in arrears, who wish to have their names retained on our list of subscribers, and to receive their numbers without intermission, are respectfully requested to forward their subscriptions during the present week. We earnestly trust that the delivery of the present quarter's accounts will leave us without the pain of announcing a single defaulter.*

THE MEDICAL TIMES.

SATURDAY, JULY 13, 1844.

Qui fit, Mæcenas, ut nemo quam sortem
Seu ratio dederit, seu fors objecerit, illa
Contentus vivat?

WE had the honour, last week, of a colloquy with a worthy member of our Profession, at once clever and penniless. His hat, which had been the mute witness of more than one winter's frowns or summer's smiles, was genteel though napless: his neckerchief—none of the newest—stood forward with a gentlemanly air of careful neatness; and his other garments, almost summed up in a close-buttoned coat and brownish-black trowsers, spoke of no recent transactions with the tailoring fraternity. There was no playfulness of feature, no country redness of skin: the pallid, furrowed face spoke of no gaiety—the hesitating, shuffling tread of no elasticity; yet it was our former acquaintance; the man of cultivated intellect and boundless ability; temperate, hard-working, cheerful—he, of a whole University's students, whom common consent fixed on as the future Profession's most successful, if not most distinguished, member. What was his intermediate history? Wanting influence to win the Professorship his talents and industry merited for him, (he was humbly born, and not rich,) he set up as a General Practitioner. Honourable in principle and delicate in feeling, practice came slowly; and years of expectation left him with patrimonial finances gone, and business receipts less than those that the most parsimonious expenditure required. He struggled on,—was thoroughly beaten,—losing every thing but honour; and, as a last refuge, had now sought London, to embark on its sea of literature, and renounce for ever what to him seemed a bootless, fruitless profession. We had left him with at least a hearty shake of his hand, and were beginning to ponder on how much his personal honour and professional pride had had to do with his ill-deserved mischances, when our eyes rested, with a crowd of others, on a dashing, cream-coloured pair of well-matched ponies, drawing a fashionable chariot, in which revelled, in gratified amplitude and elevation, the well-satisfied proportions of another disciple of Hippocrates. Who was he? A man who knows nothing of medicine, yet, unlike his patients, *lives* by it—and lives sumptuously. He is *the* "Messsrs. Lucas, Consulting Surgeons:" the son of Mr. Moses or Mr. Aaron Davis, a Jew rag-merchant in the city; and whose whole knowledge of doctoring is, that money may be made out it!

We were scarcely out of the reflections this startling contrast caused, when sitting down to an evening paper, (the *Globe*) we stumbled on a fresh illustration of the perfection of wisdom with which our State has managed everything appertaining to the medical care of its people.

FATAL ACCIDENT AT WATERLOO-BRIDGE.—Last evening, Mr. Higgs held an inquest at the Green Dragon, Villiers-street, Strand on the body of Albert Walker, aged five years. William James Myers, a waterman, who plies at Waterloo-bridge stairs, said, that on Saturday afternoon, between three and four o'clock, he was on the floating pier, near Somerset House, when a boy came to him and told him a child was in the water, near the north-west stairs of the bridge. He went to the spot, and getting into the boat of another waterman, and assisted by the latter, he found the body within twelve feet of the stairs. It was alive when got out of the water, and they rowed to the Savoy, and got ashore and took the child to Mr. Scott, a surgeon living by. Mr. Scott looked at the child, and exclaimed—"Be off with you—take it to Charing-cross Hospital." The witness added "The child was alive when under Dr. Scott's roof, and he might have saved it in ten minutes." It died whilst the witness was taking it to the Hospital. The witness added that he was an "experienced practitioner" in these matters, having since the year '98, picked up in the Thames forty-four persons whose lives were saved, and ten bodies that were lifeless. Mr. Golding, house-surgeon of Charing-cross Hospital, said the child was brought in dead, a little after four o'clock and that for upwards of an hour every means were tried without effect to restore animation. He was of opinion that the child had been dead 20 minutes or half an hour when he was brought to the hospital. The first witness said that the child's heart beat when it was taken to Mr. Scott's. Mr. Golding (in answer to a juror)—If there was pulsation of the heart when the child was at Mr. Scott's, it might have been revived; but whether it would have lived ultimately I cannot say. It was proved by another child that deceased was playing on the steps of the stairs, and accidentally slipped into the water. The jury here sent the beadle for Dr. Scott, who declined coming, but sent Mr. Pine, a medical man, who was in the shop when the witness Myers brought in the child. Mr. Pine said the child was dead when brought to the shop and that Dr. Scott having at hand no convenience to restore animation, advised Myers to take the child to the hospital, whither witness accompanied it. Dr. Scott examined the child and Myers was drunk. Myers denied that he was drunk, and swore that Dr. Scott did not examine the body. Verdict, "Accidentally drowned."

Who is Dr. Scott? He is no member of the London College. We have no means unhappily, as law is now arranged, of knowing if he be of any other. But, as in our happy, unlicensed, liberty of doing medical wrong to ourselves, and every body else, every man may make himself his own diploma, Dr. Scott is doubtless as much a doctor as some of his neighbours. He keeps a chemist's shop, with blue and red bottles in the window—and who does that but a doctor? He enjoys the distinction of approaching so near the universal medicine man (Morrison) as to be (in more senses than one perhaps) next door neighbour to him; and he exhibits the most persevering energy in propagating by ceaseless advertisements in the *Times*, the use of "a little water, as the best aperient in the world, when applied with Dr. Scott's aperitive vase, sold at Dr. Scott's Family Dispensary, &c."

Now, giving due force to these circumstances, but more especially to the singular rejection of this poor child for treatment, and supposing for a moment that Dr. Scott, like thousands of others, really has no other title to doctorship but his own sovereign will, what a significant instance have we before us of the mischief of empirical pretensions. Thousands of lives yearly depend on the immediate attendance of a skilled

medical man; and hundreds of persons are practising as medical men, who are in precisely the position in which we suppose Dr. Scott. Often, therefore, must these sudden vital appeals be made in wrong quarters—and with what effect? If the empirie assent there is not only the want of proper assistance, but the presence of improper meddling. If the empirie, like Dr. Scott, bluntly refuse, the moment of grace has been lost, while trying vainly to secure his aid—and a social murder perchance is perpetrated. Is this a state of things to be continued? Are lives to be thus continuously perilled and destroyed? Are the dear affections depending on them to be thus unnecessarily tortured? Are worthy surgeons of blameless character, like our unfortunate friend, to find the fair returns for their studies and labours cut off from them by the state—so that policemen's berths on railroad lines prove more profitable attractions than the gentlemanly pursuits of a learned calling? Are murderous pretenders for ever to outrage society by the spectacle of triumphant carriage-borne unprincipleness? We believe the Medical Profession Bill is yet open to amelioration; surely it cannot be thought complete till some remedy is proposed in it for such enormous social injustices as these.

REVIEWS.

On Dysmenorrhœa, and other Uterine Affections in Connection with Derangement of the Assimilating Functions.—By Edw. Rigby, M.D., &c. &c.

8vo. pp. 140.—H. Renshaw, 356, Strand.

The first object of the little work before us, is to prove an opinion, much a favourite of our own, viz., that in the consideration and treatment of diseases affecting important organs, too much attention has been paid to the local circumstances of the case, and too little to the original or remote cause. The author, having established this truth, gives us a system of treatment of uterine diseases based on it. A number of cases are introduced to illustrate his principles and practice, and the work concludes with tables of analysis of the urine, as connected with the cases introduced:—some very useful and practical rules for testing urine being appended.

Dr. Rigby, in this treatise, has followed the example of Dr. Prout, in his work on "Stomach and Renal Diseases," both in treating the subject with considerable ability, and limiting his observations to a peculiar class of diseases. He has hence been enabled to lay before the reader a vast store of information, which must have been in great part omitted in works of a more general nature, in which, multiplicity of subjects, and scantiness of information on each, are nearly always concomitant. It is, also, a pleasure to observe, that Dr. Rigby's work possesses (in our day, a rare merit,) the sterling quality of being intended for the profession; he has not aimed at a popular title page to charm the multitude, and acquire an ephemeral fame. No extra professional reader can enter into the gyst of the author's arguments, and, therefore, is not likely to misapply the information.

The learned author very properly attributes the original source of organic destruction to the derangement of the assimilating powers, which may be either primary, or secondary. The primary consist of the derangements in the changes which the food undergoes during its conversion into blood; the secondary of the derangements of the ultimate processes by which certain portions of the blood are converted into organic tissue, and again removed from the system. The author establishes, on a solid basis, the importance of the assimilating process, with the wide extent of injury which must result from such a process being performed in an imperfect or faulty manner, and shews, that there are no organs, however remote, which may not be deranged,—no tissues, however dissimilar, which may not suffer in consequence. The following remarks of the author are very satisfactory:—

In the numerous and varied affections arising from this cause, viz., assimilation, one great pathological feature may be distinguished, as common to all, viz., an imperfect, vitiated, or impure condition of the blood. In many of these affections, (as is also the case in the contagious fevers and diseases akin to them,) the altered condition of the blood may be distinctly seen, both during life, and after death. Thus, in some forms of rheumatism and gout, a large excess of fibrin is frequently observed; in others, the blood has been distinctly acid; in diabetes, the peculiar saccharine characters of the disease has been detected in the circulation; while in chlorosis, and other affections arising from defective nutrition, the natural quantity of iron, and saline ingredients, as also of fibrin, is considerably diminished; the same remark applies, in some degree, to scrofula. In other affections, the altered condition of the blood is evinced by faulty secretion, and other functional derangments of organs concerned in eliminating certain elements from the blood, whether for the purpose of nutrition or excretion. To this last head may be added, structural disease, ultimately produced in organs thus deranged."

It would be out of place and unnecessary to follow the author through all his arguments on this interesting subject; it is not too much to say, that we fully agree with him in establishing his general principles on the ground of malassimilation, and if he has been so successful in this part of his subject—on which, we have no doubt, the profession will agree with us, when the work is read in full—much more do we find it necessary to recommend to our reader his special views on the principal object of the volume, viz., uterine diseases. Here he displays considerable powers of nice discrimination, careful diagnosis, and well-digested plans of treatment. In his diagnosis, the testing of urine is an important point in eliciting the main features of the case, as well as directing the best means of cure. The treatment of these cases is much more constitutional than any heretofore recognized; the active remedies—taraxacum, calomel, hyoseyamus, colchicum, and potass. iodidi, are the chief. The first appears to be a great favourite; in addition to these, diet and regimen are important items. The author also esteems it of considerable importance, in the treatment of such cases, to consider the menstrual period; for the author maintains, that more can be done at these times to eradicate a morbid diathesis, or habit of the body, than at any other. "Hence," says he, "we generally gain a decided step by rousing the functions of the chylopoietic system to brisk action, just before the accession of a menstrual attack; the periodical congestion is greatly relieved, and the suffering and constitutional disturbance are much diminished." "It must be recollected," says the author, in conclusion, "that a habit of the system, not merely a local disease, is to be overcome, and even under the most favourable circumstances, a considerable period of time is necessary for this purpose. The system must, as it were, be accustomed to bear the improved tone of its functions, and healthy state of its circulation, with impunity, and this can only be effected by cautious and patient management. Under favourable circumstances, success is very nearly certain and complete, but when the disease is the result of deep-rooted mischief in the functions of assimilation, (especially the secondary) when the powers of the system have been radically effected, and its stamina sapped from their very foundations, by a state of long-continued, and now habitually deranged and defective nutrition, we must scarcely venture to look forward to ultimate success." For a while, the system answers satisfactorily to the effects of remedies and general treatment, and if an entire change of circumstances, as the removal to another climate, &c., can be obtained, such an improvement may be effected as may warrant the hope of a favorable issue. Too, often, however, is this important step deferred, until the mischief has gained fast hold upon the constitution, and when at length decided upon, the rapidly failing health shews that it has come too late. In other cases, after going on favorably for a time, the treatment begins to lose its influence upon the disease, and yet seems to be too much for the breaking powers of the system, or the local symptoms which at first threatened to pass into organic uterine disease, and which yielded successfully to the treatment employed to arrest its progress, now return to the attack in some other and weaker organ, probably the lungs, and marasmus, advancing with rapid strides, tells us but too clearly, that the last flickerings of life are coming to a close."

The cases illustrative of the author's practice are well selected, and exhibit, in a favorable light, the position he aims to establish. Amongst our earliest medical philosophers, the appearances which the urine exhibited were considered of the highest importance in forming the diagnosis, and indicating the means of cure, in disease; indeed, it was one of the first medical subjects treated upon in the English language. Subsequently, however, it was much abused, by falling into the hands of unprincipled quacks, or water-casters, whose assertions were so extravagant, as to throw a shade of discredit over all urinal experiments. We are glad to see, that some of the best modern authors are now paying minute attention to this most important matter. Dr. Rigby gives some very excellent instructions for testing the urine in the best and simplest manner; his apparatus is very limited, viz., a small compound microscope, a watch-glass, a few pieces of flat glass, a urinometer, half-a-dozen test tubes, some litmus paper, with the nitric and acetic acids, liq. ammon., oxalat. ammon., liq. potass, and hydrochloric acid, as tests. The course of examination consists of the date—passed at night or morning—colour—acid, neutral or alkaline—what sediment—specific gravity—urea—lithic acids and lithates—phosphates, oxalates, &c.

In conclusion, we find it our duty earnestly to recommend an attentive perusal of this work; it does the author considerable credit; few can read it without great advantage. This and Dr. Prout's work, form good examples for the consideration of some other classes of disease, which, we hope, ere long to see noticed by individuals of equal ability.

HOSPITAL REPORTS.

KING'S COLLEGE HOSPITAL.

Syphilitic Iritis.—James Driscoll, æt. 22, a painter, a native of London, of intemperate habits, admitted into King's College Hospital, May 22nd. Under the care of Mr. Partridge. His general health had, however, been good up to the beginning of April last, when he contracted a primary venereal sore, beneath the foreskin. On account of this, about a fortnight afterwards, he applied as an out patient at the hospital, and was treated with mercury, which severely salivated him. Shortly afterwards, a few papulæ were observed over the

insertion of the deltoid muscle, which gradually spread over the remaining part of the arm; he had no sore throat, nor any nocturnal pains in the bones. A day or two after the appearance of the eruption, his left eye began to water, he complained of pain in the eye-ball, of intolerance of light, and of dimness of vision. These symptoms became gradually worse, but he did not apply for admission into the hospital until ten days afterwards. At this time he was in good condition; his appetite good, and he had no fever nor thirst; he complained of a throbbing pain in the ball of the left eye, which usually came on about three o'clock in the morning, and of great intolerance of light. The reticular vessels of the conjunctiva were not much injected, but the ciliary-zonular vessels were distinctly seen in the sclerotic, passing into the iris, a little behind the cornea. The iris, naturally blue, was somewhat dull, and red tufts of lymph were distinctly seen on its free margin, and the pupil was contracted and irregular. Six leeches were applied to the lower lid; belladonna rubbed around the orbit, and an aqueous solution of the extract, dropped into the eye three times a day; also to take the following pill every six hours:—

℞. Hyd. chlor. gr. ii.
Pulv. opii gr. ¼ M. ft pil.

He was put upon low diet, and to prevent all exposure to light, was placed in the most obscure part of the ward.

May 23rd.—The pupil was dilated, except at the adhesions. To continue the same treatment.

27th.—The adhesions began to give way; the pain much less; mouth sore from the mercury. On account of the mercury purging, the opium was increased to the third of a grain.

29th.—The inflammation has almost entirely subsided; the adhesions broken up, and the pupil fully dilated. Mercury to be continued; mouth a little sore.

June 2nd.—Slight adhesions still remain on one side; the pupil was fully dilated; the calomel and opium to be omitted, and to take:—

℞. Pil. hydrarg gr. v. ter de die.

6th.—Pupil now quite regular; all medicine to be discontinued. Discharged cured.

This was a good case of syphilitic iritis, preceded, as is frequently the case, by papular eruption. The red tufts of lymph on the iris, so characteristic of this disease, were also well marked.

Punctured Wound of the Cornea.—Jane Dupire, æt. 22, single, maid of all work, admitted into King's College Hospital, March 16th, under the care of Mr. Partridge. Was quite well till last Wednesday evening, March 13th, when she accidentally received a blow with an iron skewer, over the nasal margin of the cornea of the left eye. No hæmorrhage followed. The eye was bathed with warm water, and at bed-time, a bread and water poultice applied; the pain became so severe as to prevent her from sleeping. The next morning she complained of great intolerance of light, and very profuse epiphora. Before her admission into the hospital, her bowels were freely opened by medicine, and eight leeches applied to the lower lid, which gave her great relief.

At present there is no redness of the conjunctiva, nor of the sclerotic coat, and no intolerance of light. The iris protrudes through the wound on the nasal side of the cornea, and there is a fibrinous deposit over the wound of the size of a split pea; the pupil is oval; its long axis horizontal. The lens and its capsule are quite transparent, but there is a little dimness of vision. She complains of a throbbing pain in the eye-ball, and around the orbit. The following pill was ordered to be taken every three hours:—

℞. Hyd. chlor. gr. ii.
Pulv. Doveri gr. iij. ft. pil.

Belladonna to be applied around the orbit, and low diet.

18th.—Mouth sore. Pupil fully dilated, still oval; no increased vascularity. Medicine to be continued.

26th.—Deposit of lymph over the puncture was somewhat diminished. No pain in the eye-ball; no intolerance of light; pupil still oval; iris protruding; her health otherwise good. Finally, discharged cured.

ST. BARTHOLOMEW'S HOSPITAL.

Case 1. *Typhus Fever.*—Charles Sheppard, ætat 26, a watch-finisher, of middle height, dark, rather sallow complexion, body much emaciated, was admitted into Luke's ward, under Dr. Roupell, June 4th, 1844. The countenance was extremely anxious; face slightly flushed; respiration hurried, inspirations being 40 per minute. He complained of great heat of skin; slight headache; thirst; loss of appetite; want of sleep, and a feeling of excessive debility; with a dry, hacking, cough, without expectoration; the skin was hot and dry; tongue dry and furred, and tremulous upon protruding it; pulse 102, small and thrilling; bowels much relaxed; urine high coloured, and there was some tenderness of the abdomen on pressure. There was great dulness on percussion, with diminished respiratory murmur, heard over the entire surface of the left lung. He stated, that he had been subject to a cough in the winter-months for several years past, excepting which, he had generally enjoyed good health. His present illness came on about a month before admission, with cold, which was followed by rigors, thirst, heat of skin, headache, cough, and excessive debility, with great sleeplessness, and some relaxation of the bowels. He was ordered a blister to the chest, and to take ol. ricini ʒiv c. tr. opii m. x. and the following pill. ℞. Hydrarg. c. cret. gr. iiss.

Pulv. ipecac. co. gr. ijss. misce ft. pil. ter in die sumend.

June 5th.—Appears exceedingly low and weak this morning. The tongue is extremely dry and hard; pulse quick and irritable; the diarrhœa continues, and there appears more tenderness of the abdomen on pressure to-day than yesterday. Ordered haust. ammon. ac. ter de die; to continue the pill, and to have ℥ij. of wine statim.

6th.—Appears extremely ill; respiration hurried and audible; countenance very anxious; lips dry and parched; tongue dry and hard; pulse small and irritable; skin warm. He continues extremely restless, not having slept for an hour at a time since admission. The bowels are still relaxed, but there is very little, if any, pain of the abdomen on pressure. To continue the pill and draught, with ℥iv. of wine daily, and to have tr. opii. m. x. every half hour, till it produces sleep.

7th.—Expresses himself as much better this morning. Countenance improved; the pulse is small, but has rather more power in it than yesterday; tongue dry, hard, and fissured; the bowels have only been opened once for several hours. Fifty minims of tr. opii were given before it produced sleep. He slept soundly for several hours, and awoke much refreshed. To have six ounces of wine, and a pound of beef for tea daily, and the following draught:—

℞. Æther, sulph. m. xx.
Tr. opii. m. vj.
Liq. ammon. ac. ℄t
Mist. camphoræ ãa ʒvj.

M. Fiat haustus sextis. q. hor. sumendus.

8th.—Not so well as he was yesterday; in fact, appears now in a sinking state. The countenance is haggard; respiration greatly hurried; pulse 100, small and thready. To continue medicines.

9th.—Was attacked in the evening of yesterday with vomiting and diarrhœa, which continued all night, without intermission, the stomach rejecting everything that was given him; the extremities became cold; the pulse hardly perceptible, and he died at nine o'clock this morning.

Post-Mortem.—The body was examined thirty hours after death. The stomach, and nearly all the small intestines, were healthy; the lower two feet of the ileum were rather congested, and the mesenteric glands slightly enlarged; internally, they presented numerous, irregularly circular patches of ulcerations; the ulcers being deeply excavated and having somewhat raised edges; in the middle of some of these ulcers lay a lump of yellowish, soft, but tough matter, not removable by washing, but easily separated by pulling, evidently a slough discoloured by fæcal matter. Amongst these ulcers were some patches of Peyer's glands, which had not been destroyed to such an extent, presenting merely a dotted appearance, but more distinct than natural. The ulcers were larger and more numerous as they were nearer the ileo-cæcal valve, but this itself was untouched. The first foot of the colon was pretty generally of a dirty green colour, marked with numerous white dots. This green coat, apparently composed of altered mucous membrane which had died, could easily be stripped off, leaving a rough surface, nearly approaching to the natural colour of the intestines, probably the sub-mucous cellular tissue; the white dots seemed to be the remains of some of the mucous follicles.

The pericardium contained a few ounces of clear pellucid fluid. The lungs were quite free, excepting the left for a short space in the interlobular fissure; the bronchi were red, and contained a little puriform secretion; the structure of the lungs was otherwise healthy, but congested at the base, so as to sink in water. The other abdominal viscera were healthy. Brain not examined.

Case 2. *Bright's Dropsy.*—G. Thomas, ætat 26, a bookseller's porter, a short, stout man, of florid complexion, was admitted into Matthew's ward, St Bartholomew's Hospital, under Dr. Roupell, April, 19th 1844. The face appeared swollen and glazed; the legs were anasareous and œdematous, and there was distinct fluctuation of the abdomen; he complained of pain round the face and head with stiffness of the jaws, thirst, and great listlessness, with a sensation of weakness across the loins, and pain upon pressure in the situation of the kidneys; the skin was harsh and dry; tongue dry and slightly furred; pulse 70, full and rather strong; bowels costive; urine scanty, pale in colour, and coagulated upon the application of heat. He stated, that he had been unwell for the last eight weeks, attributing his illness to catching cold, which was followed by general swelling of the body, thirst, loss of appetite, and restlessness. He was ordered to be bled from the arm to eight ounces, and to take the following medicine:—

℞. Jalapæ ʒij.
Potassæ bitartratis ℥iss.
Zingiberis ℈i.
Sacchari Fæcis ℥iiss.

Misce capiat. ʒij statim et repet. 4tis. q. hor. donec alvus bene respondeat.

April 20th.—Rather better this morning; the pulse is not so full or strong; the crassamentum of the blood drawn yesterday is natural in appearance, but the serum is extremely milky:—ordered Haust. Efferves. c. Magnes. Sulph. ʒi. ter die sumendus.

22nd. Appears much the same as on the day of admission, but complains of rather more pain across the loins:—to be cupped to eight ounces from the region of the kidneys.

Repet. Haust: adde Tr. Digital: M. xv.

24th. Complains of much pain in the chest, which is increased by a deep inspiration; has no cough nor is the breathing hurried; the pulse is natural; tongue dry and slightly furred; bowels open twice daily; he passes about a pint and half of urine in 24 hours.

25th. Does not feel himself so well; was extremely restless last night; complains this morning of great thirst and debility, and of pain all over him; the tongue is dry; pulse slow but full.—V.S. ad. ℥x; continue the draught.

26th. Appears rather better from the bleeding; the blood drawn yesterday presents the following appearances: upon the surface of the crassamentum, which is small, there appears a delicate cyst about the size of a small hen's egg, which contains a clear pellucid fluid; serum abundant and milky. Continue.

27th. Continues much the same; body more swollen than when he came in.

℞. Potassæ bitartratis, ʒi.
Infus: cascarill: ℥iss.

Fiat haustus ter in die sumendus.

29th. Appears much the same; bowels costive;—to have ʒij. of the jalap confection, statim, and haust. quinæ disulph. ter die, with broth diet.

30th. Passed a very restless night, in consequence of constant vomiting; the sickness continues up to the present time; the bowels have not been opened: to have two house pills directly; the effervescing draught every four hours, and four ounces of wine daily.

May 1st.—Feels himself better; the stomach is quiet, and the bowels have been opened freely;

body appears to enlarge daily; the pulse is 62 and fuller; tongue of a peculiar flabby appearance; urine, the same in quantity, gives an acid reaction and coagulates by applying heat. Continue the draught.

3rd.—Was attacked this morning with great difficulty of breathing and a feeling of suffocation, being obliged to be propped up in bed in an upright posture. Respiration not hurried; the pulse is rather full; action of heart regular, but the first sound is dull. To have a blister applied to the chest; to take ℥iv. of brandy daily, and the effervescing draught, three times a day, with acid. hydrocyan. dilut. m. iv.

4th.—He appears much the same; the blister has not yet risen. Continue.

5th.—The blister has risen well, and appears to have afforded him some relief to the breathing; the feeling of sickness continues, accompanied with vomiting; the draught stays upon the stomach, but he brings up the brandy soon after taking it. Continue the draught.

6th.—Was exceedingly sick all night long; the stomach rejects everything; fluid ejected of a dark yellow colour; the pulse still keeps up. To have one pint of porter and a mutton chop daily; enema colocynth. statim, the bowels not having been opened for 2 or 3 days.

7th.—Feels himself very ill this morning, from the action of the enema; the stomach is quieter, having retained the chop and porter. Continue the draught and brandy.

8th.—Had occasional paroxysms of difficulty of breathing during the day, which became much worse towards evening; the pulse lessened in frequency and power; the breathing became exceedingly hurried, and he died during the night.

On the post-mortem examination, which took place 36 hours after death, both kidneys were found enlarged, and presenting uneven projections on their surface, with a granulated condition of their cortical covering: the interior presented a yellow mottled appearance; the liver likewise, upon cutting into its substance, apppeared granulated: the other abdominal and the thoracic viscera were healthy.

Fever.—Mary Shea, ætat 20, a tall, strongly-made woman, of dark complexion, was admitted into Mary's ward, St. Bartholomew's Hospital, under Dr. Roupell, April 25th, 1844.—The countenance was highly flushed; skin covered with a scarlet rash, extending over the entire surface of the body; she complained of great pain in the head, pain in the back and limbs, heat of skin, great thirst, loss of appetite and sleeplessness, with a slight hacking cough; the skin is dry, and much increased in temperature; pulse 130; tongue slightly furred, but moist; bowels open; urine scanty and exceedingly high-coloured. She stated that, seven days before admission, she was attacked with sickness and great pain in the head, which was followed by rigors, heat of skin, thirst, and pain in the limbs generally. She attributed her illness to exposure to cold and over-work. The body was ordered to be sponged over with vinegar lotion, three or four times daily, and she was ordered to take the following draught:—

℞. Vin. antim. potassio-tart. m.xx.
Liq. ammon. acetat. ℥iv.
Aquæ distillatæ, ℥i. Misce.

April 26th.—Passed a very restless night, and complains this morning much of her head: the skin is still extremely hot; pulse the same in frequency; tongue slightly furred; bowels constipated; efflorescence not so distinct as yesterday, and more of a mulberry hue.

Repet. haust. adde mag. sulph. ℥i.

27th.—Better this morning; not so much pain in the head; febrile symptoms much lessened.—Continue.

29th.—Much better; has entirely lost the pain in the head; thirst less urgent; tongue clear and moist; pulse small and weak: to omit vin. antimon. potass.-tart. from the draught.

30th.—Not so well: complains of the return of the pain in the head, with an increase of febrile symptoms.—Emplast. cantharid. to the nape of the neck.

May 1st.—Again better: pain in head relieved by the blister; has a little appetite this morning: to have broth diet, and haust. quinæ disulph. ter die.

3rd.—Appears rather heavy and inclined to sleep, but has no pain in the head; the tongue is dry and furred; skin rather hot; pulse fuller; bowels constipated: hydrarg. c. cret. gr. v.h.s.: haust. sennæ co. eras mane sumendus.

4th.—Better to day: tongue cleaner; pulse quiet.

7th.—Going on favourably, but complains much of weakness: continue the quinine draught.

14th.—Has been improving daily, during the last week, but still feels herself extremely feeble: to have half meat diet; continue the draught.

21st.—Gains strength daily, but is at present too weak to return to her place: to have full meat diet; continue the draught.

28th.—Discharged to-day, perfectly well.

ON MESMERISM;

ON THE ATTACK OF LIEBIG ON BERZELIUS, AND EVIDENCE OF THE CORRECTNESS OF THE OPINIONS OF BERZELIUS.

Sir,—Having yesterday seen the *Zoist*, in which Mr. Shew, Dentist of Cheltenham, asserts his conviction, that the girl from whom he extracted the fang of a tooth, at Mr. Lundy's lecture, felt no pain, I beg to offer my testimony in favor of the same opinion. I purposely was on the platform, and by the side of Mr. Shew, on the occasion, to see if I could detect even *any change of expression* in her countenance; but I could not do so. Had it not been for this *fact*, I should have conceived this girl to have been an impostor, (or at all events, *unconsciously* attempting to deceive, if such be possible); for, I had two or three times found her brother-in-law could mesmerise her from another room, through closed doors, but never, as I afterwards found, *without her knowledge.*

I shall write nothing more on mesmerism just now, but beg to direct the attention of men of science to the above fact, which is the only thing at all satisfactory on the subject, (and even this I should like to see repeated on some other persons,) I have yet seen, amidst masses of delusion, (and collusion?) and all sorts of mountebank tricks. But as I am convinced there is *something* in mesmerism, I cannot think too highly of the conduct of Dr. Elliotson, and other contributors to the *Zoist*, and of yourself, Mr. Editor, in not allowing so important a subject to die without any examination. Notwithstanding all that has been said, for and against it, it is not WHOLLY a delusion; but is much too profound a metaphysical question for the *great mass* of the F. R. S.'s. ever to solve, and, therefore, they have probably done wisely to let it alone.

Let me now turn to the controversy between Liebig and Berzelius.

It is but a short time since Liebig's attack on Dumas, and now we have another against Berzelius. There have been many very good criticisms on Liebig in your Journal, and I have no doubt, it will now soon be found out, that Liebig has been greatly overrated. He has, however, here been made a sort of demi-god of, but more *especially* by parties, be it observed, some of whom have never read his works, and others who have, indeed, read them, and abridged them, and commented on them, but have not had calibre of intellect to understand them—one reason, as Voltaire remarks, why even Dante was overrated.

Liebig considers Berzelius' idea of the catalytic force, *an utter absurdity*; but he does not tell us why, and I do not hesitate to assert, *that he cannot tell us why.* Professor Grove (to take one instance) has pretty well proved, by the discovery of his gaseous voltaic pile, that the union of oxygen and hydrogen gases, by a *clean* plate, of platinum (for Mr. Faraday proved cleanliness to be essential) is due to the evolution of electricity. But Berzelius had previously grouped this with other phenomena (which I need not now mention,) as the due to what he called the catalytic force. But, without at all wishing to detract from Professor Groves' merit on this occasion, (for that merit is great, and Berzelius had nothing to do with the discovery of the gaseous battery,) I must now assert, that in saying the union in question was due to a catalytic force, he was *almost necessarily* asserting it to be due to an electrical force; for, at present, this is almost the only power we know of, that is brought into action by mere contact—*i. e.* catalytic power. Berzelius might as well, indeed, have confined himself to the simple expression, contact force, (for hard words do not assist the comprehension); but it seems clear that this expression was a generalization of the subject, and electricity, by Professor Groves' discovery, was only one step further in generalization. Some philosopher may hereafter, perhaps, go a step further, and say why electricity is more copiously produced in this case than when other gases are used; but they will not at all affect the merit of Berzelius's first generalization. Some have said Berzelius' generalization was merely provisional; no doubt it was,—and expressly provisional. But I maintain, that in saying, as he did, that one substance WITHOUT ITSELF BEING CHANGED (for here is his point of distinction,) does often, by contact in different mixtures, cause different combinations to take place that would not otherwise have taken place, he was pointing out a fact that had previously only been loosely noticed, or not understood in the sense he understood it, by philosophers. Now, in the animal and vegetable kingdoms especially, every physiologist will know that such contact must often exercise wonderful influence, owing to the existence of sensibility (be it only organic,) on which property, contact is such a powerful force. A generalization like this is almost necessarily sooner or later the precursor of some great discovery, for it tends to make philosophers think what effect contact should be expected to have in this case, and what in that. I have, accordingly, always endeavoured to do Berzelius justice for this generalization, both in my experimental criticism on Liebig some years ago in the *Lancet*, and also in my paper on Möser's discovery, published in the *Athenæum*, and reported in the *Mechanic's Magazine*, and in great part in the *Philosophical Magazine.*

Let us now turn to one of Liebig's generalizations; and we, I think, shall find it a much more abortive attempt than that of Berzelius just mentioned. I allude to the tendency of particles in motion to set other heterogenous particles in motion, and thus (as in the case of the alloy of silver and platinum dissolving in nitric acid,) to actually make a substance soluble that otherwise would not be so. Now, Berzelius justly (see his "Rapport An. sur les Progres des Sciences, 1840) denies that in this case the solution of the platinum takes place in nitric acid on the principle Liebig supposes; and I was enabled to confirm Berzelius's opinion by finding that the finest filings of silver, on being mixed with those of platinum, do not make these latter dissolve in nitric acid.

Again, Berzelius justly denies that Liebig's supposed discovery applies to combustion.*

Now, that Liebig himself has thought it necessary to retract his assertions on these points, we may infer from his not noticing them in his late lectures on Fermentation and Putrefaction,† *though they were first expressly brought forward to explain the nature of these phenomena.* The fact is, Liebig has had too much penetration not to see that Berzelius quite upset (his) Liebig's supposed new discovery on these points; and, therefore, it was only left to take the *lex talionis* into his own hands, and try and upset Berzelius's catalytic force, &c., &c., and all else that he could.

The great defect in Liebig's mode of philosophising is, that he is always tending to generalize *without adequate data.* I could name many other

* I have hence taken a totally different view of the whole question.—See my "Essay on Fusion." *Lancet*, 1842. Idem p. 530.

† The new ones there brought forward are equally unsatisfactory, as I shall endeavour to shew at length hereafter.

instances of this, beside those just mentioned. In fermentation he notices an exception from a general principle, and then endeavours to make fermentation like the exception, and then says all is explained, and professes to have discovered a new general principle in nature. But it so turns out that fermentation has no analogy (or only a very distant one) even to this exception from a general principle.

I had intended to have made some remarks on Liebig's opinion on the cause of rennet coagulating milk, and shewn *experimentally* what I conceive an evident error in this point; but I shall probably embody these with other experiments in organic chemistry, in a work which I have in contemplation.

I am, Sir,
Your obdt. servt.
H. PRATER.

STARTLING CASE OF CLAIRVOYANCE.

(To the Editor of the Medical Times.)

Sir,—I have read with much interest the letter of Mr. Healey, that appeared in the last No. of the Medical Times, narrating what took place with Alexis, at M. Bailliére's, the well-known publisher of Regent-street. Having been present during part of the *séance*, I can attest the general accuracy of his statement. Where, however, Mr. H. says, that the noble lord, to whom he refers, "wrongly called a place in his country-house a *cellar*, while the youth insisted that it was a *gallery*," he misunderstood *cellar* for *salon*, thereby weakening the effect of the correct description which the *clairvoyant* gave.

As you are not unwilling to receive *facts*, perhaps you will permit me to state a few striking circumstances that occurred on Tuesday, the 2nd inst., at a private *reunion*, in Welbeck-street.

Alexis was bandaged most carefully: cotton-wool and handkerchiefs were not merely placed over and below the eyes, but over and *below the nose:* and, in this state, he read six or seven lines, out of a French book, opened at random, with an ease and a rapidity of utterance that I could scarcely imitate in my own language. He repeated the experiment with another passage, when the hand of a gentleman was interposed between the face and the volume, and he succeeded completely. He read a few words, through five or six thick pages of the same volume; and this he did two or three times, not failing once.

The room was rather full, and Alexis, being greatly oppressed by the heat, threw off the bandages, and remained the rest of the morning with his eyes unfettered: and now came the more astounding occurrences.

A lady, of my acquaintance, wrote the word "Alexis," and placed the paper in a tortoise-shell card-case; and in a short time the youth read the word *through the card-case.* The card was torn, and he said it was *dechiré.* The card case was never out of the lady's sight, till he gave the name.

A gentleman placed a thick envelope, sealed up, with the word "Marie," written upon a slip of paper inserted in it: Alexis was not long before he detected what the word was.

But it is to the following striking fact that I more particularly direct your attention.

An officer, of long standing in the army, who was severely wounded at Waterloo, and is well known in the highest military circles, was one of the company present. He was an unbeliever, and knew nothing of Mesmerism, and had never seen or scarcely heard of Alexis,—but having been accidentally invited to join the party, and been told that the young man had the power of reading through opaque objects, he determined to bring his talent rigidly to the test.

He produced a morocco case, eight inches long, and an inch and a half thick, looking like a surgical instrument case, or a small jewel-case. It was placed in the hands of Alexis, who held it for a short time in silence, and then gradually and slowly gave the following description:—

"The object within the case is a hard substance."
"It is folded in an envelope."
"The envelope is whiter than the thing itself." (The envelope was a piece of silver-paper.)
"It is a kind of ivory."
"It has a point (piquè) at one end" (which is the case).
"It is a bone."
"Taken from a body"—
"From a human body"—
"From your body."
"The bone has been separated and cut, so as to leave a *flat side.*"

This was true: the bone, which was a piece of the colonel's leg, and sawed off after the wound, is *flat* towards the part that enclosed the marrow.

Here, Alexis removed the piece of bone from the case, and placed his finger on a part, and said, "The ball struck *here.*" (True.)

"It was an extraordinary ball, as to its effect."

"You received *three* separate injuries at the same moment." (Which was the case, for the ball broke or burst into three pieces, and injured the colonel in three places in the same leg.)

"You were wounded in the *early part* of the day, whilst charging the enemy." (Which was the fact.)

Here the description ended: and what does the sceptic reply to our statement? That M. Marcillet, as a colleague, was assisting Alexis? M. Marcillet, in common with every other person in the room, was himself ignorant of what the case contained.—That the gallant officer was in collusion? It were a waste of time to meet so monstrous a suggestion.—That Alexis had learned by accident, and before-hand, what the case contained? The thing was impossible: no one in the room was aware of the contents: only two or three persons present were acquainted with the Colonel, and he and Alexis had never before met.

There is but one answer to the whole transaction, viz.: that Clairvoyance is a fact in Nature—a real existing fact in philosophy—be the explanation what it may.

At the same time, it must be said, that the *power is not always on Alexis:* it varies greatly—many things act with a disturbing effect—he guesses—he makes mistakes—he is sometimes wholly wrong: this must be admitted. But a hundred failures cannot upset four or five positive facts: those facts are certain: yet still it must be owned that this singular power is not always upon the young man.

It is easy to say, that the thing is an impossibility—that it is contrary to the laws of Nature: the question recurs—What are the laws of Nature?—and what is an impossibility?

One thing certainly seems an impossibility; where a man has committed himself to the opinion, that "Mesmerism *shall* not be true," it seems *impossible*, even by the strongest and most unequivocal evidence, to bring him to a candid and willing confession of his error.

The facts, above stated, can be corroborated by several gentlemen who were present.

I enclose you my own card and address, and the name of the gallant officer who produced the morocco case, and beg to subscribe myself,

Your humble servant,
CLERICUS.

July 8th, 1844.

[We possess the cards: no names can be mentioned which, for their respectability or rank, could better exclude a suspicion of an equivocal proceeding. The case, from the singular nature of the incidents, has won for itself no small attention in some of the highest quarters.—Ed.]

THE BOHEMIAN REMEDY.

(To the Editor of the "Medical Times.")

Sir,—I am anxious to make known, by the medium of your Journal, some particulars respecting the Bohemian remedy for hydrophobia.

The belief in its efficacy is shared by people of all ranks in Bohemia, and, on the best authority, I have it stated to me that it has been always used with success.

The remedy was, and is generally still considered, a secret in the family of a chasseur of Prince Schwarzenburg. Any one could procure the powders, by applying to this man; but it is necessary that they should be renewed every year, without which they lose their efficacy. The way these act is, by producing violent perspiration; therefore, it is very possible,—as a correspondent of your Journal, of June 15, has observed—that any other remedy, likely to produce this violent local perspiration, would have an equally good effect.

I have, however, obtained a promise for the receipt of this Bohemian remedy. It is made of herbs; but the names of which, I am told, I shall find difficulty in getting translated, even into German. The herbs are common, (at least, in Bohemia) except one of them, which is rare.

I have thrown out these hints, as they may be useful in the meantime, but when I can procure the receipt, I will send it for the use of your Journal, and the address of the person to whom to apply for the powders, as it would be desirable for one apothecary or surgeon in every town to have a store by him, and to renew this provision every year, which would be as easy as to procure any other foreign drug.

I am, Sir,
Your obedient servant,

British Embassy, Vienna, June 29th, 1844.

[The name is given us by our obliging correspondent, but we have been requested not to publish it without necessity.]—Ed.

THE CLAIRVOYANCE OF ALEXIS.

To the Editor of the "Medical Times."

Sir,—Since your publication of my note on Alexis, I have learnt from the noble lord present at the meeting, that on writing to the lady in whose charge was the child—who was declared by Alexis to have just entered the house on account of rain—it was found that the boy had entered the house, and that it began to rain, about the time mentioned.

This coincidence would not call for record perhaps, were it not one of a series on which it tends to accumulate more light.

I am, Sir,
Your obedient Servant.
T. PIERS HEALEY.

2, Elm Court, Temple,
July 8th, 1844.

TRANSACTIONS OF LEARNED SOCIETIES.

Royal Medical and Chirurgical Society, June 25.—Mr. Stanley, President, in the chair.

Case of Hæmorrhage of the Liver, by James Abercrombie, M.D., of the Cape of Good Hope. The patient was a lady, 35 years of age, who, during the last two months of her pregnancy, had suffered much from dyspepsia. On the 28th September, 1841, she was seized with severe pain in the epigastrium, a sense of distention, eructations, and nausea. Having on former occasions been relieved of (what she considered) a similar pain by pressure, she had recourse to it on this occasion, by bandaging the waist, and to such an extent, as to cause the author to fear mischief might be produced. Opium and ether were given, and in the evening she was quite relieved. On the following morning, however, labour came on; it was of short duration; the placenta was readily expelled, and the uterus contracted well. Within an hour, however, symptoms of sinking appeared, leading the author to suspect uterine hæmorrhage, but on examination the uterus was found perfectly contracted, and the discharge outwardly very moderate. She complained of pain in the right hypochondrium, and right side of the neck. Opium and stimulants were freely given, and for a time she seemed to rally, but vomiting supervened; collapse of the system took place, and she died on the morning of the 1st of October. On examination after death, there was found on the anterior and inferior surfaces of the liver a large sac, which burst on attempting to remove the organ, and discharged about two pounds of blood, fluid and

coagulated. It was found to have escaped from a branch of the vena porta, and the sac was formed by the peritoneum. The organ itself had throughout a mottled appearance, and was unusually soft. The uterus was in a perfectly sound state, as were all the other organs of the viscera, both of the pelvis and abdomen.

Peculiar Case of Gelatiniform Cancer, in which nearly all the organs in the body contained colloid tumours, with the appearances at dissection. By John C. Warren, M.D., Professor of Anatomy and Surgery in Haward University. Communicated by Marshall Hall, M. D., F. R. S. The patient in this case was a man, aged twenty-five. The particulars are detailed at considerable length, and could not be abbreviated. The author remarks that colloid, gelatinoma, or gelatiniform cancer, as it has been called, is stated by various authors who have described the disease, as occurring in one single mass, usually of considerable size. Dr. Walshe says "the comparative rarity of the coexistence of several tumours in the same subject, has been noted in scirrhus, and that this is still more marked in the case of colloid. M. Cruveilhier states that it is rare to observe its successive or simultaneous development in a number of organs or parts. Dr. Hodgkin expresses himself nearly in the same tone, but adds, that it does at times invade different localities in the same subject." In the case here described the disease was diffused through nearly all the textures of the body, without presenting any one considerable mass. The author adds that the case is also remarkable in exhibiting an union of the three admitted forms of malignant disease, scirrhoma, cephaloma, and gelatinoma.

Tabular View of One Hundred and Eighty Cases of Tubercle of the Lungs in Children, with some Remarks on Infantile Consumption. By P. Hennis Green, M.B.—The author commences his paper by observing that the remarks appended to the tabular view are rather intended to point out a few of the peculiarities which distinguish infantile consumption from the phthisis of adults, than to give a complete history of phthisis in the young subject. The main character which distinguishes the phthisis of children from that of adults, is this: in children the tubercular deposit occupies a much larger surface of the lungs, is more rapidly secreted, and is complicated with tubercular disease of other organs, more frequently than in the adult. Having briefly described the varieties of tubercular deposit in the lungs of children, the author gives some statistical results relative to crude tubercle, and caverns, as deduced from his table. The complications of pulmonary tubercle in the child are numerous and varied. The author compares his own results with those given by M. Louis for the adult, and shews the proportion in which various other organs were affected with tubercular disease. The symptoms are referred to two varieties of the disease, one occurring in children of from ten to fourteen years of age, and resembling the disease in adults; the other affecting younger children, and presenting several peculiarities. In the acute form of this latter variety, the patient is often cut off long before the disease has arrived at the stage of caverns, whilst the widely spread and rapid diffusion of tubercular deposit may excite—in the head hydrocephalus, or meningitis—in the chest pleurisy—in the abdomen peritonitis—and in the intestinal canal tubercular ulceration. In the chronic form of this variety, the author remarks that the signs of cavern are very frequently absent altogether, and that this absence may depend on the seat of the cavity, (middle or lower lobes) its anfractuous formation, or the small calibre of the bronchial tubes. The author next examines successively the rational symptoms, and indicates the peculiarities which may attend each. With regard to hæmoptysis, he observes that it is not so rare a symptom as many eminent authorities assert. The question of diagnosis having been discussed, the author concludes with a brief description of bronchial phthisis. The mechanical and physiological effects produced by the enlarged glands on the neighbouring tissues and organs, are first pointed out; the symptoms are then indicated, and the author sums up with some valuable remarks relative to the diagnosis of this variety. The author does not enter into the question of treatment, which he regards as merely palliative; but he states his belief that, under favourable circumstances, we have a much greater chance of arresting the progress of incipient tubercle in the child than in the adult.

Royal Medico-Botanical Society, May 23rd.
Earl Stanhope, president, in the chair.

A communication from Dr. Houlton, on a new preparation of conium, which he calls the pilula conii, was read. It is formed by mixing recently-powdered leaves of conium, with a sufficient quantity of thin honey, to constitute a mass of proper consistence for forming pills. This preparation is far superior to the ordinary extractum conii, and may be used as an excellent substitute for the best prepared extract, made by any of the known processes. In this we have an article, which is easily prepared, and, if the powder is good, uniform. It is well known that the extracts of conium that are found in different shops differ very much in their sensible properties, as well as in their medicinal energy. Dr. Houlton strongly recommends the pilula conii to the consideration of the profession and to the manufacturing chemist, believing it at least worthy to supersede the extractum conii of the pharmacopœia, being more convenient in pharmaceutical manipulation, and equal in efficacy.

Mr. Mowbray then exhibited numerous specimens of indigenous and exotic drugs, and their preparations, and made some remarks on their pharmaceutical and medicinal value.

The following wild plants, recently gathered from their respective habitats, were placed on the table:—Momordica elaterium, salvia sclarea, salvia officinalis, rosmarinus officinalis, digitalis purpurea, glycyrrhiza glabra, atropa belladonna, hyoscyamus niger, aconitum napellus, ruta graveolens, juniperus sabina, helleborus viridis, angelica archangelica, ligusticum levisticum, althæa officinalis, artemisia absinthium, marrubium vulgare, mentha viridis, rhamnus catharticus, rhamnus frangula, menyanthes trifoliata, cytisus scoparius, potentilla tormentilla, conium maculatum, laurus nobilis, sambucus nigra, ornus europœa.

June 27. Mr. Cope, jun., treasurer, in the chair.

The chairman announced that his Majesty, the King of Holland, had condescended to become one of the honorary royal fellows and patrons of the society.

A communication on digitalis by Dr. Houlton was then read.

Dr. Houlton observed, that in order to advance medical botany, a branch of science still in a very imperfect state, nature must be carefully studied; nature is rich in facts, and facts are the stuff that truth is made of. He had frequently brought before the society the results of his own observations; how far they were original he was not able to state; many of them he had not found in books. He did not wish any one to place implicit confidence in his statements, but to compare them with nature, and then to receive or reject them. His aim was to forward the grand and beneficial objects of the society. The Doctor said it was an article of his medical faith, that a correct knowledge of plants is the first step towards their due administration as remedial agents, a principle he feared not sufficiently felt and acknowledged.

"Medicus notitiâ plantæ destitutus de viribus ejusdem nonquam juste judicavit."—
Linn. Med. Mat.

Opinions are very discordant respecting the medicinal powers of digitalis purpurea; this, he believes, arises, in a great measure, from the want of uniform preparations of the plant. Authors may not have satisfied themselves, properly, that they have given it a fair trial; that they have not only employed the true plant, but also that all other circumstances have been duly attended to, that are essential to their obtaining from it an effective medicine. Dr. Houlton considered it very probable that the ancient physicians employed this plant, but we have no information respecting their opinions of its medicinal virtues, nor is the plant mentioned by them. It is figured in Gerard, and was considered by him to be an expectorant and deobstruent, about the year 1600. In the Pharmacopœia Botanica, 1706, edited by Dr. Salmon, there is a formula for aqua digitalis. The editor states that he cured some consumptive people by the syrup of fox-glove administered in this water. About the middle of the last century, it was employed by the surgeons of the Worcester Infirmary in the form of cataplasms and ointment, for scrophula, &c. It was formerly in popular use as an external remedy in some diseases of the scalp. Murray, in the Apparatus Medicaminum, 1776, states that though it is not in the London Pharmacopœia, yet it is more employed in England than in any other country. It is not mentioned by Alston, who wrote in 1770, nor by Bergius, who wrote in 1778. Dr. Withering, it appears, was the first writer who brought the plant fully under the notice of the profession; he observed that it was an ingredient in a nostrum (for the cure of dropsy) that had been purchased; he ascertained that it had been employed successfully in that disease by irregular practitioners in Yorkshire. The doctor's knowledge of botany led him to detect the active part of the secret remedy, and it shows how important a practical knowledge of botany is to the physician, and also how desirable it is that the popular remedies of this country should be scientifically examined.

Digitalis purpurea is in the list of simples of the edition, 1668, of the London Pharmacopœia, and in that of 1720. It was rejected by the farmers of that of 1745; it was re-admitted in the pharmacopœia of 1788, after an exile of 43 years; it was not honoured by any formula until 1809, when we first had a tincture and an infusion, and the medicine was thus formally introduced to the profession. Dr. H. had witnessed its employment in dropsy, consumption, and pneumonia extensively, some years previously to this period; it was then very much employed, but at the present time, so far as his observation extends, practitioners do not place much reliance upon it: it has the character of being an uncertain medicine; the fact is, we are not at present aware of all the circumstances which modify its action—the uncertainty is in ourselves, not in the medicine. A satisfactory description of the plant cannot be found in any of the works on botany and materia medica, except so far as class, order, and genus. With regard to species and variety there remains something to be done. Digitalis purpurea is in the class didynamia, order gymnospermia, not order luridæ of Linnæus, scrophulariaceæ of Lindley. This beautiful plant, bearing large pendant purple flowers, is indigenous, and grows abundantly in many parts of this country, but is said not to be found wild in Suffolk, Norfolk, or Cambridgeshire; its favourite habitat is in dry, elevated situations. It has not been well described by authors. It has been said to have a knotty and fibrous root. Dr. H. has never seen it with a knotty root; if such is sometimes the case, it is rare. The stem, footstalk, and under-surface of the leaves of the true digitalis purpurea have a purple tinge; in some specimens the leaf is purple throughout; the purple colour of the stem has not, so far as Dr. H. has read, been mentioned by authors, yet it is a most important character, as there is a purple flowering variety without any shade of purple on the stem or leaves. There is also a white flowering variety; this has no purple tinge about it. The lower leaves of digitalis are said to be in tufts; this is certainly seldom the case; as this is a biennial plant it might be supposed that it would be easy to distinguish the first from the second year's leaves. Two figures were given for this purpose in this purpose in the *Pharmaceutical Journal*, Vol. 1, but quite inadequate to the purpose for which they were intended; the leaves of the different years' growth are not to be distinguished by shape; on both plants we find leaves varying from the ovate to the lanceolate shape; the upper leaves of the stem are always lanceolate; a practised eye can always distinguish these different leaves, but it is difficult to give any sufficient rules on this point. If detached leaves

are brought with a strip of the bark of the stem attached to the footstalks, they are second year's leaves, there being no stem in their first year; the first year's leaves are, or were, usually brought to market in tufts, from being attached to the crown of the root, the fibrous parts of which were usually removed by the collectors. It is of importance to know that the first year's leaves are of considerable size when the second year's plant is in perfection; this is not the case with some biennials, as hyoscyamus niger; we cannot procure the first and second year's leaves of this plant at the same period, in their natural mode of growth.

The parts to be employed in medicine named by authors, are the root, flowers and seeds. Should any one wish to employ the root, the rule Dr. H. has given on various other occasions should be borne in mind, *viz.*, the roots of biennial plants are to be collected in the autumn or winter of the first year of their duration; this rule he has never seen in any book, but it is an absolute one. Dr. Withering mentions that Dr. Crowley, of Cambridge, was cured empirically of hydrothorax by the root, after regular practice had failed. The leaves of this plant, like the leaves of all biennials, should be gathered in the second year of their duration, and as soon as possible after the first flowers have expanded. The plant with a purplish stem should be selected; the leaves, after removing the midrib should be carefully dried, without the aid of artificial heat: no rule is needed for the collecting of the flowers and seeds. In a work of distinguished rank it is asserted, that as digitalis is a biennial plant, its fresh leaves may be procured at any season of the year. Now this is not from its being a biennial merely, from the circumstance of its being a very hardy biennial. The leaves of biennial plants die in the winter. In mild winters and in sheltered situations the leaves of digitalis will remain through the winter.

Leaves have been offered for sale as digitalis which were those of verbascum nigrum; they have much of the general appearence of digitalis leaves, and might deceive the unwary; other species of verbascum have leaves somewhat similar to those of digitalis.

The usual preparations of the leaf are the powder, tincture, infusion, fluid juice, and extract. Dr. Houlton thinks no others are needed than the powder and the tincture, for the more simple we keep our vegetable pharmaceutial preparations the better. It is worth noticing the changes that have taken place in the preprarations of the tincture and infusion in the present pharmacopœia; they are both weaker than in the former pharmacopœias. The relative strength of the two tinctures is as $8\frac{1}{2}$ is to $10\frac{1}{2}$, and that of the infusion as $8\frac{1}{2}$ is to 21—here is a great difference; it is important to bear this in mind, when we compare the practice of authors who wrote previously to 1836 with those who have written since. The infusion of the present Edinburgh pharmacopœia is double the strength of that of the London. The opinions of the authors as to the dose of this medicine are curiously different. The ordinary dose of the tincture, according to those who are accounted the best authorities, is from ten to forty minim. Dr. Pereira states he has frequently given a drachm of the tincture of the best quality three times a day for a fortnight, without observing any marked effect. He adds, "I know that some practitioners employ it in much larger doses, as an ounce or half an onnce, with much less effect than might be imagined." Dr. Pereira also states that Mr. King, of Saxmundham in Suffolk, gives from half an ounce to an ounce of the tincture, in some cases with decided advantage, and that he, Mr. King, has given as much as two drachms to a child nine months old. Mr. King lives in Suffolk, a county in which we are informed the plant does not grow. Dr. Houlton would wish to know something of the history of Mr. King's tincture, and would not advise any one to try such doses prepared after the plan proposed in his paper, that is from the genuine purple-stalked digitalis. He has seen very unpleasant effects from ordinary doses, when continued several days, and is inclined to believe that the discrepancies amongst authors, in reference to the dose of this very important remedy, arise from the want of uniformity in the preparations they employ; hence they write on different things under the same names, and discordant statements are the necessary consequence.

Mr. Mowbray observed, with reference to the white digitalis, that the only remark respecting it which he could find in Lindley's works, was to the effect that it is sometimes seen in gardens. He had himself met with a magnificent specimen in Penscommon, near Norwood, and had since seen a cultivated plant in the Botanic Gardens at Mitcham, which had been obtained by experienced collectors, who are occasionally sent out to gather plants from their native habitats, to replace those which become exhausted from cultivation; for it has been found, that after two or three seasons, the cultivated plants which are raised from seeds, become deteriorated in value, and their places must be supplied by the wild plants. The white digitalis which he saw at Mitcham, towered from six inches to a foot higher than the other plants of digitalis, than which it was rather a more vigorous plant than a mere variety; the leaf was larger, with a more blueish green tint on the upper surface, and more downy on the under. Mr. Whiteman, of New Cross, is at present making experiments on it in practice, and he is of opinion tha the has found beneficial results from its use; but, as the experience of one individual will not be sufficient to establish its reputation with the profession, and the plant can now be procured with great facility, he (Mr. Mowbray) trusted that further experiments would be instituted by some of the members of this society. With regard to the tincture, he was of opinion that too much spirit was used. Most of these plants are supposed to contain an active principle in combination with a vegetable acid, which is nearly insoluble in proof spirit, and consequently is not held in solution in the tincture. If the quantity of spirit were diminished one-half, enough only being used to prevent the preparation from spoiling, a much more valuable article, medicinally speaking, would be obtained, than is at present the case.

Dr. Houlton observed, that Mr. Mowbray had alluded to experiments which were being carried on to determine the relative medicinal value of the white and dark-leaved digitalis, a task, in his opinion, of exceeding difficulty, as the plants were so nearly allied, and were, besides, of so delicate a nature, and so uncertain in their action, that is to say, uncertain from circumstances; for, he believed, that the strength of the plant will always be the same when used under the same circumstances. Digitalis is a plant of great delicacy, and it is almost impossible to determine the circumstances which affect its action. The plan which he adopted, and which he considered was the best, was to obtain the plant as nearly as possible in its natural state, to select it from the best locality, and at the best season, and to make from it the best preparations, and then to watch their effects, and he thought it of more importance to do this, and to ascertain the real quality and value of a good plant, than to institute relative experiments as to the strength of varieties, when there is a really useful plant in the market.

There was one important point which he had omitted to notice in his paper, and that was the deobstruent action of digitalis when given in small doses. He had found it in some cases, where he had given it in this way for a length of time, exert no other perceptible influence than the gradual improvement of the health, and this had been the case with a patient he attended last winter. She had emphysema of the lungs, and other chronic disease: she experienced considerable relief from the exhibition of small doses of digitalis. He considered that a great error had existed of late years, of paying attention to those remedies only which produced powerful and extraordinary effects in the system, while the many useful medicines which, in small doses, induce a gradual modification of the constitution, and improve the general health, are neglected. Digitalis, given under such circumstances, is one of these remedies, and he considered that to be one of its principal actions.

The white digitalis is, in his opinion, a distinct species: the purple-leaved digitalis, (*digitalis purpurea*) which he regarded as the true species, and preferred for medicinal use, had also a purple stem. He had found from 10 to 15 minims of the tincture, given for several days together, produce such an effect on the pulse, &c., as to compel him to suspend its use. The green-leaved digitalis is, as he thought, a decided variety, and a permanent one; the difference in colour not arising from any local cause of soil, &c., since both kinds, the purple-leaved and the green-leaved, may be met with growing together in the same situation, whether moist and shady, or exposed. The habits of the two plants are also very much alike: they have not the marked difference exhibited by the white-flowered digitalis, which has not the rough dead look of the *digitalis purpurea*, but has a shiney look, and the light is reflected from its leaves, which are larger and more ovate, and the stem is larger in proportion, and it is altogether a bolder plant.

Mr. Dennes did not think that the white digitalis should be regarded as a distinct species, but that it was merely a variety in the flower. He had frequently met with the plant, and had examined it, but had never found sufficient difference to warrant making it a distinct species, in creating which, he thought, botanists should be exceedingly careful. Other plants are occasionally met with in which there occurs a change in the colour of the flower, and yet they are regarded only as varieties. The digitalis purpurea is a very common plant throughout England, except in Norfolk and Suffolk. The nearest station for it to London is Shooter's Hill, where it is very abundant.

Dr. Houlton would not press it as a distinct species, but it certainly must be regarded as a more remote variety than the other which he had mentioned. The white digitalis was certainly called a variety only in Dr. Smith's work, and is there described, he believed, as variety B. He had not been able to find in any writers on medical botany, an allusion to the purple colour of the stalk and leaves, which, however, was very apparent. He had found digitalis a very valuable and efficient medicine, but he could not say that it was quite uniform in its action in all cases.

Mr. Dennes observed that all the specimens of white digitalis which he had seen were of stunted growth.

Dr. Houlton had not seen it in its wild state, but the cultivated plant was both larger and bolder than the digitalis purpurea.

Mr. Mowbray had met with a very fine specimen of the white digitalis on Pen's-common, and the cultivated plant at Mitcham was much larger than the officinal plant.

Mr. Barham stated that the specimen on the table, a small one, was gathered on Hampstead Heath, within fifty yards of a garden, whence it was probably an outcast.

A communication on the atropa belladonna, by Mr. Ley, was then read.

In this essay Mr. Ley endeavoured to point out that belladonna was not of so deadly a nature, as its name and the dread entertained of it by the profession and public would lead one to suppose, and he quotes several authors to shew that a fatal result rarely attends its ingestion. He observes, that its effects are rapid and constant; therefore, if understood, most highly valuable. The difficulty is in seeing and describing them so clearly that future observers shall recognize the same results from medicinal doses. For this purpose the variety of the observations recorded, and even the varieties of language in which the narratives are clothed, become useful information for future observers to test and reject that which is least precise and perfect.

In testing the medicinal influence of a medicine by which we seek to relieve pain, spasm, irritability of system, and to procure sleep, its approximation to or secession from opium in its action on the system, will form a very good standard to judge of its effects, and tried by this test, Mr. Ley has found that the action of opium and belladonna is very similar. He has himself taken belladonna, and has frequently given it in doses from half a grain to a grain, and in describing its action, instead of saying that it diminishes sensation, irritability, and arterial action, in the first step of its influence, he believes that it increases them all,

and that the peculiar action of the remedy being exhausted, reaction takes place, and those effects (to wit, diminution of sensation, irritability, and arterial action) follow.

He observes, that soon after taking a grain of the extract, there is a peculiar taste in the mouth, and a diffused novel sensation over the whole body, which excites the attention forcibly and unpleasantly. Saliva is secreted in diminished quantity, The nervous excitement becomes absolutely painful, with restlessness, and with the attempt to move, giddiness, with a affection of the cerebrum, becomes evident. There is difficulty in swallowing, and the voice becomes hoarse; it is as though the action of the parts were impeded by the loss of the lubricatory moisture of the mucous membranes. The sight is affected, and indistinct, and the eye has the same sensation—perhaps, of coldness—that is felt over the body. The lids become dry, and the general sensation is similar to that experienced after long watching. Pain in the bowels may occur, and, perhaps, an evacuation may take place; but neither purging nor diuresis is caused by it. Sore throat and redness of the skin resembling scarlatina, is sometimes produced, and inordinate menstrual discharge may occur suddenly in females. The attention is so entirely absorbed by the peculiar sensation, and the irritability of system, that no pursuit can be followed. The eye can see, but is indisposed to maintain attention to the object, and the ear has sensation, and hears peculiar noises. The disposition to withdraw from all the excitement of passing influences becomes active, and the retirement, like weariness, brings repose.

In this stage of excitement, Mr. Ley observes it is not difficult to trace an increased arterial action, approaching inflammation, and this being the first and most immediate action of the remedy, we ought to reckon the rapid subsidence or evanescence of these effects among the virtues of the medicine. In Dr. Pereira's opinion, belladonna is not fitted for plethoric constitutions, nor for febrile and acute inflammatory cases, in which Mr. Ley coincides; but, he thinks, it may be rendered so by combination with other medicines, or by preceding its use by blood-letting. It has been his habit, he says, to produce the excitement, and then allow reaction to go on undisturbed for a day or two. He expects more benefit in the second or third day of inaction, than from the immediate effect of the drug. In this way relief is experienced in scrophulous ophthalmia, in toothache, etc., when the state of excitement has passed away. A decided astringent effect is produced by the exhibition of belladonna in some chronic discharges from the mucous membranes ; the secretion in ulceration of the trachea is diminished, and the cough relieved; various vesicular eruptions on the skin are also removed by it, and when the contents of the vesicle have become semi-purulent, and the true skin ulcerated, the ulcer being deep and devoid of healthy granulations, the edges being still under the influence of the creeping vesicle, a single grain of the extract of belladonna will annihilate the eruption, and the ulcer will immediately assume a healthy appearance. This influence is well exemplified by that affection of the finger, where the cuticle is raised by a semi-purulent fluid round the nail. The cuticle being removed, the circle will still be enlarged by the separation of fresh cuticle, and the denuded surface pours out a copious discharge. The effect of one dose of belladonna is to dry the denuded surface, and then the disease no longer exists, and this is effected with so much rapidity, as almost to seem like magic. Mr. Ley quotes two cases from Mr. Liston's practice at University College Hospital, in one of which minute doses of extract of belladonna cured an attack of erysipelas in two or three days, and, in the other, a case of small ulcerations on the leg, aggraved by a scald, and attended with much inflammation and fever, after the fever was subdued, the belladonna also speedily effected a cure. In concluding, Mr. Ley adverted to the difference presented by the extracts, as met with in the shops, and stated that he had found a stale, black, tobacco-smelling extract most efficacious for external application. This he considers may be owing either to the mixture of the fruit with the leaves, or to the adulteration of the extract with some other drugs, and in that case he thought it would be advisable to employ the adulterating drug by itself.

Very fine specimens of the following plants, most of them indigenous, procured from their native habitats, were on the table :—

Digitalis purpurea, (every variety and in every state), atropa belladonna, solanum dulcamara, solanum nigrum, conium maculatum, œthusa cynapium, angelica archangelica, angelica sylvestris, ficus carica, artemisia absinthium, agrimonia eupatoria, marrubium vulgare, ballota nigra, rhamnus catharticus, rhamnus frangula, mellilotus, cerulœa, lepidium latifolium, tragopogon pratensis, maruta cotula, valeriana officinalis, menyanthes trifoliata, potentilla tormentilla, cytisus scoparius, sambucus nigra, quercus pedunculata, acorns calamus, bryonia dioica, rumex acetosa, rosa canina, nephrodium filix mas, scrophularia nodosa, tilia europœa, chenopodium olidum, malva sylvestris, geum urbanum, colchicum autumnale, geum urbanum, ranunculus acris, ranunculus repens, ranunculus flammula, ranunculus aquatilis, ranunculus hederaceus, ranunculus sceleratus, aconitum napellus, amygdalus communis, cochlearia armoracia, momordica elaterium, polygonum bistorta, glycyrrhiza glabra, helleborus niger, lavandnla spica, ornus europœa, daphne mezercum, rosmarinus officinalis, ruta graveolens, datura stramonium, rhus toxicodendron, hyoscyamus niger.

Mr. Barham drew attention to the chenopodium olidum, a preparationof which—an extract—had been used by Dr. Houlton for the last fifteen years with success as an emmenagogue. He also exhibited the solanum nigrum, which he had collected on Wimbledon Common. He observed, that it is abundant near London, but not common throughout England. It flowers late in the year. He also placed a specimen of the annual hyoscyamus niger before the society.

Dr. Houlton observed, that one of the distinctive marks between the annual and biennial hyoscyamus was, that the former had not a branched main stem, whilst the stem of the biennial was very much branched. The passage relating to the decurrence of the lobes in his paper on the hyoscyamus niger, was not, he thought, sufficiently explicit. The leaves of the biennial hyoscyamus, which he believed to be the original species, were all decurrent; those of the annual were only slightly decurrent, and that not always. The upper leaves of the annual plant are never decurrent. Many of its leaves also have footstalks, which is not the case with the biennial. There is a circumstance connected with the flower, which he omitted in the paper; it is only of botanical importance, and has not any reference to medicine. The raceme are circinnate ; their peculiar character is concealed by the floral leaves ; but they curl round in volutes. The same thing occurs in some other plants of the class, pentandria.

Mr. Mowbray observed, that the annual hyoscyamus which used to be cultivated at Mitcham, was abandoned in consequence of the statements in the journals. The biennial plant, which had arrived this year from Cambridgeshire was very stunted and dwarfish; but it yielded a powerful extract, in consequence of the almost total absence of albumen,—to be attributed, perhaps, to the dryness of the season.

PERISCOPE OF THE WEEK.

Signs of pregnancy [This and the nine following articles comprise the principal contents of the two last numbers of the Lancet.] Dr. Heming states that a case occasionally occurs in which the diagnosis as to the existence of pregnancy is rendered exceedingly difficult, from the fact probably, that it sometimes exists accompanied by scarcely any of the usual symptoms, and disease is often attended by many symptoms like those of pregnancy. The difficulty is also frequently increased by the feelings and wishes of the person whose case is to examined. One person fears she is pregnant, another hopes she is so, a third supposes she has some disease when she is pregnant, and a fourth imagines herself, and is thought by others, to be pregnant when she has disease. The signs of pregnancy which exist during the first three months are, the cessation of the catamenia, the value of which may be modified by the occurrence of pregnancy before menstruation, while nursing, by the existence of an imperforate hymen, and by the fact that women sometimes stain their linen at each catamenial period to conceal their pregnancy. Dr. Heming appears to doubt the regular appearance of the catamenia during pregnancy. He infers however that it may occur once after conception, from the vascular action of the uterus being increased for the secretion of the deciduous membrane, previously to the formation of which a sanguineous dischargo escapes from the mucous surface of the uterus. Another sign is morning sickness, the value of which may be modified by the presence of debility, and various diseases; and also the fact that the patient's statement is not always to be relied upon. The third sign is enlargement of the mammæ and this again may be simulated by hypertrophy of the glands, enlargement, and the occurrence of enlargement and pain during the catamenial period. Other signs are, 1st, alteration of the areola ; 2nd, mottled appearance; and 3rd, fluid in the mammæ. The modifying circumstances are, chronic inflammation of the uterus; for the first sign, the effect of former pregnancy, disease of the sebaceous glands; the second is comparatively rare ; and with regard to the third, there have been cases in which fluid has been found independent of pregnancy, and there are cases also in which it has continued some years after labour. The last sign is quickening, which may be simulated by different portions of the rectus abdominis being voluntarily put in action ; by air in the intestines ; and by the pulsations of the great arteries felt acting on the tumour. During the second three months there may be perceived the tumour of the pregnant uterus; the value of this sign may be diminished by the presence of diseases of the uterus, of the ovaries, by the lateral situation of the uterus, disease of the liver, of other organs, new deposits, and fungus hæmatodes. The changes discovered by vaginal examination, are, first, alterations in the neck of the uterus, which however may be the effect of a former pregnancy, or of disease of the uterus ; 2ndly, tumour between the anterior lip and pubes, in which case diseases of the ovaries, or tumours of various kinds may be the cause of error, and thirdly, repercussion of the fœtus, the *ballottement* of the French, may be mistaken from the uterus itself being thrown up by the finger; and indeed it cannot always be obtained. The stethoscopic signs afforded by the fœtal heart may not be perceptible from the death of the fœtus, and the *bruit placentaire* may sometimes be imitated by disease or other causes independent of pregnancy. During the third three months the principal indications will be, first the *projection of the umbilicus*: this however, when the woman is very fat, may remain indented; or a mistake may arise from the existence of an abdominal tumour, or an umbilical hernia :—secondly *the motion of the child felt externally*: in which case the cause of error may be, that different portion of the rectus abdominis may be voluntarily put in action, or flatus may be present in the intestine. Besides these, Dr. Heming briefly mentions but without comment, the abdominal black line, the blue appearance of the vagina, the condition of the urine, salivation, and the increased susceptibility and irritability, of the nervous system. The paper is illustrated by cases.

Poisoning by arsenic.—Sir George Lefevre gives a caution respecting the poisoning of rats by arsenic, which is worth attending to. He says that, in country places, where the water is supplied to the house by a well, arsenic should never be employed for the destruction of rats, for, as soon as they have eaten the bait, they are tormented with thirst, and burrow under ground to seek for water to allay it: they may perish at the source of the spring, which, in time, will become impregnated with the poison, and be productive of the most dangerous consequences. What renders the circumstance more appalling is, that the quantity of mineral dissolved may be too minute to produce the effects which would immediately lead to its recognition, but sufficient to undermine the constitution, and kill by slow degrees. An ex-

ample of this occurred in a public institution for Cadets, at Vienna, where the boys gradually lost their health, pined away, languished, and some few died of slow fever. Those who were removed from the institution soon rallied. Malaria was conjectured to be the cause, but on examining the drains with a view to their improvement, the springs by which water was supplied to the establishment were invaded, and, in the principal well, a number of dead rats were discovered, which had been poisoned by arsenic some months previously, as the store-houses had been infested by them.

Lepra vulgaris.—Dr. J. C. Hall relates a case of long-continued lepra, attended with inflammatory symptoms and violent itching, in which, after premising venesection and the use of purgatives, he effected a cure by the cautious use of the liquor of the hydriodate of arsenic and mercury. He lays great stress upon the propriety of not exhibiting the arsenical preparation, until the indications of inflammatory action have been previously removed.

The process of labour.—Mr. Tyler Smith says, it may be stated briefly that labour consists of positive dilatation of the os uteri and the vagina, the action of the muscles of expiration, and contraction of the uterus and the vagina; all excito-motory phenomena, aided by volition, and modified by emotion.

Case of eventration.—Mr. Eves was called to a woman during her labour, in consequence of the midwife being unable to make out the nature of the presentation. On examination, he found a substance of apparently a spongy texture, presenting at the os uteri, and behind it a hand. Version was performed, and a fœtus—of the dissection of which Mr. Eves gives the following description—was born. It weighed four pounds and three quarters. An irregularly-shaped tumour, about the size of the child's head, projected from the right side of the anterior part of the abdomen. The integument and muscles of the abdominal walls terminated by a well-defined line all round the base of the tumour, which was invested with a semi-transparent membranous covering, in some parts slightly fleshy. This membrane was easily divisible into two layers, the upper of which was continuous with the covering of the cord; the internal layer was most probably the peritoneum, as it adhered to and was reflected on the liver, forming ligaments supporting that viscus. The lower part of the membranous covering was loose, and towards the left side of the base of the tumour was prolonged into a sac, about an inch and a half long, and one inch broad, corrugated externally. This sac, and the loose part of the membrane, contained a brown fluid, much like urine, in quantity about an ounce and a half or two ounces. The sac, though apparently single externally, on being laid open, was found divided into two compartments by a perpendicular septum. Its walls could be divided into three layers, the outer of which was a strong white membrane, the middle a fleshy and muscular layer, the innermost a thin membrane, presenting a smooth surface. The sac was dilatable, and on dilating it, the external corrugations disappeared. At the left side of the pouch was an opening, partly concealed among its corrugations. This opening led into a canal, about half an inch long, presenting a smooth surface and this canal was continued into a cavity with fleshy walls. The cavity was not situated free in the abdomen, but was partly enclosed in the thickness of the walls of the sac. The canal and cavity were thought to bear a resemblance to a vagina and uterus. No ovaries were perceived. The upper part of the tumour contained the liver, which formed the greater part of its magnitude. The lower part contained the intestines and the fluid above-mentioned, which was in contact with them. The intestinal tube terminated on the anterior part of the abdomen by an opening directed obliquely through the wall of the left compartment of the corrugated sac. The stomach and intestines were full of meconium. There was no rectum or anus in the natural situation, and no perineal opening. The arteries presented a remarkable deviation. The aorta first gave off a trunk on each side, which, on the left side, divided into a renal and common iliac artery. This common iliac first sent two arteries to the pelvis, and was then continued as the femoral. The corresponding trunk on the right side divided into a renal and an artery to the pelvis (internal iliac). Another artery was then given off to the pelvis on the right side, then the right femoral separated, and, lastly, the trunk of the aorta still continuing single, was continued into the cord, so that the latter consisted of only one artery and the vein. The artery did not emerge at the navel, but made its exit at a lower part of the abdomen, and joined the vein at an angle. Mr. Eves observes, with regard to the formation of the pouch, that as the amnios at the fifth week is reflected down the cord, and is continuous with the integument, the membranous covering of the tumour may have been formed by the adherence of the reflected amnios to the peritoneum, and the want of development of the muscles. The arterial deviation is rare: Velpeau only mentions three cases, and only one of these three fell under his own observation.

The ergot of rye.—Mr. Hussey observes that the action of this drug on the uterus, at the full period of gestation, is infallible; while, in the early months of pregnancy, and in the unimpregnated state, it is, under certain circumstances, neither certain nor satisfactory. He has never found it effective in cases of abortion, either in stimulating the uterus to action, or in controlling hæmorrhage; but, he says, in combination with dilute sulphuric acid and decoction of bark, it is certain to succeed where the sanguineous discharge, after the first two days of the accident, becomes persistent. He has also given it in cases of asthenic menorrhagia in young and aged females, and where a sanguineous discharge has occurred for two or three months after confinement. In uterine leucorrhea it is also of benefit, but not when the source of discharge is the vagina. The death of the fœtus in utero, during its use to assist parturient action, he attributes to the powerful contraction of the muscular fibres of the uterus, which cuts off for the time all communication through the circulation, between mother and child, owing to the almost incessant action of the ergot, when immoderately given. The result of his experience in the use of ergot, when administered either to prevent flooding, should such be anticipated from the history of the previous labours, or to suppress it when it has already come on, has suggested the following conclusions:—First, ergot may be given to a great extent, to promote vigorous uterine action during labour; yet after-flooding to an alarming amount will in some cases supervene.—Secondly, the action of this medicine, for the most part, ceases with the birth of the child.—Thirdly, its protective power over this organ, so as to prevent hæmorrhage or suppress it, is proportionate to the amount of pain caused by it.—Fourthly, there is a marked disparity, or want of uniformity, in its action on the uterus.—And, fifthly, although it may be given to stimulate the viscus actively after labour, as a preventive of flooding, the risk of a copious discharge in the intervals of pain is, nevertheless, incurred. Several of these conclusions are not consonant with the experience of other medical men.

The ergot of rye.—Mr. Litchfield supports the views respecting this drug as an obstetric agent, which were advocated by Mr. Hooper at a recent meeting of the Medical Society of London, (vide *Medical Times. ante*) The principal gist of his remarks will be found in the old saying, *abusus non tollit usum.*

Opacity of the cornea.—Mr. Johnson has relieved a very long standing case of opacity of the cornea to a considerable extent, by the local application of the sulphate of copper and nitrate of silver in substance. He gave calomel and opium internally in small doses at the same time, and the vinum opii was instilled between the eyelids twice a day. He adds that he has seen two cases in which the application of hydrocyanic acid was had recourse to, but without advantage. One was a case of amaurosis, and the other of cataract.

Acute rheumatism.—Dr. Barnes adds his testimony to the efficacy of large doses of nitrate of potash in the treatment of acute rheumatism, but says that in one case in the practice of M. Gendrin, it caused alarming diarrhœa, together with vomiting and pain on pressure over the region of the stomach, and increase of febrile action, so that its use was necessarily abandoned altogether in that case. Another objection to its use consists in the exceedingly nauseous beverage a compound of nitre and ptisane makes, leading to the belief that in many instances the full quantity of nitre ordered is not taken. Dr. Barnes observes, with respect to this, that without disputing the fact of M. Martin Solon's finding all the nitre in the urine, he knows that it sometimes find its way into the chamber-utensil by a passage more direct than through the kidneys.

Use of naphtha in phthisis.—Dr. Buxton has published a case in which he considers he effected a cure of phthisis by the use of naphtha, but the details of which, meagre as they are, do not shew any indications warranting the assumption that it was a case of consumption. It was, more probably, an instance of chronic bronchitis.

Epidemic meningitis.—[This and the three following articles comprise the principal contents of the last number of the *Medical Gazette.*] Dr. Gillkrest has forwarded to Sir James Macgrigor a report on the meningitis, which was epidemic, or rather endemic, in Gibraltar, in the early part of the present year. No peculiar atmospheric phenomena preceded the invasion of the disease, with the exception of considerable drought during the period usually considered the rainy season; there was a tendency, however, to more or less severe headache, principally in the occiput, in all cases of indisposition prior to and during the prevalence of strongly marked cases of meningitis. The invasion of the disease was, in many instances, sudden, but occasionally premonitory symptoms existed,—such as a slight disturbance of the cerebral functions, with rigidity of the muscles at the back of the neck, and vomiting. These symptoms generally yielded in a few days; but, in the more severe cases, the headache, whether frontal, occipital, or general, was most intense from the beginning, and was often indicated by shrieks; the head was drawn back by the rigidity of the muscles, and there were extreme anxiety and restlessness, frequently with spasms, or convulsions, or both. The pulse was not always influenced by the apparent severity of the attack, and injection of the adnatæ, with much fever, occurred in a limited number of cases only. Vomiting and costiveness were among the early and most constant symptoms, and, in some cases, after vomiting had ceased for several days, and hopes were entertained of recovery, it has recurred with other symptoms, and been followed by a fatal termination. The most striking and general symptom was the greater, or less, curvature of the spine, caused by the rigidity of the muscles of the neck; the head in many cases, was observed nearly to touch the shoulders. Strabismus, deafness, amaurotic blindness were not unfrequent: in two cases, temporary hemiplegia, and, in three or four, fatal apoplexy occurred. Somnolency was frequent in the course of the disease. The pupils were sometimes dilated, sometimes contracted, and were occasionally observed to oscillate. The countenance in the advanced stage of the disease, sometimes had an unmeaning and fatuous appearance. The opisthotonic condition of the hand and spine, which was common in children and young persons, was comparatively rare in those more advanced in life. The treatment consisted of bleeding, general and local, purgatives, and various derivatives, as also the internal exhibition of mercury. Dr. Gillkrest objects to cupping, or blistering near the seat of inflammation, as likely to be injurious, and, he thinks, mischief may follow such measures applied any where on the body, when the disease is at its height. On the same principle, he would hesitate at largely leeching the head in young persons; simple irrigation of the head, the hair having been cut close is, he thinks, preferable to the application of ice, which, he says, is likely to produce reaction, and a great shock to the system. The disease having prevailed principally among the civil population, the post-mortem examinations were very limited in number; but were very carefully conducted. In no instance, was the head of a child, dying of disease, examined, so that it was impossible to as-

certain whether or not the disease was meningitis, arising from strumous granulations of the arachnoid and pia mater, described by the French writers. The dura mater was perfectly free from all trace of inflammation; the arachnoid always presented unequivocal marks of the existence of inflammation at the base of the brain, where pus even was usually found. The pia mater was remarkably implicated; traces of pus were found in its foldings in the sulci of the brain, and lymph at various points of its spinal prolongation. It could not be ascertained satisfactorily, that the substance of the brain was involved in the inflammatory action. The ventricles contained a quantity of serum, with lymph and pus lying at the bottom, rendering the serum turbid. About four hundred and fifty cases occurred altogether among the civil population, of which forty-two terminated fatally. The bulk of the cases were in persons under eighteen years of age, and but very few serious cases occurred above the age of thirty. The proportion of the sexes appeared tolerably equal.

Spina bifida.—Mr. Prescott Hewett has narrated several cases of spina bifida. The first of these, treated in St. George's Hospital, was punctured several times, the operation being followed by inflammation and death. In the second case, treated by Mr. Hewett, slight support, by means of a bandage only was used, but the tumour continued to increase, the skin became inflamed and burst, extensive suppuration of the sac followed, and terminated fatally. The remaining two cases were instances where the patients had reached the period of puberty, and were, comparatively, but slightly inconvenienced by the disease. With respect to the treatment of these cases, Mr. Prescott Hewett says, the tumour ought never to be punctured along the mesial line, especially in the sacral region; for it is generally at this part that the cord and its nerves are connected with the sac. The puncture should be made at one side of the sac, and at its lowest part, so as to diminish the risk of wounding any of the nervous branches. The instrument used should be a grooved needle, or a small trocar; for, if a lancet is used, there will be a greater risk of wounding some important part contained in the cavity of the tumour. From the numerous pathological examinations that have been made, it appears that in almost every instance nervous branches are connected with the sac, and this circumstance which leads Mr. Hewett to recommend caution in operating, would induce us to discard the operation altogether.

Transverse presentations. — Dr. Ramsbotham, in his report of the Royal Maternity Charity for 1841, says, he was sent for, to a case of transverse presentation, and found, on his arrival, that the *arm had been amputated* by the surgeon previously in attendance, after ineffectual attempts had been made to turn. The uterus was ruptured. Dr. Ramsbotham had no difficulty in bringing down the feet. It was the woman's sixth child; all the other labours having been preternatural presentations, are shoulder and four breech. She had a slightly distorted pelvis. We should be glad to know what object the surgeon proposed to himself in amputating a child's arm?

Cancer of the pylorus.—A woman, fifty years of age, was admitted into University College Hospital, under Dr. Taylor in April, 1843, having suffered previously from symptoms of dyspepsia, attended with constant vomiting after taking food, and torpor of the bowels. There was great prostration of strength; no pain about the chest, or head; no cough, nor dyspnœa. The countenance was of a dingy sallow hue. The pulse was 80, rather jerking, but compressible; appetite slight; no thirst: a constant saltish taste in the mouth: the fluid portion of the vomited matters had a chocolate-like colour, and an acid reaction. There was considerable tenderness on pressure over the epigastric region, especially towards the right side; but no tumour could be distinctly recognised. The abdomen was considerably enlarged, the swelling being somewhat of a globular form, and terminating very abruptly a little below the umbilicus in a line inclining from this point towards the right iliac region. Fluctuation was distinctly perceptible. There was some dullness in percussion in different parts of the chest. The treatment which was palliative, consisted in the exhibition of small doses of hydrocyanic acid, and of the tincture of the sesquioxide of iron, to allay vomiting, and of the hydrochlorate of morphia to procure sleep. Some relief was experienced from these measures, but the symptoms soon recurred, and she gradually sunk, dying about three weeks after her admission. The examination of the body, after death, shewed the lungs dark-coloured, and mottled over with black spots; their apices contained some soft cretaceous or putty-like matter. There were some ounces of bloody serum in each pleural sac. The heart, liver, and spleen, were small; the stomach much enlarged, being three times its natural size. Near the pylorus, the mucous membrane was mammillated; and beneath it, at one part, there was a quantity of gelatinous matter. The muscular coat at the pylorus was about a line in thickness, and external to it there was a quantity of dense, whitish, semi-transparent tissue, surrounding and constricting the pyloric aperture, so that the point of the little finger could with difficulty be introduced into it. No milky fluid could be expressed from the adventitious deposit, but subsequent microscopic examination proved it to be distinctly scirrhous. The mucous membrane was ulcerated at one point only. The duodenum was enlarged, but the calibre of the other small intestines was diminished. The peritoneum generally was studded over with small, semi-transparent, granular prominences, about the size of pins' heads, which subsequent microscopic examination proved to be scirrhous. There were about two or three pints of yellowish serum in its cavity. The liver was in a state of incipient cirrhosis. The ovaries and uterus seemed to partake in the scirrhous degeneration.

Funis presentation.—Mr. Bainbridge was called to a stout woman, about twenty-five years of age, in labour for the second time. On examination, he found the cord filling up the vagina, and projecting a little from the external opening, the head high up, and the os uteri about half dilated. He immediately introduced the hand, and pushed the funis, spreading it about above the child's shoulder, and over the elbow, suffering the uterus to contract upon and expel his hand; and the head descended at the same time considerably. He then gave half a drachm of tincture of ergot, and in less than an hour a fine lively child was born. Both mother and child did well.

Amputations.—Three cases are reported in the *Lancet*, from the Dreadnought Hospital Ship. The first of these is a man who had had his leg cut through by the chain of a crane, which ran along one of the sides of a pair of shears, as lofty as a mast. Amputation was performed by the flap method in the lower third of the thigh. The man was apparently doing well until the seventeenth day after the operation, when constitutional irritation was lighted up, with pain in the abdomen, rigors, headache, &c. These symptoms were relieved by the treatment, and he then became affected with cough, mucous rale in the lower lobe of the lung, with great dulness behind, ammoniacal urine, &c. A small abscess formed in the left elbow; and the man died on the twenty-fourth day. On examination of the body, the left pleura was covered with coagulable lymph, and the cavity contained two pints of sero-purulent fluid. Several large portions of the lung appeared of a pale yellowish grey colour, and fluctuating to the touch. When cut into, the tissue was found reduced to the consistence of a rather flocculent mass, infiltrated with pus and air, and was very fœtid. These gangrenous spots were separated from the rest of the lung by a well-defined line; the bronchial tubes in their neighbourhood were filled with thick purulent fluid. The right lung was in a similar state, but in a minor degree. The liver was largely studded with small abscesses, and a few of the large branches of the hepatic vein were filled with colourless coagula, slightly adherent to the coats of the vessels, which contained a thick white fluid, resembling that in the cysts or abscesses. This, when microscopically examined, appeared to be composed of large cells, containing firm granular matter resembling in some respect pus-globules, but differing from them in the circumstance of their being almost entirely displaced by dilute acetic acid, and not having any nucleus, as is usual in the latter. Besides these, the fluid contained in abundance a fine granular matter—softened fibrine? and oil-globules. The inner surface of the viscus where these fibrinous clots were, was roughened by a fibrinous deposit. The liver also contained a large quantity of oil. The second case of amputation occurred in a lad, nineteen years of age, who had disease of the knee, from an accident, and was also under treatment for spinal disease, the result of exposure to the vicissitudes of the weather, and of carrying burdens beyond his strength. He made a speedy recovery. The spinal disease was treated successfully, with issues, and the internal exhibition of strychnia. The issues were made with undiluted nitric acid, in the following manner:—A single or double piece of lint is taken, clipped till it is as round and as small as a sixpence: a little nitric acid is then poured into a gallipot; the lint is laid hold of with a pair of bone-forceps, or scissors, drawn to the side of the vessel, while the acid is allowed merely to penetrate without saturating it. It is then applied to the skin, and kept on by means of a piece of oil-cloth, and two narrow strips of adhesive plaster. The third case was one of amputation below the knee; the patient was an old man, a Dane, sixty one years of age. The cure was somewhat retarded by the formation of an abscess over the front of the tibia, and the subsequent removal of a piece of dead bone. The report of these cases terminates with the following choice bit of nonsense;—"the first (of these cases is) pathologically interesting; the other two men grew wiser and better, and were morally interesting, affording therefore full scope to the medical mind."

Scrophulous abscess of the neck.—Dr. Hoffmann narrates in Caspar's Wochenschrift, the case of a child, five years of age, who, when recovering from scarlatina, had inflammation and suppuration of the cervical glands. A certain tremor, which was perceptible by the hand, and a noise which could be heard by the ear applied to the abscess, excited suspicion, and an opening was not made, until the proceeding was sanctioned at a consultation. The abscess was then opened, but a full stream of blood issued forth, at first of a dirty red colour from the mixture with pus, but afterwards perfectly pure. The patient died soon after the puncture was closed. When the body was examined after death, the external jugular vein was found to be perforated like a sieve for three quarters of an inch, and the parts of the vessel above and below the perforation were discoloured and soft.

Arsenic in ascites.—Dr. De Cavay gave arsenic in the dose of one twentieth of a grain twice a day, in a case of ascites following peritonitis, without any organic complication. The disease was of fifteen months standing. At the end of six weeks the abdomen was less tense, and was sensibly diminished in volume: the urine was at the same time increased in quantity. Uniform compression of the abdomen was then also employed, and at the end of six months there was scarcely any fluid remaining in the peritoneal cavity. The case is reported in the *Gazette Medicale*.

Abscess of the heart.—M. Gintrac has published in the *Journal de Medecine de Bourdeaux* the case of an old man, long subject to palpitation, with dyspnœa. etc, and who was under his care for a few days. His respiration was short and uneasy, there was orthopnœa, cough, and bloody expectoration. The heart's action was strong and irregular, and heard over a large surface:—no bruit could be distinguished. On dissection, from twelve to fifteen pounds of a thick reddish and yellow fluid, consisting of pus and bloody serum, were found in the pericardium, and there were distinct layers of pus on the anterior surface of the heart, especially on the left side, where a small ovoid opening was found in its substance. The lower part of the left ventricle was separated from the rest by a thick unorganized septum, and contained a thick purulent fluid, the color of the lees of wine. The muscular fibres in this part were pale and softened,

and soaked in pus, which seemed to have passed between them from a fistulous opening in the anterior wall near the septum, communicating with that at the surface of the heart.

GOSSIP OF THE WEEK.

Appointments.—Charles McArthur, M.D., of the Victory, to the William and Mary Packet, for special service.

Assistant-Surgs.—W. Fosken, M.D., (acting) additional, to the Illustrious; W. A. Leslie, (acting) additional, to Plymouth Hospital; R. Clark, M.D., and E. Elliott, M.D., additional, L. T. F. Wooldridge, (acting additional, of the Caledonia, L. V. C. Clark, M.D., acting additional to the San Josef, for duty at Plymouth Hospital; L. C. Urquhart, M.D., from the Camperdown, additional, to the Ocean, for service at Sheerness Dockyard; G. Willes, for service at Haslar Hospital; J. Gordon (acting) of the Camperdown, to the Poictiers, for service at Melville Hospital.

Obituary.—At South Lincolnshire, aged 78. Mr. John Hudson, formerly surgeon in the Royal Navy. At Chapleton, Borgue, near Kircudbright, aged 27, Thomas Gordon, M.D., recently of Maidstone, Kent.—At Norwood, Beverly, James Browns, Esq., M.D., aged 83.—On the 7th inst. on board the Princess Royal, on the passage from Liverpool to Glasgow, Charles Foote, Esq., M. D., Gibraltar.—Gustavus A. Chayle, M.D., Physician to the Royal Infirmary, Manchester.

Another death took place last week in Manchester, through the having taken a dose of Godfrey's Cordial.

The following gentlemen have been elected Fellows of the Royal College of Physicians:—Dr. Gny, of King's College, London, Dr. Conolly, of Hanwell; Dr. Plenderleath, of Ramsgate; Dr. Forbes, Dr. J. O. Rees, Dr. Curtham, Dr. Ramsbotham, and Dr. Hughes.

The following gentlemen belonging to the medical department of King's College, passed the matriculation examination at the University of London last week: first division, Messrs. Arlidge, Bridgwater, Cook, Gibbs, Gill, and Griffiths. Second division, Messrs. Farmer, Manley, Paley, Reed, Stevens, and Skinner.

Gentlemen admitted Members of the Royal College of Surgeons, on Friday, July 5th: H. F. Middleton, J. H. Llewelyn, G. C. H. Hitchings, J. Mitchell, D. I. Allen, I. Ozanne, R. I. Loch, N. S. Glazebrook, I. E. Hebblethwaite, C. W. Hope, J. H. Smith, T. Blathewick.

Gentlemen admitted Members of the Apothecaries' Hall, 4th July, 1844.—Henry James Aldham, Walter Masterman Pulleyne, George Matthews, Charlton Saunders, George F. Wills.

Metropolitan Mortality for the Week ending Saturday, June 22.

Causes of Death.	Total.	Average of 5 Springs.	Average of 5 Years.
All Causes	871	900	946
Zymotic, or Epidemic, Endemic, and Contagious Diseases	151	151	178
Sporadic Diseases—			
Dropsy, Cancer, and other Diseases of uncertain or variable Seat	98	106	111
Diseases of the Brain, Spinal Marrow, Nerves, and Senses	157	159	157
Diseases of the Lungs, and of the other Organs of Respiration	228	253	256
Diseases of the Heart, and Blood-vessels	27	19	21
Diseases of the Stomach, Liver, and other Organs of Digestion	78	88	69
Diseases of the Kidneys, &c.	13	5	5
Childbirth, Diseases of the Uterus, &c.	7	9	10
Rheumatism, Diseases of the Bones, Joints, &c.	3	5	6
Diseases of the Skin, Cellular Tissues, &c.	2	1	1
Old Age	45	56	71
Violence, Privation, Cold, and Intemperance	21	25	26

A SELECT PRACTICAL FORMULARY,

TRANSLATED FROM THE FRENCH OF M. FOY, PRINCIPAL PHARMACIEN OF THE HOSPITAL SAINT LOUIS, AT PARIS.

(Continued from page 298)

Conium Pills with Calomel (Cullerier): one drachm of extract of conium, one drachm of calomel, mixed together with a sufficient quantity of powdered gum arabic and simple syrup, to make thirty-six pills. Mode of exhibition: three or four daily in syphilitic enlargements.

Conium Pills with Cinchona: thirty grains of extract of conium, seventy-two grains of extract of cinchona, mixed together, and made into thirty pills. Mode of exhibition: three daily in the treatment of phlegmonous scirrhus.

Pills of Copaiba: copaiba solidified by magnesia or almond cake, made into pills weighing six grains each. Mode of exhibition: from six to twelve pills and more daily, in the treatment of gonorrhœa, &c.

Pills of Copper (Swediaur): forty-eight grains of crumb of bread, eight grains of ammoniacal sulphate of copper, with a sufficient quantity of carbonate of ammonia, to make forty pills weighing four grains each, and each containing one-fifth of a grain of the salt of copper. Mode of exhibition: two or three daily in epilepsy, and obstinate hæmorrhagies.

Cyanuretted Pills (Parent and Boutigny): six grains of the porphyrised sub-cyanuret of mercury, one drachm of crumb of bread, and a sufficient quantity of honey, to make ninety-six pills. Mode of exhibition: one or two daily, and more progressively in the treatment of syphilis.

Cyanuretted and Opiated Pills (Parent and Boutigny): twelve grains of crude opium, added to the preceding prescription.

Pills of the Cyanuret of Gold (Fourche): one grain of the cyanuret of gold, sixty grains of extract of mezereon, mixed together, and made into fifteen pills weighing four grains each, with a sufficient quantity of marsh-mallow powder, of which one, two, or three pills, &c. to be given daily.

Pills of the Cyanuret of Potassium (Bailly): two grains of the cyanuret of potassium, and a sufficient quantity of starch powder and syrup of gum, to make four pills weighing six grains each. Mode of exhibition: one evening and morning in dyspnœa, orthopnœa, and convulsive affections.

Pills of Cynoglossum: four parts of extract of opium, eight parts of powdered cynoglossum bark and hyoscyamus seeds, prepared together in equal proportions, six parts of powdered myrrh, five parts of powdered olibanum, half a part of powdered castor, half a part of powdered saffron, mixed together very accurately, and made into pills weighing four grains each. Mode of exhibition: one or two daily.

Diuretic Pills: see Turpentine Pills.

Scotch Pills (Codex): twenty-four grains of powdered aloes, twenty-four grains of powdered gamboge, one grain of oil of aniseed, and a sufficient quantity of syrup, to make pills weighing four grains each. *** Tonic and digestive.

Emetic Pills (Swediaur): forty-eight grains of sulphate of copper, forty-eight grains of ipecacuana, and a sufficient quantity of syrup, to make pills weighing five grains each. Mode of exhibition: two or three every third or fourth day in the treatment of pulmonary phthisis.

Emmenagogue Pills (La Charite): eight grains of black oxyde of iron, sixteen grains of powdered saffron, sixteen grains of powdered valerian, and a sufficient quantity of syrup of wormwood, to make eight pills. Mode of exhibition: four to eight daily in amenorrhœa.

Anti-epileptic Pills: see Anti-spasmodic pills.

Pills against Acne Rosacea (Biett): half a drachm of calomel, one drachm of extract of taraxacum, mixed together, and made into thirty-six pills, one to be taken evening and morning.

Pills against Hooping-Cough: one grain of extract of opium, and two or three grains of sub-carbonate of iron, mixed together, and made into six pills. Mode of exhibition: three daily—one evening, morning, and noon, at the commencement of hooping-cough.

Pills against Cystitis (Italian hospitals): seventy-two grains of flower of sulphur, forty-eight grains of Venice turpentine, mixed together, with a sufficient quantity of yelk of egg, and made into pills weighing five grains each, of which from four to eight are to be given daily.

Pills against the Colliquative Nightsweats of Phthisical Patients (Burdach): sixteen grains of white agaric, twenty-four grains of mucilage of gum arabic, and a sufficient quantity of extract of gentian, to make sixteen pills, of which four are to be given at bed-time.

Pills against Syphilides: twelve grains of extract of aconite, two grains of powdered crude opium, two grains of corrosive sublimate, mixed together, and made into eight pills, one to be taken every morning fasting. *** The pills of Dr. Sedillot and Dr. Lagneau, which are prepared with the iodurets of mercury, may be used in the same cases.

Pills of the Deuto-Ioduret of Mercury (Puche): eight grains of the deuto-ioduret of mercury, thirty-two grains of sugar of milk, with a sufficient quantity of gum water, to make thirty-two pills. Mode of exhibition: from one to eight daily progressively, in primitive and secondary syphilitic affections.

Pills of Dulcamara and the Sulphuret of Antimony (Hospital St. Louis): four drachms of the extract of dulcamara, two drachms of sulphuret of antimony, mixed together, and made into pills weighing four grains each, with a sufficient quantity of powdered dulcamara. Mode of exhibition: four, six, eight, and twelve daily in obstinate cutaneous affections.

Pills of the Resinous Extract of Nux Vomica (Magendie and Fouquier): one drachm of the resinous extract of nux vomica, made into thirty-six pills. Mode of exhibition: one or two daily in the treatment of paralysis.

Compound Steel Pills (English Formulary), two drachms of powdered myrrh, one drachm of sub-carbonate of soda, one drachm of sulphate of iron, and a sufficient quantity of syrup, mixed together, and made into pills weighing three grains each. Mode of exhibition: from three to eight daily. *** Tonic and emmenagogue.

Ferruginous Pills; see pills of Blaud and of Valette.

Dr. Franck's Pills: see Grains of Health.

Pills of Mercurial Ointment (Lagneau): see Pills of Dr. Sedillot.

Pills of Hesser: thirty-six grains of extract of aconitum napellus, thirty-six grains of powdered aconite, two grammes of the sulphuret of lime, mixed together, and made into thirty-six pills. Mode of exhibition: three, six, nine, and twelve daily, according to their narcotic action.

Hydragogue Pills (Hospital at Montpellier): five drachms and a half of powdered squills, five drachms of extract of colocynth, made into two hundred pills. Mode of exhibition: one evening and morning, and more progressively, as purgative and diuretic.

Pills of the Ioduret of Iron (Dupasquier): four grains of the ioduret of iron, twenty grains of powdered gum arabic, eight grains of white honey, mixed together, and made into thirty-two pills. Mode of exhibition: five or six daily, and more progressively; used in scrofulous affections.

Pills of the Ioduret of Mercury (Biett, Magendie, Ricord, Cullerier, Gibert, &c.): one drachm of the proto-ioduret of mercury, one drachm of powdered marsh-mallow, mixed together, and made into seventy-two pills, with a sufficient quantity of simple syrup.

Pills of the Ioduret of Mercury: forty-eight grains of the proto-ioduret of mercury, thirty-six grains of thridace (extract of lactucarium), seventy-two grains of extract of guaiacum, mixed together, and made into forty-eight pills.

Pills of the Ioduret of Mercury: one grain of the proto-ioduret or deuto-ioduret of mercury, twelve grains of the extract of juniper, mixed together, with a sufficient quantity of liquorice powder, and made into eight pills.

Pills of the Ioduret of Mercury: half a drachm of the proto-ioduret of mercury, half a drachm of thridace, nine grains of gummy extract of opium, one drachm of extract of guaiacum, mixed together, and made into thirty-six-pills. *** Mode of exhibition: one pill to be taken daily for the first three days, the dose being gradually augmented by one pill every second or third day, according to the symptoms, until three or four are given daily. The pills are administered at first either in the evening or morning, then evening and morning, afterwards one evening, morning, and noon, &c. During the day the patient should drink an infusion of saponaria, sweetened with syrup of marsh-mallow, or with capillaire. If the scrofulous diseases complicated with syphilis, for which these pills are generally prescribed, are also combined with nervous disorders, or osteocopic pains, the extract of aconite should be used in conjunction with the mercurial iodurets.

Pills of the Iodhydrargyrate of the Ioduret of Potassium (Puche): eight grains of the dento-ioduret of mercury, eight grains of ioduret of potassium, sixty-four grains of sugar of milk, made into thirty-two pills with gum water, which are afterwards covered with gelatine. Mode of exhibition: from one to four daily in cases of syphilis complicated with scrofula.

Pills of Dr. Koopp: four grains of powdered acetate of lead, seventy-two grains of powdered phellandrium seeds, mixed together, and incorporated with seventy-two grains of extract of miltoil, made into pills weighing two grains each. Mode of exhibition: one or two daily in the treatment of hysteria and epilepsy. *** Five grains of the gummy extract of opium are sometimes added to this prescription.

Martial Pills (Sydenham): see Ferruginous pills.

Pills of Meglin (Codex): one drachm of extract of hyoscyamus niger, one drachm of extract of wild valerian, one drachm of white oxide of zinc, mixed together, and made into pills weighing four grains each. Mode of exhibition, one daily, the dose being successively increased to six or eight; used in the treatment of facial neuralgia.

Pills with Hahnemann's Soluble Mercury: eight grains of the soluble mercury of Hahnemann, two drachms of extract of liquorice, mixed together, and made into sixty-four pills. Mode of exhibition: from one to ten daily.

Mercurial Pills (Cullerier): eighteen grains of the deuto-chloruret of mercury, half an ounce of flour, half a drachm of powdered gum arabic, made into pills weighing three grains each, with a sufficient quantity of distilled water. Mode of exhibition: two evening and morning.

Mercurial Pills (Hospital St. Louis): one scruple of corrosive sublimate, two drachms of alcohol, three drachms of flour, with a sufficient quantity of distilled water, to make 144 pills. Mode of exhibition; one evening and morning, the dose being afterwards doubled.

Mercurial Pills; see Blue Pill.

Mercurial Pills (Codex); see Pills of Belloste.

Aloetic Mercurial Pills (Bories): twelve grains of pure mercury, triturated with eight grains of lard, until they are extinguished, then a sufficient quantity of powdered socotrine aloes and soap added; made into pills weighing four grains each. Mode of exhibition; three or four daily in tænia.

Iodretted Mercurial Pills; see Pills of the Iodurets of mercury.

Hoffmann's Minor Pills: one drachm of porphyrised calomel, one drachm of crumb of bread, mixed with a sufficient quantity of water, and made into pills weighing one grain each.

Hoffmann's Major Pills are made with eighteen grains of corrosive sublimate, six drachms of crumb of bread, mixed with a sufficient quantity of distilled water, and made into 216 pills. Mode of exhibition; from one to six daily in syphilis.

Pills against Chronic Metrorrhagia (German Formula): three drachms of powdered savine, two drachms of extract of savine, twenty-four drops of oil of savine, made into pills weighing three grains each. Mode of exhibition; five to ten daily.

(To be continued.)

No. 252. **SUMMARY.** JULY 20.

CLINICAL LECTURES ON SOME IMPORTANT POINTS OF SURGERY, BY SIR B C. BRODIE, BART.:—
LECTURE XIII.—Diseases of the Male Urethra, continued—Retention of Urine arising from Stricture—Its Mode of Treatment—Difficulty of Passing the Catheter—Plan to be Adopted when this Instrument cannot be introduced—Periodic Retention of Urine—Its mode of Treatment—Different Modes of Puncturing the Bladder—Their Advantages and Disadvantages.—Retention produced by Abscess in Perinæo—Symptoms and Mode of Cure—Rupture of the Urethra—Its Consequences, &c. 319

ON THE PHYSIOLOGY OF HEALTH AND DISEASE, BY M. RASPAIL:—
General Considerations on the Characters of the Morbid State—Symptoms, Visible, Odorous, Tactile, or Acoustic—Classification of the various Morbid Effects described in our Systems of Nosology—Therapeutical Division of M. Raspail's Work—Precautions and Medications, Anti-Azotic or Anti-Asphyxiant—Hygienic Precautions—Therapeutic Medications 320

RELAXATION AND SEPARATION OF THE PELVIC SYMPHYSES AND LIGAMENTS, BY C. CLAY, M.D., &c. &c.
QUESTION:—What evidence have we towards establishing the supposition that the pelvic symphyses and ligaments, relax or separate during parturition at the full period of utero-gestation? .. .. : 322

PARISIAN INTELLIGENCE:—
Professor Velpeau on Diseases of the Eye.—Preparatory Treatment in Operating for Cataract—Position in which the Patient ought to be Placed during the Operation—Consecutive Treatment 323
Professor Rostan on the Treatment of Pneumonia.. 324
Dr. A. Latour on a New Mode of Treatment for Phthisis .. 324
Proceedings of the Academy of Sciences, July 8th. 325
Proceedings of the Academy of Medicine, July 9th 325

SOME OF THE PRINCIPAL CONCLUSIONS ARRIVED AT CONCERNING THE THYMUS AND THYROID GLANDS, (from a rejected Essay on Thymus) 326

THE PHYSIOLOGY OF MATERIA MEDICA, as Established by the Latest Researches in Organic Chemistry, Physiology, Pathology, &c., by PROF. T. F. SOBERNHEIM .. 326

Death from Abuse of Ardent Spirits 327
Wound of the Abdomen: Delirium Tremens 327
Hernia Cerebri 327
Seasoning 327
Ichthyosis Infra-Uterina 327
Gangrene of the Lung 327
Spinal Distortion.. 327
Successful Removal of the Uterus by Ligature 327
Peritoneal Dropsy 327
Carcinoma of the Breast and Liver 327
Opium in the Treatment of Delirium Tremens 327
The Colabah Barracks 327

TO CORRESPONDENTS 328

LEADER:—
ELECTIONS BY THE NEW FELLOWS 328

MR. WAKLEY'S ACTION AGAINST THE HOPE INSURANCE COMPANY 329

OBSERVATIONS ON A WORK ENTITLED "CHEMISTRY IN ITS APPLICATIONS TO AGRICULTURE AND PHYSIOLOGY," BY PROF. LIEBIG, M.D., PH.D... .. 332

NON-QUALIFIED PHYSICIANS 334

TRANSACTIONS OF LEARNED SOCIETIES:—
Pharmaceutical Society 334

HOSPITAL REPORTS:—
Westminster Hospital 335

LIST OF ENGLISH GENTLEMEN who have Graduated in Medicine and Philosophy in the University of Giessen, since June, 1843 335

PENCILLINGS OF EMINENT MEDICAL MEN:—
DR. ABERCROMBIE 336

PERISCOPE OF THE WEEK:—
Hypertrophy of the Eyelid 337
Excitement of Uterine Action.. 337
Traitement Arabique in Obstinate Cutaneous Affections.. 337
Abscess of the Liver and Ovarian Disease 338
Cyanosis.. 338
Sloughing of the Uterus 338
Large Doses of Quinine in Epilepsy 338
Superficial Nævus 338
Singular Case of Empyema 338

GOSSIP OF THE WEEK 338

METROPOLITAN MORTALITY TABLE 338

A COURSE OF CLINICAL LECTURES ON SOME IMPORTANT POINTS OF SURGERY,

Delivered at ST. GEORGE'S HOSPITAL, by Sir BENJAMIN C. BRODIE, Bart.

Lecture XIII.

Diseases of the Urethra continued.—In the course of your practice you will frequently be called to a patient with retention of urine from *stricture*. I say stricture, because there may be retention from a variety of causes: such as hysteria, enlargement of the prostate, and so on; each requiring different treatment. Now, what then are you to do in stricture retentions? Is it better to trust to emollients, or, to pass an instrument at once? My own opinion is that it is better to employ the instrument in the first instance, because it is more likely to succeed. Introduce a small gum-elastic catheter, and take care when you come down to the stricture to lengthen the penis; this will, in the majority of cases, ensure the success of your operation, and the water will flow from the bladder, in a small stream. In some cases it is adviseable, when you have passed a bougie, to allow it to remain there some time. Keep it in till the patient wishes to make water. It will often happen, that he will request you to remove it as soon as possible, crying out that he can make water. But again, perhaps you cannot get the instrument into the bladder: the stricture grasps it, or it catches something behind the stricture and will go no further; it is not essential it should go into the bladder; if the stricture grasps it, that is quite sufficient, for when you withdraw it the patient will make water, just as well as if it had gone quite to the bladder. You will fail more frequently with a catgut bougie than with a silver catheter, as the latter is much more manageable; or you may employ a gum catheter with an iron stilette in it; but with the silver catheter you will be better able to press upon the stricture if it is required. If it be a recent case, you may employ a large sized instrument; but if it be an old case, you should employ one of a smaller size. For old strictures, it is better to have a short instrument, and it should be fixed in a wooden handle, as then you can tell exactly where the point is; and in passing the instrument, always recollect what I said about the rugæ in the lower part of the canal; slide the point of the catheter along the upper part of the canal. Sometimes when it reaches the stricture, it will be arrested as if in a cul de sac; if this happens, draw it back a little, and then push it gently forwards again, and you will generally get it through. Perhaps the stricture will let it pass at once, but this will not be the case very often; still you must not use violence, but press against the stricture with a moderate and steady pressure, otherwise you will force it into the surrounding cellular texture; press it carefully forwards in the line of the urethra, and sometimes in half a minute, at other times in several minutes, it may be half an hour, the stricture gives way, the catheter enters the bladder and you are enabled to draw off the water. If, in such a case, you employ a gum catheter, it should always be mounted on an iron stilette, and be fixed in a wooden handle. The size must be regulated according to circumstances. I advise you to have recourse to the catheter last; if you can get in a bougie, never use a catheter; because the bougie leaves the urethra in a fit state for passing a catheter, but a catheter does not leave it in a fit state for passing a bougie. But if you cannot get in either catheter or bougie, what are you to do then?—the great remedy in this case is laudanum; ʒss to ʒj mixed with some starch and injected into the rectum; and if this is not sufficient, give him some by the mouth, and it will seldom fail. Now, in what way does this act? I suspect it is that the patient does not feel so much the distress from the loaded bladder, and so leaves off straining; for I think it is this which keeps up the stricture: patients have told me that if by a great effort they could avoid straining, they could then make water, but in most cases it is involuntary and cannot be arrested. But suppose the opium fails, then some have advised putting the patient into a warm bath; I must confess I have not much faith in this; others advise bleeding the patient standing till he faints, and perhaps this might succeed; but by far the best way is to cup him in the loins: when this plan has been resorted to, I have known the patient make water immediately, even before the blood had flowed, so that I have thought dry cupping would do as well. Different persons are relieved in different ways: some by opium; others find if they take a strong dose of senna and salts it relieves them almost immediately, and doubtless it is good practice to give a strong dose of purgative medicine at the commencement of the attack; but you are seldom called in time enough, because this remedy requires four or five hours to operate: one patient of mine told me he always found relief from injecting a pint of warm water. Some time ago I had an old gentleman under my care; I had taught him to pass the instrument himself, but one night he called me up out of my bed as he was unable to pass his instrument as usual; I succeeded in passing a catheter for him and he was immediately relieved; but he called me up again and again, and I observed this difficulty always occurred in the night and about the same hour; through the day he was quite well: so I said, why this is a kind of intermittent disease, and in fact you may have almost any disease assuming an intermittent character, and all such are to be treated with quinine or arsenic; I resorted to this plan of treatment in the patient I have just mentioned, and he was relieved immediately. It will rarely happen that you will not succeed; and, although from a complication of circumstances, an operation may sometimes be required, still such cases are very rare. But such a case will, of course, happen; the bladder gets loaded, and there is danger of its bursting; you must never allow this mischief to happen, and if you cannot get the water through the stricture, you must another way. You must puncture the bladder, either above the pubes, in the perinæum, or from the rectum. I shall not enter into a full description of this operation, as it would occupy a whole lecture, but merely make some general observations upon it. In addition to the operations I have just mentioned, you may puncture the urethra behind the stricture, but this is not an easy operation; it is more difficult than cutting a man for stone; it has also been proposed to puncture through the prostate gland, but this again is extremely difficult. It seems very well on the dead subject. There is no vital organ in the way, you will say. No—but what is there? Why, a quantity of loose cellular tissue, and if the instrument slips, it will go into this, and the urine escaping, the patient will die. In lithotomy the principal danger is from the urine getting into this cellular tissue, and in the proposed operation you do what in lithotomy you try above all things to avoid. Puncturing above the pubes is a very awkward operation. The safest plan is puncturing from the rectum. You know, in dissecting the bladder in the dead subject, you find a small triangular space, bounded before by the prostate, and above, on either side, by the vas deferens; you will, probably, say—but this is very small—yes, so it is;—but you must recollect, the bladder is distended, filling up the whole of the pelvis; and I never knew a case of puncturing in this part, take any harm. You should allow the canula to remain in the opening till the next day, by which time the parts will be so agglutinated that no harm can ensue. Sir E. Home said this was unnecessary, and I do not know that any mischief would follow its omission. Sir A. Cooper recommends puncturing from the perinæum. In this operation you dissect down to the urethra; this you are enabled to do, from knowing the parts anatomically, and by the patient straining a little, so as to force the urine into the urethra; but this operation should never be attempted by any one who is not thoroughly intimate with the anatomy of the parts. For instance, suppose there was fistula in perinæo: the callous margins being extended in different directions would render it extremely difficult; a large quantity of fat also makes the operation very troublesome. In such cases, even puncturing from the rectum would be difficult; still, if you are careful, it is perfectly safe, and is the best thing you can do under the circumstances. I shall now speak of another form of retention, in connection with stricture. I explained to you, on a former occasion, in what way abscesses were formed in the perinæum. A small portion of the urethra, behind the stricture, gets inflamed from constant irritation, and goes on to ulceration; an opening is thus formed, and through it a drop or two of urine escapes into the surrounding cellular texture, and an abscess is formed, which becomes putrid from the admixture of urine; (generally speaking, it makes its way towards the surface), but as it increases in size, it presses on the urethra, and at last produces complete retention. You are called to a patient under these circumstances; the symptoms have been coming on for several days past; he has had shiverings; the tongue is dark, approaching to black; pulse weak and low, as if he

were in the last stage of typhus fever, with all the other symptoms of putrid abscess. In such a case, it is needless attempting to pass a catheter, but you may relieve him another way: have two assistants, and place him in the position as for lithotomy; put your hand to the perinæum, and perhaps you will be able to feel the matter fluctuating; then take your scalpel and thrust it in; make a good gash, and out will flow the putrid matter. If it lies very deep, you will only feel a hard substance, and then take great care how you direct your instrument, or you will cut through the principal artery of the penis. Pass it up the anterior surface of the rectum till you feel the resistance, then enlarge the opening several ways, and as soon as the matter is evacuated, the patient will make water; but perhaps he does not quite empty his bladder, so that it is better to pass a catheter for him, and you will have no difficulty in doing this when the abscess has been freely opened; an instrument which you could not get in before, will now pass immediately. But, suppose the urethra has burst behind the stricture, and the urine is effused between the superficial and deep layers of fascia (which is the common seat of effusion), extending to the scrotum and penis, producing at once all the symptoms of which I have previously spoken: sometimes, when this has occurred, the patient feels himself relieved, the spasm ceases, and you will be able to introduce a catheter without difficulty; but you have other mischief to encounter—you have urine out of the bladder. Then, put the patient up as before, and cut down upon the urethra as you would in the ordinary operation; by so doing you will be certain no further effusion can take place; make deep incisions into the parts wherever you see any redness or tumefaction in the scrotum, the skin of the penis, &c., so that the effused fluid may escape. If you have passed an instrument into the bladder, leave it there, or pass it at once by the opening in the perinæum through the membranous part of the urethra into the bladder, so that the urine may flow away by it. Very little local treatment is required afterwards. Fomentations are useful in assisting to bring away the slough; but this sloughing of the cellular membrane always gives a great shock to the system, and the patient will require support, which is best afforded, not by bark, but by brandy and water, or wine in such quantities as to stimulate the patient without heating him. Large portions of the scrotum sometimes slough away, so that both testicles may hang down almost bare; but the small portion remaining will go a great way to repair this, so that what with this enlarging, and some new growth, a tolerably good scrotum will be formed again.

ON THE PHYSIOLOGY OF HEALTH AND DISEASE.

APPLIED TO ANIMALS AND VEGETABLES, BUT MORE ESPECIALLY TO MAN.

By M RASPAIL.

[After a somewhat metaphysical disquisition on the *moral causes of disease*, that is to say, the influence of the passions in the production of human maladies, M. Raspail makes some *general considerations on the characters of the morbid state*.]—So soon as an elementary cell of the animal economy ceases to receive and aspire the air and liquids which fecundate and nourish it, or as the air and liquids which reach it become the vehicles of an inert or disorganizing substance, that is to say, of a substance which is opposed or injurious to the organization, this small organ becomes the seat of disease—the germ of contagion to the rest of the body. But our organs are not of a calibre to perceive these infinitely small or molecular sensations. We are enabled to recognize or define but the sum of these sensations; we give signs of our suffering only when, escaping from the circle of atoms, these morbid effects are directed against the integrity of our entire organization. The sensations thus induced are usually denominated *symptoms*. These signs or symptoms are *external*, and accessible to the perception of others, or *internal*, and revealed only to the inward sensation of the patient himself. They are *visible, odorous, tactile*, or *acoustic*.

The *visible signs* are drawn from the physiognomy, the modifications of the cutaneous surface, the general appearance of the body, the perspiration, the urine, the fæces, the expectoration, the matters vomited, &c. The *odorous signs* are manifested by the cutaneous exhalation, the breath, the perspiration, the urine, the fæces, the matter from vomiting, the discharge from ulcers, &c. The *tactile signs* are those which are afforded by the movements of the circulation—that is to say, the pulse; the displacement of gases, of liquids, or of solids, beneath the skin; and the disengagement of heat, with or without moisture. *Acoustic signs* are had recourse to for the purpose of discovering those symptoms of health and disease, which, by their depth, are concealed from the sight, the smell, and the touch. We judge at a distance of the tone and alterations of the voice; but it is by applying our ear mediately or immediately upon the chest, or by shaking the body, that we judge of the state of the deep-seated parts. The one of these processes is named *auscultation*, the other *percussion*. We auscultate the heart, the lungs, the stomach, the intestines, the uterus while in a state of gestation, by applying the ear, or the stethoscope, upon the regions corresponding to these organs. Percussion is practised principally over the chest and abdominal regions, for the purpose of discovering the condition of the organs in these cavities.

Internal signs of diseases.—We understand by the internal signs of disease, those of which the patient alone is cognizant, and for which we are obliged to depend on his evidence simply. Among these we may enumerate the following: 1° The *sight* is disturbed and weakened, as soon as the cerebral system participates in the progress of the evil; the patient sees objects turn around him; there is a horror of light, a violent photophobia, when the tissues of the eye become turgid and inflamed; the eye loses the sensation of ordinary colours; objects are seen double with both eyes; things which are stationary, seem to be agitated, or move around; black spots float about in the focus of vision, &c. The *taste* becomes blunted, vitiated or destroyed, should the papillæ or nerves of the tongue become implicated, or the secretions which arrive at this organ be deranged. The *smell* is vitiated more readily than the taste. The *hearing* becomes obtuse, or deranged in various ways, as well from the accumulation of *cerumen*, or the presence of foreign bodies, as from the effects of inflammation of the delicate structures of this organ. The *touch*, in like manner, is more or less disordered: it is by this sense that the patient receives impressions from all parts of the body; whether it be the crawling of a worm, the displacement of a liquid, or of a solid body, the itching, or pruritus, of a moving atom, the introduction or the escape of air, the impressions of heat and cold, of increase or arrest of transpiration, of shivering, or of fever, &c.: all these sensations are conveyed to the patient through the medium of the touch. Finally, as to the *consciousness*, that sixth sense, if I may so express myself, so clear in its workings to the patient, yet so obscure to the observer: this also may become a symptom of disease, whether by its unnatural exaltation, or by its depression. Have we not a proof of the former in those somnambulic states so often exhibited, and which are due solely to an abnormal excitation of this power?

Classification of the various morbid effects described in our systems of nosology.—From the instant that disturbance is induced in the interior of an organ, the individual unity commences to suffer, as a consequence of the state of privation thereby engendered. The general life, in fact, being but the product of the concurrence of the individual functions, so soon as one of these functions becomes enfeebled or defective, all the others are deranged and interrupted; the contingent of one of the organs ceasing to suffice for the elaboration of the others, the products which result from each must necessarily be incomplete and unassimilable. Here, then, we have the commencement of the morbid state; that state which may progress to a point incompatible with life, unless the harmony of the functions be re-established, and the suffering organ restored to its normal condition. We must, then, conclude that every individual disease may become a predisposing cause to all others, and that any morbid influence, however local in its action, may, according to circumstances, become the germ and the focus of general disease; abnormal action, when once induced in the smallest of our organs, may derange all the functions of the individual. A morbiparous cause being given, the morbid effects which will result from its introduction into the economy of the individual, will change in character and in name, according to the organ which such cause shall have elected for its invasion; the same cause will thus be capable of engendering different evils. On the other hand, two causes of a different nature produce similar symptoms, should they both invade the same organ, and there produce similar disturbances and alterations. Considering the nervous system as the centre of action and development to the whole economy, and all the other organs, both external and internal, as dichotomous and superficial developments of this vital tree, we shall perceive two modes by which an individual may become ill: the one commencing by the centre of sensibility, and the other by the various centres of peripheric elaboration, which place us in relation with the exterior world. When the disease attacks us through the centre of sensibility, the peripheric organs are no longer able to analyze or to convey the interpretation of their suffering; but if the centre of sensibility preserve the integrity of its functions and its power, then, should the evil attack the peripheric organs of elaboration, the individual has the full consciousness of his own disorganization. When a peripheric organ is the especial seat of the malady, the circulatory liquid becomes accumulated in its meshes by hæmorrhage or by extravasation, or in its canals, as a consequence of increased aspiration; now, this cannot take place without producing a proportionate disengagement of caloric, more or less sensible to our means of observation. The simultaneous occurrence of these two circumstances has given the name of *inflammation* to this condition in red-blooded animals; and the diseases presenting this character have formed the group of *phlegmasiæ*. The *neuroses* are those diseases in which the suffering is not attended by the ordinary characters of inflammation, that is to say, redness and heat of the surfaces. This is the distinction between the two classes: for, when the nervous centre is attacked by the morbiparous cause, the circulation relaxes for want of impulsion, and heat must diminish in the absence of elaboration. But if, laying aside scholastic language, we descend more minutely into this distinction, we shall not fail to perceive that it indicates but two different states of our mode of suffering, and not two distinct groups of disease; the same morbid state being able to reach alternately, or successively, the one or the other of these phases, during the course of its development. If we pass in review the different popular or scientific nosological nomenclatures, we shall become convinced that diseases have always taken their name from the organ which seemed to be their especial seat; disease, with all, is a morbid state having its seat in one organ rather than in another,—a disorganising cause acting in one especial region. *Disease* has been defined to be:—*a group of various symptoms, the combination of which forms differences and resemblances, and serves to distribute methodically the evils which afflict us, by classes, orders, genera, species and varieties.* Up to the present day, the diseases which afflict the human and the animal species, have, in reality, been classed only by the traces left of their effects.

Such is not the manner in which we have studied the characters of maladies. We have sought in nature for all the physical and moral circumstances, capable of inducing derangement in our functions, in other words, of engendering disease. It results from the foregoing remarks that there is not a single malady which does not issue from the concurrence or the invasion of one or other of those circumstances which are perfectly appreciable to our means of observation. The invasion of these circumstances I regard as the *cause of the evil;* each of them constitutes a *genus* which, by changing its region, forms so many

species, and takes its specific characters from the nature of the organ invaded. I shall, then, divide the different genera of morbid effects into the following groups: 1° diseases which arise from a partial or general privation of respirable air (*pneumagénoscs*); 2° diseases which arise from a partial or general privation of nutrition (*trophagénoses*); 3° diseases which arise from a partial or general privation of the temperature necessary to assimilation and development (*thermogénoscs*); 4° diseases which are the product of the disorganizing or decomposing action of a non-assimilable substance, in a word, of poisoning (*toxicogénoses*); 5° diseases which arise from a solution of continuity from without inwards in the body (*tranmatogénoses*); 6° diseases which arise from a mechanical solution of continuity which shows itself from within outwards (*acanthogénoses*); 7° diseases which arise from the development of a vegetable grain or *gemma* in one or other of the cavities of the body (*phymogénoses*); 8° diseases which result from the presence and the ravages of a parasite in the living tissues (*entomogénoses*); 9° lastly, diseases which arise from the influence of a moral cause (*noogénoses*). [M. Raspail, after dividing these different *genera* into a great variety of *sub-genera* and *species*, so as to embrace all conceivable morbific causes, next comes to the THERAPEUTICAL division of his work.] The object of this branch of enquiry is laid down in the two following problems: 1° *Health being once re-established, to preserve it from every ulterior attack.* 2° *A disease being given, to divine its cause, and to find out its remedy.* The first problem constitutes HYGIENE,—the art of preserving health,—preventive medicine. The second problem constitutes MEDICINE, PROPERLY SO CALLED. The one consists in precautions, the other in aids and medications; the object of both is to combat the same cause, and to destroy its influence. We shall, then, divide these *precautions* and *medications* into: 1° *anti-azotic* or *anti-asphyxiant*; 2° *dietetic* or *anti-indigestible*; 3° *anti-thermanic*; 4° *anti-toxic*; 5° *anti-traumatic*; 6° *anti-entomic*; and lastly, 7° *anti-maniac* or *moral precautions and medications.*

1° *Anti-azotic* or *anti-asphyxiant precautions* and *medications.—Hygienic precautions.* Pure air is a nutriment, for we assimilate to ourselves the elements of air; it must be renewed often, for we incessantly vitiate it by depriving it of its constituents, to our benefit. The air most suitable to us is that to which our organs have been longest accustomed. An abrupt transition from one atmosphere, to another even more pure, occasions a certain degree of inconvenience. We have a nocturnal as well as a diurnal respiration. The nocturnal respiration of man, as of animals and plants, commences with the night; hence, the reason why animals go to sleep at night-fall. Civilized man degenerates so much, simply because he prolongs the activity of the day far into the night; because he watches when he ought to sleep; and because he continues his diurnal respiration at a time when the elements of the atmosphere, deprived of the light which fecundates them, are fit only for the respiration of sleep. The art of ventilating our dwellings is daily more and more lost sight of; we construct and adorn them for show and not for the purpose of living. In an elevated apartment, the vitiated air, yielding to the heat which pervades it, mounts to the top, and, on a level with the mouth, we have always a pure and renovated atmosphere; in a low apartment, the vitiated air remains on a level with the head; we should have to lie down on the floor, to respire a pure air. The same remarks apply, with greater force, to our hospitals, our barracks, our prisons, our stables, &c. These should all be constructed on a principle, so as to give them light, with free currents of air. Do not make a sitting-room of your bed-chambers; enter them only at night; and, in the day, let the windows be opened widely so that the air and light may circulate freely through them. In low and damp places, the air is vitiated more quickly than elsewhere; for, by favour of moisture, everything ferments and becomes corrupt. Ground-floors are therefore unhealthy; our architects have no idea of *hygiéne*; they seek to introduce the Greek style of architecture in a cold and damp country; they endeavour to ward off the little sun that our climate affords us. To render the lower part of a house dry: I would propose submitting the bricks or stones, forming the foundation, to a moderate heat, and saturating them immediately with some common fatty substance or bad bitumen; instead of mortar, use for cement, a mixture of bitumen and quick-lime, up to the height of a foot above the soil; form the pavement with stones cemented with bitumen, then a layer of iron-dross with fragments of charcoal, and above this, lay down your glazed bricks. Moreover, when the walls are plastered and dry, heat them moderately and impregnate them with some drying oil, boiling resin, or a mixture of nine parts of oil of turpentine and one part of yellow wax; this should be brushed over the wall so as to penetrate into every part; then paint or paper; and your ground-floor will be as dry as a third story, provided your windows are large, numerous and well arranged.

Therapeutic Medications.—When the respiration has been interrupted or greatly vitiated, the most speedy medication alone can repair the evil; every delay is fatal, especially in man, when the suspension of this function is not owing to syncope; syncope, indeed, frequently lasts a long time, with all the appearances of death. The medication must be founded on the theory of each of those various accidents of which the asphyxia is the consequence. *Asphyxia by vacuum, strangulation and occlusion.*—The first and the most pressing demand is to remove the obstacle which opposes itself to the introduction of the air; to cut the cord which strangles, or withdraw the foreign body or parasite which blocks up the trachea. An emetic, in these cases, is often successful. This result obtained, we must hasten to rub the body of the patient, the neck, between the shoulders, on the chest and abdomen, with an aromatic ointment, (camphor ointment, for instance), and place a compress of *sedative* water over the region of the heart, on the cranium and around the neck. Our *sedative* water, which has ammonia for its base, has the property of penetrating speedily into the circulatory current, and there dissolving the coagulated albumen: in fact, of impregnating the blood with ammonia and sea-salt, which are two of its most powerful vehicles. We may, also, gently inflate the lungs with hot air, containing the vapour of myrrh, camphor, &c., to re-establish the respiratory movements, and obviate all tendency to decomposition. Directly the patient gives a sign of life, make him swallow hot broths and strongly spiced liquids. *Asphyxia by submersion.*—Dry the body; then bathe it with the strongest camphorated spirits. The alcohol, which passes by imbibition through the living tissues, removes from the blood the aqueous quality which it acquires from too long a stay in the water; now, the circulation is arrested as much by excess as by deficiency of its menstruum. Also, inflate the lungs with air impregnated with camphorated spirits, &c. *Asphyxia by the vapour of charcoal and by acid emanations.*—Abundant lotions of the *sedative* water, so as to re-dissolve, by the vehicle of the ammonia, the congestions caused by the chemical action of the acid vapour. Constant frictions along the course of the spinal marrow, and the abdominal region, with camphorated liniment; insufflation of air rendered slightly alcaline with ammonia. *Asphyxia by ammoniacal gas, sulphurctted hydrogen and other basic gases.*—General frictions with camphorated or aromatic vinegar; application of camphorated spirits, to absorb the aqueous portion of the blood and diminish its liquidity; acid lotions to neutralize the exaggerated effects of the alcaline vehicle, and to decompose the poisonous gases by precipitating their bases. *Acid exhalations and emanations; marsh miasmata.*—In the new process of gilding by dipping, and in the manufacture of vitriol and other acids, the workman is constantly surrounded by an atmosphere of nitric or hydrochloric acid, which he respires through all his surfaces. The trades in which mercury is employed are perhaps less injurious than this. Mercury attacks the nerves; acids corrode the parietes of the intestinal canal and of the chest. The men should, here, take care to work only under low and glazed chimneys, and to be surrounded by free currents of air. They should also frequently bathe their hands with the ammoniacal water, and wear a cravat impregnated with it around the neck, so that the mouth and nose may be constantly enveloped with a vapour capable of saturating the acid emanations, and neutralising their effects. A mask might also be worn, in such cases, containing similar antidotes. Those who labour in sewers, and on marsby grounds, should adopt similar precautions, or employ *cigarettes* containing particles of chloride of lime. The smoking of tobacco, otherwise very *hygienic*, can here serve only as a vehicle and auxiliary to the corrosive action of the acids and the miasmata. Fires on the borders of marshy grounds purify the air, not only by decomposing the chemical principles of the miasm by the flame, but also by converting them into a saponaceous compound by the essential oil, and neutralizing them by the pyroligneous acid which is disengaged. *Dietetic precautions and medications.*—The nutriment varies according to the species, the individual, the manners and the customs. All vegetables do not flourish in the same soil; some languish where others thrive; animals are not all carnivorous; man also is not nourished, in all situations of life, in the same manner. The food of the adult would be indigestible to the infant, and that of the infant insufficient and debilitating to the youth. So also, do we find a difference between the food of the man of leisure and that of the hard-working labourer. The best diet is that which suffices our digestion and our habits. A mixture, in sufficient proportions, of glutinous substances (in the first rank of which we must place meat) and of saccharifiable bodies, forms the base of all normal food. But such a diet, serving equally to the nutriment of the animal, as of the parasites which prey upon it, requires the addition of ingredients capable of poisoning these infinitely small parasites, without producing derangement in the functions of the animal itself. These ingredients are called *seasonings* and *condiments.* Every condiment is a vermifuge or anthelmintic; it is a feeble poison, which can destroy only very small animals. I have invariably seen gastritis, diarrhœa, pains in the bowels, and a whole train of morbid symptoms, to be the inevitable consequence of an insipid, saccharine, and mucilaginous diet. This species of food is a slow poison: by dieting patients we merely substitute one disease for another. Our graziers are ignorant of the cause of that frightful mortality which ravages their cattle; yet it is easy to see that this calamity may be dated from the period when our economists advised the substitution of the grains from the distilleries, of beet-root, potatoe-peel, &c., in the place of hay. Hay has its condiment, or its anthelmintic, in the aromatic herbs which perfume it; the grains possess no condiment. Hence, those putrid or verminous fevers which so quickly carry off the milch-cows. Exercise after meals is a condiment of another kind. The sedentary or studious man digests badly; not that motion is necessary immediately after feeding: quite the contrary; repose is essential for the stomachic digestion to take place, that is to say, for the alimentary mass to be elaborated into chyme. But, as soon as the chyme passes into the duodenum, agitation becomes an auxiliary to nutrition, inasmuch as the contractions of the abdominal muscles force the bile to flow out in greater abundance, thus bringing about the transformation of the chyme into chyle, and aiding the process of the duodenal digestion. During the first hour, therefore, after meals, remain seated, and talk; then take sharp exercise for another hour, and you will thus in two different ways aid the two primary processes of digestion. Add to this, that the bitter matter of the bile is an excellent anthelmintic. Hence it is, that long-continued friction alone, over the region of the liver, by aiding the flow of the bile, sometimes suffices to free us from pains in the bowels. By a contrary reason, mental labour, after meals, is both painful and injurious to digestion. These two digestions, the cerebral and the stomachic, cannot go on together; the thought being elaborated merely as a product of nutrition, it is contradictory to admit that these two functions can be effected at the same period. The studious man is never more disposed to labour than when fasting; but hunger renders this disposition of

short duration; and then, the stomachic cavity being emptied of its condiments, which have all passed into the small intestines or the colon, the vermicular ascarides are driven upwards into the stomach, where, by their titillations, they give rise to *crudities of the stomach, cramp, sensations of hunger, &c.* The means which I have adopted to prevent these effects, is simply holding in the mouth a *cigarette* of camphor, contained in the tube of a quill, and aspiring its vapours during respiration, as also swallowing the saliva which is impregnated with it. The odour of the aspired camphor is introduced as well into the stomach, by ingurgitation and deglutition of the saliva, as into the respiratory organs. The smokers of tobacco, and I might even say of opium, defend themselves from the torments of hunger, by a similar proceeding; but their mind is less clear, by reason of narcotics not permitting, or but slightly allowing, of intellectual labour. When digestion is disturbed, perverted, suspended, or paralysed, we must evacuate the products as quickly as possible; nothing is more injurious, in our intestines, than that which is non-assimilable. Vomiting is painful, and has its ill-effects; evacuants have none, provided they do not exceed the dose tolerated by the economy. I generally employ for this purpose a few grains of socotorine aloes, taken in a little soup, or anything convenient. Among the most powerful condiments which the rich man possesses, we must rank alcoholic liquors, generous wines, spirits containing the aromatic principle of canella, orange-peel, angelica root, nutmeg, vanilla, orange-flower, &c.: anthelmintic elixirs which he makes use of after each meal, to protect his digestion, at the same time that they stimulate agreeably his exhausted palate. The poor man has nothing but a small glass of brandy, which he takes in the morning, fasting, and for which he is reproached, as for a depraved taste; during the remainder of the day, he procures, for the same purpose, a little tobacco, which he smokes or chews, and for this he is accused of uncleanliness; but these habits are, in reality, hygienic. Nutrition is the laboratory of life and of development. Hunger is a poison which corrodes and destroys. What, then, should be the diet of an invalid? The best medication is that which combats the cause of the evil, without deranging the sources of life, which seconds nutrition, and does not suspend it. If man requires for nutriment a mixture, in suitable proportions, of gluten and sugar, of what use can it be to administer simply water, holding in solution a bitter, and *non*-assimilable principle? You may by this kill the worm, or other parasite, but you will also famish the patient, and destroy him by inanition; and this the more quickly, as your ptisans shall contain less of the nutritive principle. The milk of the nurse is a sovereign remedy, and the best anthelmintic for the infant: it should never be deprived of it under any pretext, when there is no fear of infection. Nurses' milk is so good an anthelmintic, because it is, in general, the depositary of all the condiments digested by the female, for the milk seems to proceed directly from the stomachic digestion; if the nurse eat garlic, the milk immediately acquires an alliaceous odour. Sea-salt is an excellent vermifuge; witness its action on the leech, which it causes immediately to disgorge the blood which it may have swallowed. All domestic animals are fond of it. The poor man, who has so few condiments within his reach, seeks it with as great avidity as domestic animals; he falls ill when he is deprived of it. Why is it that sea-scurvy is cured so readily on land, when its ravages have not extended too far? Why, also, that scurvy, and some other maladies, which are contracted on land are cured by a long voyage at sea? The fact is, that both the one and the other are verminous diseases, and that there are some vermin belonging to salt water, and others peculiar to fresh water; that fresh water and pure air form an anthelmintic, in the first case, and salt water, or air impregnated with sea-salt, do the same, in their turn, in the second case. Aromatics, perfumes, and resinous elixirs, are vermifuges, under either circumstance.

RELAXATION AND SEPARATION OF THE PELVIC SYMPHYSES AND LIGAMENTS.

By CHARLES CLAY, Member of the Royal College of Physicians London, Graduate of Edinburgh, Author of "Peritoneal Sections,' and Lecturer on Medical Jurisprudence, &c., Manchester.

Question.—What evidence have we towards establishing the supposition that the pelvic symphyses and ligaments relax or separate during parturition, at the full period of utero-gestation?

This question has now been debated for a considerable time, and no little difference of opinion has been expressed upon the subject. It has been treated as an absurdity, laid down as impossible, allowed to happen occasionally, admitted as a fact, and considered both as a pathological and a natural circumstance. This subject was spoken of somewhat early in the history of obstetrical science, but the earliest writers of all said little, and thought less, about the osteological department: some are so perfectly silent about the pelvis, that it might seem not to have had an existence, so particularly did they exclude the consideration of it, and bend their attention to the description of the soft parts of the mother only. Thus Raymond, Rueff, Mayern, Burgeois, Culpeper, Pechey, and Dionis, speak only of the anatomy of the soft parts; whilst modern authors treat of the structure of the pelvis with great minutiæ, fearlessly asserting that a strict and comprehensive knowledge of it, is the *ne plus ultra* of obstretics, without which no person ought to practice that department. With respect to the existence of both relaxation and separation of the pelvic symphyses and ligaments, there cannot now be the least doubt that such has frequently been the case; there are many examples on record. A few selected from the mass of evidence will suffice for the purpose of illustration. Daventer, in his "Art of Midwifery," speaking of the pelvic symphyses, says: "Whence, hereafter it will appear, that for this reason one woman is more easily delivered than another; for the bones in one are firm and immovable, and resist relaxation altogether: in another, they give way, and yield to the force of the infant as it passes. These bones are fitted, and grow together with one another, being tied fast with ligaments; and thus, whilst they are not yet hardened into bones, they may be extended or relaxed by force, and disjoined from one another; *wherefore, their opinion is not to be rejected,* who testify that they have seen the ossa pubis a great way distant from one another, after frequent labours, though I think that seldom happens; nor is there any occasion for such separation, since it would be of little service, nor would it afford any advantage." From Smellie I select the following. Vol. 1st, p. 58. "Divers authors and practitioners in this art have alleged, that towards the latter end of gestation, when all the parts of the abdomen are strongly pressed by the increased uterus, an extraordinary *quantity of mucus is secreted,* not only by the glands of the os internum and vagina, but also by those belonging to the cartilages and ligaments that connect the bones of the pelvis; by which means, the ligaments and cartilages are softened and relaxed, and the bones are separated from one another in time of labour. But, from experience and observation, I may venture to assert, that this separation is by no means an usual symptom, though sometimes it may happen; in which case, the patient suffers great pain, and continues lame in those parts for a considerable time after delivery. In some women, indeed, a kind of obscure motion may be perceived. The junctures of the sacrum with the os ilium, as well as that of the ossa pubis, seem to yield a very little alternately, in order to accommodate themselves to the shape of the head, &c." Smellie, in the second volume of his work, gives two cases of separation of the bones of the pelvis. Many other authors of midwifery, as also of anatomy in general, speak most decidedly as to the facts of both relaxation and separation, some of them considering it as a natural, others as a pathological, circumstance. It will, however, be unnecessary to enter into the particular statements of each, on account of the space it might occupy; but I cannot pass over the evidence of some of our most modern and highly esteemed authorities on this question, without being more particular. Dr. Blundell acknowledges to having witnessed three or four cases of relaxation of the symphysis; and his statement goes a considerable way to prove it a natural, rather than a pathological, phenomenon; for, says he: "It may, for aught I know to the contrary, now and then occur independently of gestation; but in all the cases I have seen, this disease has been connected with pregnancy; and it is generally in the latter months of gestation that it manifests itself." This admission is an important one, as it would appear to have but little of the character of a *disease* about it. In my own practice, I have had two cases. Both felt no symptoms of uneasiness till within two days of confinement; then the parties were quite unable to walk, felt pain at the sacro-iliac and pubic symphyses, and a sense of motion at those junctures, feeling, as they themselves expressed it, as if they were falling to pieces. In one of them, on examination, a distinct motion was discovered, by the finger being applied over the symphysis pubis: both cases recovered entirely from the inconvenience within the month after confinement. Sir C. M. Clarke also mentions a case of relaxation of the sacro-iliac synchondrosis. In many of the mammiferous animals, *when delivery is about to take place,* a considerable relaxation of the pelvic junctures occurs; nay, in some instances, separation to a considerable extent. Mr. Mangles dissected a mole that had recently been expelling its young, and found the ossa innominata distinctly separated from each other, to the extent of three or four lines; and there is a well-known and extensively applied rule with those in the habit of assisting cows to bring forth their calves, namely, that there is a general relaxation of the ligaments and symphyses of the pelvis immediately preceding labour; and this is so notorious, that a cow-leech looks upon it as an absurdity to assist, until the animal is what he terms it "loosened in her bones," or as Blundell affirms it to be called by farmers, "sinking in the rump," which strictly means the sinking of the sacrum from the relaxation of the sacro-iliac symphyses. This circumstance has been found to exist in all the mammiferous tribes of animals to which any particular attention has been paid; and it is a most extraordinary circumstance, if what is allowed to be so extensively noticed in these tribes, and to be of such use in facilitating the efforts of labour, should be denied to the human being, who stands in much greater need of such assistance by the more complicated formation, and the more numerous difficulties, presented in the human pelvis. But the evidence already given in respect to the fact of the same provision existing in the human, as in other animals, is not without foundation, and, therefore, a few other authorities will not be amiss, by way of confirmation. Ruysch states that he has *frequently* observed it. Harvey speaks of it as a *common occurrence.* Frequent *post-mortem* examinations of females, immediately before and after parturition, have afforded examples of the fact, whilst similar opportunities on the bodies of females not pregnant, or not recently delivered, have failed in producing such appearances. In the "Medical Gazette," of July 28, 1843, is a remarkable paper on this subject, by the celebrated anatomist, Dr. Knox, which I hope to be excused for quoting in full, as its evidence is of so important a character on this question. It is in reply to the following query?

"*Query?*—Do the articulations of the female pelvis relax during, and a little before, delivery? To what extent does the relaxation take place? Is it a rare or a frequent occurrence? Is it a pathological or a healthy condition? To answer these questions, in as far as my own experience goes, I shall endeavour to relate to the best of my recollection, some of the principal facts bearing on them, in the order in which they presented themselves to me. During the summer sessions of 1825, 1826, and 1827, I delivered, in Surgeon's Square, three courses of lectures on Comparative Anatomy.

"The desire to preserve numerous fresh specimens of all the great classes, and principal genera, of animals, induced me to apply to the fishermen on our coasts, engaging them to send me any rare mollusca, fishes, seals, dolphins, &c., which they might take by nets, or otherwise. Now, under

hese circumstanees, a pregnant seal was brought ne. The animal had been shot with a single ball, killing not only the mother, but the fœtus. From the size of the young seal, and other circumstanees, it was evident that in a very few days the fœtus would have been born. I shall here abstain from mentioning any other circumstanees respecting the anatomy of the seal, and its fœtus, saving what is directly connected with the history of the pelvis—I mean of the pelvis of this pregnant seal. The fœtus, which lay in the uterus with all its natural connections, appeared to me of extraordinary dimensions, and I was curious to know how such a fœtus would pass the pelvis of the mother. The examination of this cavity displayed a singular and unexpected fact, and which was at the time quite new to me; the interpubic ligament, or ligamentous symphysis, was so elongated that the bones might be separated from each other, to the extent of nearly two inches. When I now examined attentively the form of the osseous pelvis, I could see very evidently that in the quadrilateral shaped pelvis, where the greatest diameter was the antero-posterior one, as in the quadruped mammal, and not the transverse one, as in woman, this temporary separation of the pubic bones of the pelvis, admitted of a great enlargement of all the diameters of the pelvis; whilst, in the transversely oval pelvis of woman, the artificial separation of the pubic bones merely, even to a considerable extent, say an inch, did but little increase any of the diameters of the brim and abdominal entrance to the true pelvis. As this was a matter which could be made the subject of comparative demonstration, several female pelves were divided at the pubes, as recommended by Sigault, when it became manifest to the class that, unless the pubic bones were separated forcibly from each other, for more than an inch and a quarter, nothing was gained in the diameters of the cavity, and that a more extended separation, so as to render the operation at all useful, in respect to its object, was absolutely impracticable on the living woman; since, on its being attempted, the sacro-iliae joints were heard to give way.

Having satisfied myself that the Sigaultian operation, on the transversely oval pelvis of woman, could lead to no real benefit, being only applicable to that form of pelvis found in the quadruped, and but rarely in woman, my attention was next directed to ascertain whether or not, in woman, the ligamentous symphysis of the pubis became relaxed during parturition?—whether or not this was frequent or rare?—whether or not it was accompanied by a corresponding relaxation of the ligamentous symphysis, it would be of little avail;—and lastly, whether such relaxations were to be viewed as pathological or natural? An opportunity soon occurred, after the dissection of the seal described above, to put some of these questions to the test of direct observation.

"A middle aged woman, who had died of flooding following delivery, was brought into the practical rooms. The pelvis was of full dimensions. On examining its articulations, they were found all relaxed; the bones could be made to slide over each other. The dissection was shewn to the class, and compared with that of the seal. The opinions, likewise, of several distinguished accoucheurs in town were asked; they all declared the relaxation to be the effect of one of two causes. It was either, said they, the result of putrefaction after death, or a diseased or pathological condition of the pelvis. On consulting the published works of Mr. Burns, of Glasgow, I found that he also maintained the doctrine, that when the relaxation of the articulations of the pelvis did take place during delivery, it was a pathological, and not a healthy, process.

"*Since* 1825, *I have examined the pelves of five women of different ages, who have died soon after delivery, and having found in all these a relaxation of the articulations of the pelvis, to a greater or less extent, but always remarkable, I feel disposed to think the process a regular or healthy one, and not pathological.*"

After the mass of evidence here produced, can the facts of relaxation and separation of the pelvic connections be doubted; and as all the evidence produced tends to prove that such phenomena are connected only with those *about to be*, or *recently* delivered, it is equally probable that it is a natural circumstance combined with parturition. Dr. Blundell states: "On the whole, my opinion with respect to relaxation, &c., of the ligaments of the pelvis is, that in many other genera of the mammalia, it occurs in a much higher degree than in women, but that even in them *some slight relaxation takes place.* Now this relaxation enables us to explain what we before stated as a fact, without entering into the reason for it, viz., that women are liable to marked relaxation of the joints before mentioned, solely, or generally, in connection with gestation. It also enables us to explain why the symphysis pubis is sometimes burst open, where the child has been unusually large." As I have already said, it appears strange that a law of nature, apparently so well confirmed in the mammalia, should not exist where the difficulties of parturition are more numerous and of a more serious character. At the time the Sigaultian operation was proposed as a substitute for the Cæsarian section, experiments were made, and arguments founded upon them, to prove that the ossa pubis might be separated to a considerable distance, yet no advantage was really gained in the pelvic diameters, so as in the least to facilitate parturition. The same arguments have been raised to prove that there is no necessity for relaxation of the symphysis of the pubes, because, though separated to some distance, no additional room was to be gained thereby, in the diameters of the pelvis. But these arguments are decidedly untenable in respect to the natural phenomena of pelvic relaxation, inasmuch *as to separate the pubes only*, whilst the sacro-iliac junctions and ligaments remain in a *rigid and unyielding* state, is only a partial view of the case, an error which nature in her wise operations never commits. Dr. Knox, though an advocate for the natural relaxation of the pelvic connections, falls into an error in making his experiments by dividing the symphysis pubis; "when it became manifest," says he, "that unless the pubic bones were separated from each other for *more than an inch and a quarter*, nothing was gained in the diameters of the cavity, and that a more extended separation, so as to render the operation at all useful in respect to its object, was absolutely impracticable on the living woman, since on its being attempted, the sacro-iliac joints were heard to give way." This is exactly the result I should have expected; so long as the relaxation or separation be confined to a part only, the object of facilitating parturition is defeated; but if it be general, affecting the whole pelvic connections at the same time, *even though it be to a trifling degree in each*, yet the advantages arising from it are much greater than generally imagined. I can readily admit that a very marked distinction exists between the human and other mammalia, as to the degree of relaxation required. In quadrupeds, the relaxation may be very extensive, nay, even separation to a considerable distance, without serious consequences. In the first place, a greater degree is required, on the ground that the size of the fœtus, when compared with the diameter of the pelvis, through which it has to pass, is much larger on the average, and requires much greater space for passing than the pelvis in an unyielding state could warrant. Secondly, the consequences of this relaxation are not serious, because the pelvis is not called upon to sustain so much of the weight of the body. Exactly the reverse takes place in the human being; the pelvis has to bear the pressure of the whole body, not only from above, but also from below; therefore, an extra degree of relaxation, or separation, would be attended with serious consequences. And again, the average size of the human fœtus, when compared with the diameters of the human pelvis, is found to approximate much more closely, therefore requiring a much less extent of relaxation to accomplish the same object; and that, in the human subject, the rigidity which time and age invariably add to the pelvic system, is fully compensated by the reduction in size of the offspring of those advanced in life; the greatest amount of relaxation being required in early life, when the average size of the fœtus is not only larger, but the pelvic connections in a state disposed to contribute their quota of advantage. The principal error of authors, on this subject, lies in mixing the pathological with the natural phenomena, and not making the necessary distinctions between the mammalian tribes in general, and the human being in particular; in the former, neither relaxation nor separation can be considered as pathological, considering the amount of evidence produced confirming it, the wide extent of its application, and the want of proof of any ill consequences arising from the circumstance. In the latter (the human being) a slight relaxation is not only a natural and a healthy phenomenon, but has been proved to exist beyond a doubt to a greater or less degree in all, where examinations have been made after death, and is known to be present in the living being also; that so far as the natural phenomenon is concerned, no ill consequences, beyond temporary inconvenience, arise from it. On the contrary, relaxation to a great extent, and separation, where the locomotive powers are interfered with, and pain accompanies it, must, without any doubt, be considered as pathological, and ought to be treated as such. After all, I consider extensive relaxation to be rare in the human being, and separation of the pelvic communications *still more so.* Nevertheless, I believe in all cases relaxation is most positively established, though it may in some be to a slight degree, and scarcely discernable in those of advanced years, to make up for which deficiency, as I have already stated, the average size of the fœtus is reduced. In the young, the relaxation no doubt is generally sufficiently extensive to ensure a safe and speedy delivery, without which it would be tedious if not extremely difficult.

PARISIAN INTELLIGENCE.

(FROM OUR OWN CORRESPONDENT.)

Paris, July 11, 1844.

On diseases of the Eye, by Professor Velpeau.—Before terminating what I have to say on cataract, I wish to draw your attention to the preparatory treatment—the position in which the patient ought to be placed during the operation—and also the consecutive treatment; as to the manual operation, I refer you to the treatises on operative surgery which contain all that is needful to be known on this subject; here the facts will be considered only in a clinical point of view.

1° *Preparatory treatment.* In all operations, certain preparations are requisite; but as regards cataract, opinions differ. Some surgeons prepare their patients eight, ten, and even fifteen days, administering depurative tisannes, purgatives, and applying topical remedies, as if they wished the patient to be ill ere he was operated on. Others operate immediately, sending the patient home directly after; Wenzel, Jun. acted thus, and a very curious fact of this description has been recorded. A distinguished surgeon, crossing the court of his hospital, perceived an individual affected with cataract; calling for an assistant, he requested an instrument to be brought, operated, and sent the patient into his wards. Finally, there are some practitioners who submit the person to the treatment employed, previous to performing an amputation. I do not think there is any great necessity to put the patient under a long preparatory treatment, as I never observed more consecutive accidents in persons who were operated on without any preparation than in those who had been the object of great care. What is important is to avoid falling into extremes, as they may be injurious. Thus, there is a contradiction in the conduct of those who recommend most strenuously a preparatory treatment; these practitioners administer purgatives, which, from the irritation they cause, indispose the patient; they are therefore obliged to defer operating until the different organs have regained their normal state. If, however, the patient is strong and plethoric, venesection may be employed advantageously. Therefore, you ought never to submit your patient to a long preparatory treatment; nor should you operate too soon, nor send the patient home immediately after the operation, when it is performed at the hospital or at your own dwelling. The rules I lay down here may appear to you in oppo-

sition to the line of conduct I adopt in the hospital; but, in a few words, I will prove to you that this is but apparent. It is true, I never operate on a patient immediately on his entry, but this is not because I wish to submit him to a preparatory treatment: not at all; but I do so for the following reason: It is a general remark, that many patients become unwell from the fact of their being in the hospital. If, therefore, I do not operate immediately, it is in order to allow them to get accustomed to the circumstances in which they are placed; for it is certain that, if they should become ill, it is better that this should take place before than after the operation. In my private practice, I do not consider these precautions needful; I therefore operate much sooner, and I never have remarked any serious consecutive accidents on that account. You must not, however, consider these precepts as rules by which you ought invariably to be guided, but employ such remedies as you may consider useful: for instance, baths, venesections, purgatives. Blisters have likewise been recommended previous to operating; Scarpa applied them on the arm; Professor Roux on the nape of the neck; some practitioners say this should be done twelve or fifteen days before, others on the eve only of the operation; finally, some say the day after it. Theoretically speaking, this mode of proceeding is logical; as, in producing an irritation in one part of the economy, it is prevented developing itself elsewhere; but in practice, how many times do we not remark that the irritation, though local, is felt in the whole system. The question is therefore still undecided; the more so, as very frequently accidents supervene, after the application of the blister.

2° *Position in which the patient ought to be placed during the operation.*—In my opinion, that generally adopted is not the most proper. A great many surgeons, for couching, make the patient sit down, being themselves seated on a chair somewhat higher, the foot placed on a stool, and the elbow on the knee. Dupuytren made the patient lie down for the operation of couching, and sit down, for that by extraction: I, on the contrary, have adopted a very different plan: thus, the individual for couching is seated before me and I operate standing; and for extraction, I make him lie down. My reasons for acting thus are the following: in couching, if you operate on a person in a recumbent position, you will in all probability experience more or less difficulty in depressing the crystalline lens; but, in the erect position, this does not exist, and the needle naturally descends on the slightest effort; on the other hand, in performing the operation for extraction on the patient sitting, there is a tendency to bring the instrument further forwards than necessary; besides which, should the posterior portion of the capsule be lacerated, there is greater danger of the eye emptying itself; all this may be avoided by making the patient lie down. These reasons are sufficient to explain the preference I give to the horizontal position for extraction, and to the erect for couching.

3° *Consecutive treatment.*—It differs according to the method adopted. After couching, a simple band is sufficient; but after extraction, this is no longer the case; the lids must be closed with care and very gently; and the eye must be kept motionless by means of some soft lint placed on it, over which a bandage, offering an opening inferiorly for the nose, is placed, and pinned to the patient's night cap; finally, the head must be kept quite straight and motionless. As to the other remedies, they vary according to the accidents which occur; in general, notwithstanding, when the patient is not too weak, I think it adviseable to draw blood from the arm, and do not hesitate to repeat the bleeding or apply leeches, should pain come on. Topical means ought never to be employed until the accidents appear.

Having thus ended all I intend saying about cataracts, in my next, I shall continue the description of inflammations of the eye, where I left off.

On the treatment of Pneumonia, by Professor Rostan.—*Local and General Bleeding.*—It would appear that not the least doubt could be entertained as to the efficacy of this method; notwithstanding, though the immense majority of practitioners are of that opinion, still there are some who, from clinical observation, have come to the conclusion that as many cases of pneumonia may be cured without, as with, blood-letting; therefore, it is not absolutely necessary. When the physiological school first sprung up, I myself more than once cured pneumonia, not only without drawing blood, but likewise by administering tonics, combined with anti-spasmodies. This result was in all probability owing to the peculiar conditions in which the patients were placed, a circumstance which you must never neglect; thus, in all these cases, they were persons already weakened by old age, and former diseases;* consequently, I should, by depletion, employ a mode of treatment which would certainly have hastened the fatal termination. In young and plethoric individuals, in my opinion, therefore, blood-letting constitutes, in the treatment of pneumonia, a remedy, I will not say the most useful, but certainly very needful. But in what circumstances, and to what extent, ought it to be employed? Blood-letting is so much the more efficacious as it is employed in an early stage, and on the appearance of the disease; in fact, it may be said, if it acts on the first day as sixteen, on the second it will only act as four, and on the third but as one. Hippocrates was aware of this; for he said, that in pneumonia blood ought never to be drawn after the eighth day. Now, however true the precept may be, as far as concerns the efficacy of the remedy, still it must not be rigorously followed, it being necessary to bleed sometimes after the eighth day. Again, in what manner ought we to bleed in pneumonia? In general, venesection ought to be preferred in deep-seated and extensive inflammations, whereas local bleeding may be employed in superficial, and slight ones, or where the patient offers a tendency to collapsus, or adynamia. It has been asserted, that the latter mode weakens the patient more, because the blood removed is arterial as well as venous. I do not think so. On the contrary, I consider the former as productive of this effect, with much more certainty, since, in a short time, a greater quantity of blood is taken away. You must likewise pay attention to the age and the strength of the patient: for instance, in children, phlebotomy cannot be performed, and must be replaced by local bleedings. Another question has often been asked, especially of late; viz., ought, in every case, a given quantity of blood to be removed, lb,ij., lb,iij., or lb,iv.? I do not think it possible; all that can be established is, that the quantity of blood must vary according to the age and strength of the patient. You may likewise decide from the quality and the aspect of the blood, whether venesection ought to be repeated. When the cruor is considerable, and covered with a buffy coat of a certain thickness, and the patient strong, it ought to be repeated. But ought venesection to be renewed so long as the inflammatory coat is present on the cruor? Certainly not. Because, in so doing, you run the risk of destroying your patient; this sign is important only when united with others. Finally, at what moment ought blood-letting to be considered as injurious? There is a period of the disease, in which opinions differ as to the utility of opening the vein; it is at this period that venesection may save or kill. Unfortunately, it is impossible to describe it exactly, notwithstanding its importance. All depends upon the sagacity of the physician—on a certain intuitive penetration, which enables him to decide. It often happens, in pneumonia, that after bleeding five or six times, the local symptoms persist, in all their primitive energy; the blood continues to present the buffy coat, &c. If you do not bleed anew, the existing hepatization may increase; if, on the contrary, you open the vein, adynamia may be the result. The case I allow is difficult; and it is in such, that the talent of the physician declares itself. On another occasion, you may be called to a patient presenting the following symptoms: stupid look, slight typhoid aspect, debility, dorsal decubitus, pulse small and contracted; and this, complicated with other signs of phlegmasia of the parenchyma pulmonalis. If, struck by the appearance of adynamia, you prescribe tonics and revulsives, death will be immediately the result; and, at the autopsy, you will find the lung hepatized. Had you bled, you would have saved your patient, for this adynamia was only apparent, and was owing to a concentration of the vital forces. But how can this state be ascertained? If the patient is young, of a strong constitution, general health good, if the disease has just begun, and the treatment hitherto employed not been too debilitating, adynamia does not exist, and venesection ought to be performed. If, on the contrary, the person is weakened by disease, or previous treatment, bleeding is counter-indicated.

But it may happen that you can no longer bleed, although the disease persists; in such cases other remedies must be had recourse to.—*Antimonium tartarizatum.*—Laënnec was the first who employed this substance in France, in 1819 or 1820, on the Rasorian principle. These two distinguished practitioners (Rasori and Laënnec) administered it after one or two bleedings; and I think, notwithstanding the contrary opinion of many eminent physicians, who advise giving it alone, that it ought only to be employed when venesection is counter-indicated. I prescribe it in general in the dose of grs. viij. in ʒv. of liquid, adding gr. i, or gr. ij., of opium. This substance acts in two ways; either it is supported, or it gives rise to abundant vomitings. It cures in both cases; but, contrary to the opinion of Professor Chomel, I think it is more efficacious according as the *tolerance* takes place sooner. This was also the opinion expressed by Rasori and Laënnec.—*White oxide of antimony.* When the disease is complicated with gastro-enteritis, you may have recourse to this substance, instead of the preceding.—*Kermes mineralis* has likewise been recommended, but I put little faith in its efficacy.—*Purgatives* have been advocated by Stoll, not only in bilious, but likewise in inflammatory pneumonia; and among the number there is one—(calomel)—which appears to possess, in uncomplicated pneumonia, a sort of specific action. It must be confessed, however, that Stoll attributed to purgatives a much more powerful action than they present.—*Mask* of no use whatever.—*Tonics, stimulants.* If, after having been bled, the patient offer adynamic symptoms, such as: skin cold, respiration difficult, &c., cinchona, wine, &c., may be given; and it is in these cases that I have often seen them beneficial.—*Revulsives.* Contrary to the opinion of Messrs. Louis and Grisolles, I consider them useful, but they ought not to be applied until the inflammatory symptoms have somewhat subsided. As to the part to which they ought to be applied, it should be as near as possible to the diseased organ, that is to say on the walls of the chest.

On Phthisis.—Dr. Amedée Latour, in a pamphlet, the second edition of which has just appeared, (*Traitement preservatif et curatif de la phthisie pulmonaire.*) recommends a new mode of treatment for this disease, which yearly makes so many victims; as may be seen in the interesting article published by Dr. C. Calvert Holland, on "The physical condition of the Grinders in Sheffield," and on which Dr. C. J. B. Williams F.R.S., in his lectures, thus expresses himself: "From one-fifth to one-sixth or one-seventh of the diseases of this country (England), as given in the tables of mortality, are those that arise from phthisis." (Vide Medical Times, Vol. 9, p. 86.) This treatment, the efficacy of which is exemplified by the numerous observations quoted, is deserving of the attention of the profession, inasmuch as the remedy therein advocated is from its price and abundance within reach of the poorest individual. The author, after indicating—1° the nature of the disease, which, in his opinion, is dependent on a general *hyposthenisating* cause, producing perhaps an alteration in the blood, supposed by some authors to be a diminution of the globules; and on a local cause, such as inflammation, irritation, &c.; 2° that it is, because sufficient attention has not been paid to these two causes, that the treatment of this disease is so vague and uncertain.—and 3° pointing out the most appropriate hygienic treatment: proceeds to the object he had in view in undertaking the work, viz: the best means to be adopted in order to obtain the cure.

* Might not the Professor have added *by previous bleeding?*

The remedies are considered under two heads : as they act on the general, or on the local causes ; and it is universally admitted that the former are the most important. Deploring the inefficacy of those usually prescribed, he was led by a fortuitous circumstance to employ the chloride of sodium (*sodæ murias*) ; and as to the mode of administering this substance, he thus expresses himself: "after ascertaining the state of the intestinal canal, and being convinced that no inflammation exists, it must be given in the dose of ʒss every morning in a cup of broth ; every fourth day, gr. xv must be added, until the patient takes ʒiss. or ʒij, beyond which it would be imprudent to go. It may likewise be given in bread, in the proportions first indicated, the quantity of dough being always about ℥iss. Diarrhœa is not a counter-indication, for often it disappears under the influence of the remedy, and even when produced by it, does not persist, although the patient continues taking the chloride. Its first effect is to create considerable thirst which ought to be assuaged, but not with emollient or pectoral tisanes, because they weaken the digestive organs; instead of them, the following decoction may be given : ℞. radic. gentian ʒij., cortic. fructi aurant. ʒj., aquæ puræ lbij. fiat decoctum, et colaturæ adde syrup. gummi arab. ʒij. capiat æger. cyath. parv. sœpe in diem. The earlier the chloride is employed, the greater the chances of success ; consequently, it is highly necessary to examine attentively patients who present the least predisposition to phthisis, in order to combat it in an early stage." "The first sign of returning health is, increased appetite, and as the strength comes back, the nocturnal perspirations decrease and cease entirely ; to obtain this, the chloride must be given for 2 or 2½ months, after which the dose must be gradually decreased, so as not to cease it before 3 or 3½ months. The diet ought to consist of grilled or roasted mutton or beef, good broth, the leaves of the *sisymbrium nasturtium*, good wine mixed with an infusion of cinchona (℞ pulv. cinchon. oblongifol. ℥ss, aquæ bullient. lbij, post 12^mas^ horas, cola.)" Against the local symptoms :—*pain*—opiates and pectoral tisannes ought not to be ordered ; they may be replaced advantageously by the following preparation: boil a sufficient quantity of carrots to make a thick soup; when mashed, add some good milk, sweeten, and aromatise with lemon peel ; the patient taking as much and as often as he pleases.—*Dyspnœa*—smoking the leaves of *datura stramonium*.—*Hœmoptysis*-℞ tannin. gr. ss, pulv. gum. arab. gr. ij, syrup. simpl. q. s., M. fiat pilula 3^tia^ quâque horâ sumendâ. In general, 8 pills suffice, and in order to avoid the constipation they produce, an enema must be given every morning.—*Diarrhœa*—℞ album. ovi No. vj. aquæ puræ lbij, misce et colaturæ adde syrup. simpl. ʒiij, aq. distill. flor. aurant. q. s. Three or four times this quantity to be taken daily ; at the same time, the following enema must be given: ℞ albumin. ovi No 1, aquæ puræ ℥viij, ter in die. As to cauteries, blisters, &c., they are useless, and asses' milk is in general too difficult of digestion. Finally, the author justly remarks that practitioners, who are not familiar with stethoscopic phenomena, ought never to neglect auscultating a healthy lung, and comparing the sounds obtained with those presented by the diseased one, as they will thus be enabled to form a far more certain diagnosis.

Academy of Sciences ; Sitting of the 8th July.—Baron Ch. Dupin in the chair.—Professor Dumas presented the five following memoirs:—

On the Resin Isica, by M. F. Scribe.—This resin, in the Museum of the Garden of Plants, is known under the name of storax of cayenne, and was placed by M. Brogniord among the resinous products of the genus isica, family of the burseraceæ, so common in Guiana. It exists under the form of small opaque lumps, of a yellowish-white colour, containing small bits of bark; of a mild and agreeable odour, which is increased when heated or pulverized; easily broken ; almost insipid ; not volatile; requires for dissolving, 55 times its weight of cold alcohol ; 15 times its weight of boiling alcohol ; 3½ times of essence of turpentine. When analysed, presents three peculiar resins : two—bréane and isicane—are crystallizable: the third, colophoue, non-crystallizable, similar to colophony—whence its name. *Breane* when purified, by being dissolved in boiling alcohol, allowed to crystallize, and dried in vacuo at 280°, gave, by four different analyses—

Carbon.....	83·85	83·86	83·83	84·12
Hydrogen. ..	11·65	11·86	11·91	11·87
Oxygen	4·50	4·26	4·26	4·01
	100·00	100·00	100·00	100·00

Whence the formula: C^{80} H^{64} + 3 H O. This substance is of a pearly white aspect; insipid; crystallizes easily, in small needle-like crystals; non-phosphorescent ; neutral ; burns with a fuliginous flame; insoluble in water and alcalis; almost insoluble in alcohol, which dissolves only 100th part of its weight ; ether dissolves 23-100ths of its weight; liquified at 378½° F., on cooling, it becomes viscous, and is perfectly solid at 258° F., and then resembles amber; it is also remarkable for its similarity to cholesterine. *Isicane*—three analyses gave:

Carbon	82·11	82·06	82·86
Hydrogen....	11·64	11·78	11·50
Oxygen.....	6·25	6·16	6·64
	100·00	100·00	100·00

Whence the formula: C^{160} H^{137} O^{9} which may be decomposed into—C^{80} H^{64} 3 H O + C^{80} H^{64} 6 H O. It is similar to the substance obtained, by Messrs. Dumas and Peligot, from essence of turpentine mixed with dilute nitric acid. Cold alcohol dissolves 3-100th parts of its weight. M. Boussingault extracted, in 1835, from the wax obtained from the palm-tree (cyroxylon), a similar substance, and which, on analysis, was found to be composed of:—

Carbon	81·81	82·54 .. 82·11
Hydrogen....	11·50	11·49
Oxygen.....	6·69	5·97
	100·00	100·00

Colophony of the Resin Isica: amorphous ; yellow; fusible under 212° F.; more soluble in alcohol and ether than the preceding ; composed of carbon 77·84, hydrogen 10·69, oxygen 11·47 ; whence the formula: C^{40} H^{30} O^{4} or C^{10} H^{30} O^{5}.

On a New Method of Analyzing Blood, and on the Chemical Composition of the Globules of Blood, by M. L. Figuier.—Berzelius showed that, on mixing a neutral salt with blood from which the fibrin has been removed, the greater part of the globules remain on the filter; whereas, if the salt is not added, they pass through. By numerous experiments, the author found that, by mixing two parts of a solution of sulphate of soda, marking 16° or 18° at the areometer of Baumé, with one of blood deprived of its fibrin, all the globules remain on the filter. By this method, the weight of the fibrine may be ascertained when removed; that of the globules, by collecting them on the filter, by means of the solution of sulphate of soda; that of the albumen, by coagulating the filtered liquor by heat; and finally, the proportion of water is ascertained by evaporating a given quantity of the filtered liquid.

On Diabetes Mellitus, by Drs. Mialhe and Contour.—The authors gave the details of a case, in which the urine contained ℥iss of sugar to lbij of urine. The treatment employed was: a nourishing animal diet, daily ; magnesia, gr. xv.; bicarbonate of soda, ʒj: this last, in eight days, was increased gradually to ʒiss, ʒij, ʒiiss, ʒiij ; vapour baths.

Researches on Creosote, by M. Deville.—The author concludes:—that the hydruret of guaiacum and creosote are analogous, offering the same chemical and physical characters; so much so, that the former, C^{28} H^{16} O^{1} may be considered as an oxide of the latter, C^{28} H^{16} O^{2} + 2 vol. of vapour; that the former imparts a brown tint to a solution of a salt of iron, the latter a blue; that brome forms with creosote a crystallizable acid, half of the hydrogen of the latter being replaced by an equal quantity of brome ; that both, with sulphuric acid and chromate of potass, form a salt of chrome analagous to tartro-chromic acid ; that perfectly pure creosote, exposed to the air, becomes coloured.

Researches on the Gases that Salt Water Dissolves during the Day, and under the influence of Seasons, by Professor Morren, Dean of the Faculty of Sciences, Rennes. From his experiments, M. Morren concludes:—that during winter and spring, salt water absorbs less atmospheric air than fresh water ; that, in general, fresh water dissolves 32 per cent. of oxygen, and from 2 to 4 per cent. of carbonic acid: salt water, under similar circumstances, 33 per cent. of oxygen, and from 9 to 10 per cent. of carbonic acid ; that salt water, on a bright sun-shiny day, contains carbonic acid, oxygen, and azote, whose proportions vary ; that when the weather has been fine for some time, the quantity of oxygen absorbed is greater ; that as oxygen increases, carbonic acid decreases in an equal ratio ; that the quantity of oxygen absorbed varies from 31 to 39 per cent. ; that on the small pools formed at low water, the quantity of oxygen varies much more ; it may be estimated at from 1¼ cubic inches to 4½ cubic inches ; that when salt water contains a great deal of oxygen, it gives it off to the atmosphere.

Academy of Medicine.—Sitting of the 9th July.—Baron P. Dubois in the chair. After the reading of the proceedings of the former sitting, M. Bally requested that M. Landouzy, who had an interesting observation to communicate, might be heard (accorded).—*On a case of acute glanders, produced by a wound*, by M. Landouzy, corresponding member of the Academy. A farmer perceived, a fortnight after purchasing a horse, (July 1843), that the animal was affected with glanders, and that an ass in the same stable had caught the disease. Desirous of saving the beast if possible, he himself administered the remedies prescribed by the veterinary surgeon ; but, to do this, he was obliged to force open the horse's mouth, by means of a bit of rope; one day the rope was broken by a sudden movement made by the animal, and one of its teeth struck its master on his cheek, inflicting a slight wound. Unconscious of the danger to which this wound exposed him, he merely washed it, and then went to his work as usual ; but two days after, (20th Dec.) all the symptoms of acute glanders became manifest: pustular eruption ; abundant secretion; dyspnœa ; matity of the lungs on percussion ; diminution of the respiratory murmur ; abscesses, &c., and, likewise, one which has not yet been pointed out—opacity of the cornea. Death took place on the 2nd of January.—Section. —Miliary eruption on the thorax and abdomen, and on the mucous membrane of the bronchi ; lungs full of small abscesses; liver and spleen larger than usual ; miliary eruption above and below the cœcum, and, in this intestine, 7 ulcerations which had destroyed the mucous and muscular membranes, as if they had been removed by a punch: the serous or peritoneal coat forming the bottom of the ulcer. In order to ascertain the precise nature of the disease, a healthy ass was inoculated two days before the death of the patient ; the result was a case of acute glanders, and the animal died. To resume : this case is interesting, from the fact of the inoculation of glanders by a wound, and from the presence, among the symptoms, of opacity of the cornea, and among the pathological characters, of ulcerations in the cœcum.—Dr. Nacquart, while admitting that the case was highly interesting, regretted that the actual cautery was not employed, and thinks that the Academy would perform an act of great utility, in propagating its use.—Dr. Landouzy said that cauterization was performed by means of the *perchloruretum antimonii ;* unfortunately, as is often the custom in the country, the medical man was called in too late.—M. Barthelemy remarked that, although the horse was affected with chronic glanders, still he communicated the disease in the acute form, which is a proof that the distinction made of late between the two, is incorrect.—Dr. Londe is astonished that Dr. Nacquart should recommend cauterizations at all periods of the disease, it being generally admitted that they are useful only immediately after the accident.—Dr. Nacquart in reply said, that as it was impossible to indicate the precise duration of the period of incubation, he thinks it ought always to be performed.

Dr. Martin Solon read a report, in reply to a letter from the Ministre du Commerce, concerning the request made by Dr. Hillairet, to be sent offici-

ally to study *febris intermittens* in the department of the *Charente-inferieure.* The conclusions, that the mission is neither useful nor opportune, after a few remarks from MM. Dubois d'Amiens, Rochoux and Dupuy, were adopted.

On uterine polypus. Dr. Hullin of Mortagne, related the case of a lady affected with an enormous polypus, which had existed five years, and which he removed piece-meal by means of ligatures. The patient recovered.

Extirpation of the spleen, by Dr. Berthet of Gray. A man, in a quarrel, was wounded in the left hypochondrium; eight days after, Dr. B., when called in, recognized a large tumour formed by the spleen, which was gangrenous: he removed it, and by an appropriate treatment, cured his patient, who lived 13½ years after the accident. Digestion took place as usual, and the individual enjoyed good health,—a fact which seems to indicate that the spleen is not an organ essential to prolong life. The man ultimately died of pneumonia; at the autopsy, the remains of the spleen were found to be no larger than a filbert, and were adherent to the stomach.

On vesico-vaginal fistula, by the same. The method adopted by the author, consists, after preparing the patient, in insufflating the bladder during the operation, so as to cause the edges of the fistula to become prominent in the vagina, after which, by means of the actual cautery, he refreshes the opening, and subsequently employs nitrate of silver instead of the actual cautery. Cylinders of cotton must be placed in the vagina, and the position of the patient must be such as to prevent the urine reaching the edges of the wound. The diet, during the whole time, must consist of dry toast, stale bread, roast or boiled meat in small quantities; and as to liquids, they must be taken by teaspoonsful at a time, and at very long intervals. Out of four cases he has succeeded in curing three. The same practitioner read, likewise, a case of cancer of the neck of the uterus.

On diabetes mellitus. Case read by M. Mialhe, (V. sitting of the Academy of Sciences).

On fracture of the neck of the femur, with penetration of the fragments into the spongy portion of the trochanter major. Dr. Robert, surgeon of Beaujon Hospital, read the first part of a memoir on this subject.

Professor Gerdy related a case of retraction of the palmar aponeurosis cured by its division; and another who had been operated on three times for cancer, and who, after death, presented a carcinomatous tumour of the right humerus, and two on the sternum, the one subcutaneous, the other internal: to this last the lungs adhered.

GARLAND DE BEAUMONT, D.M.P, B.L., & S., &c.
Honorary Physician to the Spanish Embassy.

SOME OF THE PRINCIPAL CONCLUSIONS ARRIVED AT CONCERNING THE THYMUS AND THYROID GLANDS.

(FROM A REJECTED ESSAY ON THE THYMUS.)

1. That the thymus and the thyroid gland are each nothing more than the *central capillary nucleus* of an apparatus of blood-vessels.

2. That the *thymic apparatus* consists of, firstly, the two thymic arteries; secondly, the thymic capillaries, or the thymus itself; and thirdly, the two thymic veins; and that it is for the purpose of diverting two small streams of blood into the great descending current, (that is, the current which descends to the heart by the superior cava) in a direction *opposed* to its course, and thereby to *retard* the descending current.

3. That the *thyroideal apparatus* consists of, firstly, the four thyroideal arteries; secondly, the thyroideal capillaries, or the thyroid gland itself; and, thirdly, the four thyroideal veins; and that it is for the purpose of diverting four very strong streams of blood into the great descending current, in a direction *favourable* to its course, and thereby to *accelerate* it.

4. That the thymic apparatus, by retarding during infancy the descent of the blood to the heart by the superior cava, also retards the motion of the blood through the brain and spinal cord, and thus keeps the cerebro-spinal functions inactive.* An inactive condition of the cerebro-spinal functions is manifested by *sleep.*

5. That the thyroideal apparatus, by accelerating after infancy the descent of the blood to the heart by the superior cava, also accelerates the motion of the blood through the brain and spinal cord, and thus increases the activity of the cerebro-spinal functions. An active condition of the cerebro-spinal functions is manifested by liveliness and inclination for muscular exertion, or playfulness.

6. That the thymic and thyroideal apparatus are precisely the reverse of each other *anatomically* (if they were not they would not be so *physiologically*); thus, the thymic apparatus is temporary, and the thyroideal, permanent; the thymic apparatus rapidly diminishes in size and disappears after infancy; and the thyroideal rapidly increases and attains its full development. The thymic is larger in animals than in the human subject; the thyroideal is larger in the human subject than in animals. The thymic consists of small vessels, (arteries, capillaries, and veins)—and the thyroideal of large vessels, (arteries, capillaries, and veins.) In the thymic apparatus, the impetus of blood is not great; in the thyroideal it is very great. The thymic currents join the great descending current in a direction opposed to its course; the thyroideal currents join it in a direction favourable to its course.† In short, just as *to retard* and *to accelerate* are diametrically the reverse of each other, (like plus and minus—attraction and repulsion—east and west—north and south—nadir and zenith, &c.) so are the *thymic* and *thyroideal* apparatus diametrically the reverse of each other.

7. That the thymic and thyroideal *cells* are merely *intervascular spaces* which the blood-vessels cannot occupy; and, as there are no other vessels to occupy them,—no air vessels, as in the lungs—no bile vessels, as in the liver—no urine vessels, as in the kidneys, nature lines them with a delicate membrane, which fills them by secreting a serous fluid.

This theory of the uses of the *thymic and thyroideal apparatus*,—that they are the simple instruments by which Nature *regulates* the rapidity of the motion of the blood through the brain and spinal cord,—first, keeping it slow, and then causing it to become rapid—retarding it during infancy, and accelerating it after infancy,—is, at least, plain and intelligible; and the writer has yet to learn the fact concerning either of these apparatus that is opposed to it, or that cannot be explained by it. J. J.

July 12th, 1844.

THE PHYSIOLOGY OF MATERIA MEDICA.

AS ESTABLISHED BY THE LATEST RESEARCHES IN ORGANIC CHEMISTRY, PHYSIOLOGY, PATHOLOGY, &c.

By the celebrated Professor T. F. SOBERNHEIM.

Translated for the 'Medical Times,' by SIGISMUND SUTRO, M.D.

(Continued from page 243.)

THE experiments made by Kremer, Brodie, Bresehet, Tiedemann and Gmelin, Prevost and Dumas, Peipers, T. Müller, and Valentin, as regards the influence of the nervous system on the organic secretions and exeretions, clearly demonstrate that the obstructions caused by lesion, or removal, of different nerves, particularly the stomachic portion of the vagus and the renal nerves, occasion great disturbances in the *plastic* and *metabolic* phenomena of the respective organs; but still it does not follow, that the nervous influence governs all organic actions, as was supposed previous to any true idea being entertained of the life of a cell, devoid of vessels and nerves. Thus, poisons, after the resection of the stomachic nerves, are conducted through the capillary vessels into the circulatory current, producing their usual effects. Beverages are likewise absorbed. The secretion of the kidneys is not even arrested, after cutting through all the nerves connected with these organs. Though T. Müller and Peipers could perceive no urinary secretion in their experiments on dogs, after destroying the renal nerves (by applying tight ligatures round all the renal nerves, with the exception of the ureter), Valentin did not obtain the same result from similar experiments. But, as regards the peculiar change of the urinary excretion in one of the above mentioned experiments, apparently produced by the removal of the nervous influence on the renal vessels—I mean, the discovery of hippuric acid—it is to be observed, that, in this case, (with a sheep) this acid was not a morbid product, but, on the contrary, perfectly normal; for it is found in the urine of all herbivorous animals, taking the place of the uric acid found in the carnivorous animals. At the same time, it can be easily perceived, by the actual knowledge of the organization, that, in all these experiments, the lesion of the renal artery, subjected to the compression of a ligature, and the disturbance of the circulation caused thereby, acted the principal part, instead of the removed or destroyed innervation. But if, to prove the specific influence of the nerves on the organic secretions and exeretions, we allege the change in the secretions during the cold stage of fever, we may answer, that the indisputable primary alteration of the blood-cells may be the chief cause; for, in inflammatory diseases, several metamorphoses of the same kind are found in the secretory and excretory products, in consequence of the immediate affection of the blood-cells. The cold stage of fever is not produced through alienated nervous influence, but merely felt and brought to objective perception through it; whilst it is occasioned by the alienation of the blood-cells themselves, in consequence of material irritation. The affection of the blood-cells is shewn in the specific process of shivering and of cramp; the violent reaction produces the contrary effects, namely: heat, turgor, and removal of the cramp. As regards the determining influence of mental effects, or ideas, on the increase of certain secretions, as the bile, saliva, semen, &c.: we agree with Carus, that the saliva, for instance, is not secreted in greater quantity through mental influence, but that the saliva, already accumulated in the salivary ducts, is poured out; so, also, with the bile accumulated in the gall-bladder. Nerves are organs which concentrate the different and specific secretions into the requisite unity for the vital process; they are the bonds of connection to the whole organism, associating divided secretory products to a general purpose; and, on the other hand, producing objectivity of sentiments, and calling into action, in a great measure, the organic movements of the secretory organs. The nerve is, to the blood, as form is to matter; as, without a binding and cohesive form, the rich globules would fall into an aggregate of useless individualities, so it happens if the blood and the secretions, mediated by it, are no longer kept in unison by the nervous system, and the union of the vital process is disturbed. Now, we must consider the physiological relation of the sympathetic nerve to the nerves of the cerebro-spinal axis. Bichat was the first to introduce into physiology the system of serous and exhalent vessels, and to represent them as a system perfectly independant of the central organ of the circulation, provided with a peculiar vital power, and which, though undiscoverable to the exploring eye of the anatomist, according to him, mediated the most important physiological processes, such as the secretions, organic development, the whole change of matter, &c.; but all this was proved to be erroneous when, by means of the microscope, the more minute structure of the parts was ascertained; and when it was shewn, that the circulatory apparatus forms a whole, closed on every side, and that the ultimate ramifications of the

* All the blood from the *spinal cord*, as well as from the *brain*, (which are both *one organ*,) returns to the heart by the *superior* cava.

† The reader must bear in mind, that the *right* or great inferior thyroideal vein, (often there is no left,) joins the descending current at the angle of junction of the two subclavian veins; and also that the two thymic veins join it, as near as may be, opposite the inferior thyroideal vein, or veins.

arteries, in no organ, enter the parenchyma in an *immediate* manner; that there are no free mouths of vessels; that those minute exhalent and serous vessels are nowhere to be found; on the contrary, that the transition of the arteries and lymphatic vessels into the veins is mediated by a series of arterial and lymphatic capillary vessels. The result of these experiments and researches is:—that the *sympatheticus* is to be considered as a cerebro-spinal nerve; that its fibres are not anatomically different from those of the cerebro-spinal nerves, and that (in their motor, as well as their sensitive, fibres) they arise, like all other nerves, from the nervous central organ; that the sympathetieus possesses no motor, nor sensitive, nerves of a peculiar kind; that all organs, supplied by it, are put into motion only through cerebro-spinal nerves, as the heart through the *accessorius*, and the three upper cervical nerves; the pharynx and the upper part of the œsophagus, also through the *accessorius*, and the three or four upper cervical nerves; the lower part of the œsophagus, through the *accessorius*, and the middle cervical nerves; the thoracic part of the œsophagus, through the fourth and fifth cervical nerves; the stomach, through the fourth, fifth, sixth, and seventh cervical nerves; the intestinal canal, through the *nervus trigeminus accessorius*, and the dorsal and lumbar nerves of the spinal marrow; the ureters, through the lumbar nerves of the spinal marrow; the bladder, through the middle and lower lumbar nerves of the spinal marrow. Thus, the above-named cerebro-spinal nerves are to be considered as the motor roots of the above parts. By cutting through the connecting branches of the sympatheticus, and the cerebro-spinal nerves, the motor effect of all the nervous roots ceases. In the same manner, the sensitive nervous roots of the heart, pharynx, œsophagus, stomach, alimentary canal, bladder, &c., will be found in the cerebro-spinal system. The sympathetic nerve is, then, distinguished from all other nerves, not from its difference of functions, but from its size, inasmuch as its so-called trunk arises by several roots at very distant points of the nervous centre; and, furthermore, that it represents a chain of cerebro-spinal nerves, the rings of which form ganglia. As regards these ganglia of the sympathetic nerve, they are only distinguished from those of other cerebro-spinal nerves, inasmuch as their nervous globules lie, more or less, between, and near the plexuses of the primitive nervous fibres: a cellular sheath surrounds the globules of the ganglia. The fibres arising from them, which were discovered by Remak, and which J. Müller considered as the proper, organic, nervous fibres, Valentin regards only as cellular processes (*apophyses?*).

(To be continued.)

DEATH FROM ABUSE OF ARDENT SPIRITS.—Dr. Nicol details, in the *London and Edinburgh Medical Journal*, the particulars of the *post-mortem* appearances presented by the body of a young man, who was found dead after drinking freely of whiskey. The principal morbid phenomena were found in the alimentary canal; on opening the stomach, an evident odour of ardent spirits was emitted. The whole of the mucous membrane, from about one half up the œsophagus, along the whole extent of the stomach, and for about eighteen inches down the intestines, was highly injected; the vascularity of the corrugated part of the stomach was of a deep crimson colour through its whole extent. The œsophagus and intestines presented a similar appearance, but the colour was less intense, gradually fading until it merged into the normal straw-colour of the healthy structure. The uncorrugated plane, immediately preceding or adjoining the pyloric orifice, was highly vascular, of a bright scarlet or vermillion colour, evincing arterial injection, while the rest seemed decidedly venous. There were several large patches of viscid mucus adherent to the more depending parts of the stomach, which were at first supposed to be coagulable lymph, but there was not any erosion, extravasation, or sanguineous stain in any part of the exposed surfaces. The brain was apoplectic. The fluids contained in the alimentary canal were analysed, but no trace of poisoning could be discovered.

WOUND OF THE ABDOMEN; DELIRIUM TREMENS.—Mr. Tennent narrates, in the *London and Edinburgh Medical Journal*, a case of penetrating wound of the abdomen inflicted on a drunkard, who was going on well for a few days, when delirium tremens set in, requiring the free exhibition of opium and ammonia. The case ultimately did well.

HERNIA CEREBRI.—The following causes have been alleged as possibly productive of hernia cerebri:—Firstly, the normal movement of the brain, from the action of the heart and lungs in their unexcited state; secondly, the same movement increased by local congestion, inflammation, and general inflammatory fever; and thirdly, disorganization of the brain, and fluids, the products of inflammation.

SEASONING.—Dr. Armstrong says the influence of warm climates is apparent after a few years' residence within the tropics. Europeans lose their sanguineous complexions, and acquire the power of resisting the heat better than the newcomer. This power of accommodation to circumstances arises from a corresponding change in the functions of life, and which is usually attributed to the individual having undergone the process of seasoning.

ICTHYOSIS INTRA-UTERINA.—Dr. Simpson narrates two cases of this rare and curious disease, in the last number of the *London and Edinburgh Medical Journal*. The first of these cases was communicated to him by Professor Vrolik, of Amsterdam; the child was a male, born in the eighth month. The parents were healthy. The child's skin, fissured in different parts, was hard and generally thickened; it was of a yellow colour, and covered with the epidermis; in the fissures it was softer, and somewhat of a bloody appearance. The sutures of the head were very open, the anterior fontanelle very large; the scalp was intersected with numerous fissures; the ears were concealed by the skin, and the eyeballs by an ectropic condition of the conjunctiva; the nose, which was large and flattened, was only shewn to be such by the two nostrils. The mouth was largely opened, forming an ellipsis with the returned anterior surface of the lips, and surrounding the alveolar parts of the two jaws and the tongue, which was much thickened; and there were fissures at each angle of the lips. There were not any testes in the scrotum, which, with the penis, was of a red colour, and appeared as if the chorion and epidermis were retracted from them; no perinæum was to be seen, and the opening of the anus was on the same level as the nates. By a superficial examination of the fissures, it was clear that some were recent and unhealed; others were in the way of being cured; some were covered by a red cicatrix, and others were quite like the unfissured parts of the skin. Dr. Vrolik, sen., in whose practice the case occurred, explains the occurrence of this disease nearly in the same way that Dr. Simpson does,—namely, that the cutaneous fissures are merely a secondary and mechanical result, and that the integumentary parts, not possessing a proper degree of expansibility, and not increasing with the increasing dimensions of the growing fœtus, at last split and fissure under the stretching from within to which they are subjected, and to the same mechanical cause he refers the ectropia of the eyelids, and the form of the mouth, nose, and ears. Dr. Vrolik considers the disease generally to be caused by an arrest of development.—The second case was born at Haddington, and was seen by Dr. Lewins: the disease was confined to the head and neck. The fissures were deeper, and in some instances broader than in Dr. Keiller's case (vide Periscope, *Medical Times*), and the child was larger altogether, so that its aspect was exceedingly horrible, and the parents sent for Dr. Lewins to obtain his sanction for its destruction. He saw it, forty-eight hours after birth, and it then appeared viable, but died and was buried before his second visit, a few days afterwards. The labour had been dreadfully severe from the great size of the child's head—it was born at the full time. The parents were healthy.

GANGRENE OF THE LUNG.—Dr. Tinniswood narrates in the *London and Edinburgh Medical Journal* the case of a woman, 31 years of age, who had long previously presented symptoms of tubercles in the lungs, and who ultimately recovered under his care after the destruction of a considerable part of that organ by gangrene, from inflammation set up in the neighbourhood of a large tubercular deposit, and obliterating the vessels of a portion of the lung—the walls of the cavity having afterwards collapsed, and the greater portion of the lung becoming impervious.

SPINAL DISTORTION.—Two cases of extreme spinal distortion are related by Mr. Hare, in the *Provincial Medical Journal*, in both of which a cure was effected by placing the patients on an inclined plane, making gentle extension by weights attached to the feet, axilla, and head, and by attention to the general health. The first case is described as caries of the dorsal vertebræ, but a careful perusal of the history of the case has convinced us that it is a simple case of angular distortion only.

SUCCESSFUL REMOVAL OF THE UTERUS BY LIGATURE.—Dr. Toogood, of Bridgewater, narrates, in the *Provincial Medical Journal*, the case of a maiden lady, nearly sixty years of age, whom he had attended several years previously for prolapsus uteri. A former partner of his, Mr. Parsons, was called to her in consequence of procidentia uteri occurring, and her being totally unable to restore the womb to its proper position, in which he also failing, a consultation was held with Dr. Toogood, and it was determined to remove the protruded mass by ligature, which was applied very firmly round the neck of the swelling, just within the vagina. The mass, when removed, was about two pounds' weight, and of the shape of the uterus, but its structure was much altered in character, the cavity being quite obliterated, and the os uteri almost cartilaginous. The patient perfectly recovered.

PERITONEAL DROPSY.—Mr. Daniell has published, in the *Provincial Medical Journal*, the particulars of a case of dropsy following inflammation of the peritoneum, in which, after trying various plans of treatment unavailingly, he had recourse to paracentesis abdominis, fourteen quarts of dark-coloured fluid being withdrawn by the operation, which was followed by a perfect cure. The patient has since borne two children.

CARCINOMA OF THE BREAST AND LIVER.—Dr. Fletcher exhibited, at a meeting of the Birmingham Pathological Society, specimens of cancer of the breast and liver, taken from the body of a woman, fifty years of age, who died of the disease. The cancered breast was ulcerated, and generally carcinomatous; the liver was also carcinomatous, and there were about two gallons of transparent fluid in the cavity of the peritoneum.

OPIUM IN THE TREATMENT OF DELIRIUM TREMENS.—Mr. Graham reports a case of delirium tremens in the Transactions of the Medical and Physical Society of Bombay, in the treatment of which he gave seventy-eight grains of opium, and twenty-seven of morphia in tincture, in nine days, before the symptoms yielded. In two of these days, about eight grains of morphia were given daily before sleep was induced; and of the opium eighteen grains were exhibited in one day, and thirty-nine grains in another.

THE COLOBAH BARRACKS.—The following description of the Colobah barracks, furnished by Dr. Thomson, shews with how little judgment their site was chosen; had there been a wish to destroy the soldiery, a better means of effecting that purpose could hardly have been selected. They are built almost in a line with the sea. The floor is formed of a deliquescent stone, which, in damp weather, is always wet, so that it is impossible for the men to keep their feet dry. During the rains the water stagnates round the barracks, there not being any proper facility for draining it away, so that the ground becomes a perfect marsh. The sea recedes so far as to expose to the sun half a mile of shore covered with slime and marine vegetation; and, as the privies are situated there, the smell is often disagreeable.

NOTICES TO CORRESPONDENTS.

We have received Mr. Mechi's interesting letter on Agricultural Improvements, but it is unfitted to our pages.

J. S. M.—*The tincture contains, we understand, as is usual, the hydriodate of potass.*

Mr. Griffith *informs us that we gave an s too much, in mentioning his name, last week, as a Student of King's College.*

I. J. C.—*In excess, there may be some ill consequences. It is no proof of disease.*

Dr. Tate.—*The prices of drugs, as published, are those at which purchases are made for importers. The wholesale buyers have, of course, a profit.* "B. D." *stands for Bonded;* "B. P." *for British Possessions;* "F." *for Foreign.*

Justitia *came late. The information is much sought, and is given as of public interest.*

M.R.C.S. *will learn the different matters he enquires after, by consulting Renshaw's Almanack. They will not be found elsewhere.*

Dr. Armstrong *will oblige us by sending us the paper.*

Mr. M.'s *communication is declined.*

Several communications are under consideration.—The introductory paper by Dr. Knox, of a Course on interesting points of Physiology, will certainly appear next week. We have received, also, an original paper of great value, by Dr. M. Peyrone, of Turin, which we shall early insert.

A Military Surgeon.—*The insult offered by our unfortunate contemporary to Mr. Guthrie, for a disclaimer that did the latter so much honour, was characteristically gross and wanton. No insult, however, can injure that distinguished gentleman, and for the share in the abuse we received, we are more than avenged, in extending the punishment of silence. Altogether, therefore, we think our Correspondent's letter unnecessary.*

We regret to announce that we are permanently losers by the honour we have enjoyed of having had Mr. F. A. Jones, of Dublin, among our subscribers. We are minus the amount of our bills, and have, of course stopped his papers.

Other Correspondents next week.

THE MEDICAL TIMES.

SATURDAY, JULY 20, 1844.

Putidius multo cerebrum est, mihi crede, Perilli
Dictantis, &c.

ONE of the drollest farces ever enacted by a body of sane corporate members, is about to be exhibited within the walls of our Royal College of Surgeons. On the 31st of July, we are to have the *formal*, the very formal election of our three new Councillors, who, sufficiently ridiculous themselves as the bastard Councillors, are chosen by a sort of process so wholly ridiculous, that one like it never crossed the brain of Sancho Panza, when fixing the principles of administrative government for his empire of Barataria. It is a veritable "Much ado about nothing:" and the "Much ado" has this distinction above the common comedies old men and charmless women are so fond of favouring us with, that it rises to the comic dignity of a *system*,—a system started under distinguished auspices. The trumpery nonsense is all pre-arranged, under Graham's patronage, by that admirable master of ceremonies, Sir Benjamin Brodie: no less: and with a minuteness of ingenuity, and, of course, careful length of foresightedness, which would inevitably have made Sir B. in Lilliput, a statesman —in China, imperial teacher of the Kotou.

Though the affair will scarcely bear anything but laughing at, let us try and dissect out a few of its ramifications.

The short statement of the facts tells us, then, that out of a body of eight or ten thousand equals—who were imputing a want of justice or common sense to their ruling Council—three hundred have been picked out by that very junto, for its invidious promotion, and presented as a *peace-offering* to the eight thousand seven hundred, who are, of course, to feel gratified by this new *causation* and *proof* of their inferiority. Hence, if acts bear explanation by words, the body of Surgeons have been addressed by the Council much in this fashion:—"You have no confidence in our election of ourselves as Surgical dignitaries: to oblige you, we will form a new class of dignitaries (Fellows), and *we* will kindly elect them! You object to our command of twenty-one honours: to remedy the grievance we will take the command of three hundred! And as you complain of being too far removed from us, your Council, we will gratify your demands by removing you one grade further away!"—With these men, irresponsible power must be precisely what his nostrum was to the quack: its only fault can be our having too little of it. It is a Castalian fount, not to be touched save by those fond of deep draughts! The best of wines is that drunk at another's expence: the best of reforms, to these gentlemen, is that of reforming other people. They solve the question of medical grievances, by giving themselves more patronage.

Now, these three hundred "Fellows" of the Council's own picking and choosing, being entrusted with the *serious* power of adding three members to that very Council,—i.e., electing its eighth part—it was all-important that they should not fly in the face of their makers, and turn the *very* important privilege to the injury of the donors. Here, then, was a vast occasion, that called for all the wise prevision of the College Solons. The great point to be gained was, that the nominal election by the three hundred should be the real election by the twenty-one, and mark with what complicated skill the important aim has been attained. First, no proxies are to vote, and all votes are to be given in the College-hall. Hence, the country Fellows, who ought to stand in the ratio of four to one, are disfranchised at a blow, unless they think their vote worth the expenditure of a fair round sum in travelling expences, and the loss likely to arise from their absence from business. If they have large practice, they cannot well leave it: if they have not—they have not the means. In London, itself, it is fair to presume that many of the Fellows will not vote. Some will think it a farce —and refrain in disgust. Others will be annoyed by rival claims of equally friendly claimants, and will forbear rather than offend either. A fresh body will have engagements which will preclude attendance. So that, of the three hundred Fellows, it is not unlikely that, after the first ferment has subsided, not fifty will trouble their heads with the election, Now, the Council have included their own names among the Fellows: their charter gives each of them a vote. So that, of the fifty voting for new men, twenty-one may be Councillors; and as they may form a single united corps, voting for *one* man, and, of course, out of the way of neutralizing their votes by voting (as others through the ballot may) for themselves, it is easy to see that the Council will be very untrue to themselves if they do not retain, as fresh and lively as ever, their power of electing their own members.

But the careful wisdom of Sir Benjamin Brodie did not end here. The charter anxiously provides that the Council shall give such notice of a forthcoming election as *they* "shall from time to time think fit,"—and that "the election shall be conducted in such way and manner as the Council shall from time to time think fit." Thus, then, the Council lay down the laws of the election—give just such notices to their *friends* and *enemies* as please them—preside, by their Principal, over its actual proceedings—form the returning officer, and principal voters! The proprietors of Old Sarum and venerable Gatton never had the returning a member more in their own hands!

But, as if this were not enough—as if the surety was not yet sufficiently great that not one of Sir B. Brodie's own set could not get on the Council—we have a hundred limitations as to the sort of man that shall be competent to be a Councillor. First: he shall not live in the country,—so that a Hey could never have been on the Council; he shall be in actual practice,—so that the venerable Carpue will be excluded; he must not practice midwifery,—so that a Blagrove is not admissable; he must have forborne pharmacy, (*i.e.* giving out his own medicines,) at least five years,—so that a Hippocrates, a Galen, and we believe, a Cheselden would, if living, have no chance. Then he must be pronounced and announced by the Council, *eligible;* he must have, signed by such a number of *fellows* as the Council shall think fit to name, a certificate, guaranteeing that he is a fit and proper person to be a Member of the Council, and has some half dozen other qualifications; he must be nominated by other Fellows; he must never, if unsuccessful once—that is, if once beaten by the Council—be proposed again, unless he submit to special terms fixed at will, by whom? the Council! and if beaten a second time by them, be ineligible for the rest of life! We have heard much, and read something, of the checks and counter-checks of the British Constitution; they fall to unimportance compared to the checks and counter-checks of Sir B. Brodie's Constitution. Such a gigantic waste of forethought on small matter has been rarely exhibited.

And, after all this fussy and farcical statesmanship—this silly caricature on deep policy—what will be the value of the position or influence of the three new Members of the Council? Elected for twelve months and by ballot—(ballot and annual parliaments!)—and indebted for their seats to the votes principally of the Council, they will have neither the private respectability of the present members, nor the public authority of members chosen by a whole profession. Unless they disappoint all expectation, they will form a hybrid, bastard, *parvenus* set of Councillors, constantly influenced by the anomalous and humbling nature of their position—from whom we can expect neither large views nor free action, and their annual ins and outs will have less interest for the Profession, than those of the mobile monk of the well-known barometer. So far from representing the body of Surgeons, they can scarcely rise to the dignity of representing themselves.

If the two hundred and seventy Fellows could be induced, on this first election, at all hazards to attend the College Hall, and if they felt some anxiety to promote the good government of the Surgical branch of the Profession, some little good might perhaps be extracted from this "point" of the new charter. Each of the three would go in pledged by all the means in his power to secure *open* meetings of the Council. The next best thing to electing our managers, is, the having their public doings under the notice of public opinion. If we must take men by chance, and by

compulsion, let us at least have the privilege of knowing what they are about.

But if the Fellows would go farther with us, and sharing our dislike to the Charter, not faulter to give it a blow it could never recover from, they would unite in fixing on the three last names in the Fellows' chronological list for Members of the Council. If these were certified, nominated, and elected this year and the next, the whole present body of Fellows would be declared, by the Charter, ineligible to College promotion; for, according to the Charter, they would be twice passed by. The Mantells, the Skeys, the Lanes, the Phillips, the Fergussons, the Keys, the Coopers, the Owens, the Partridges, the Graingers, the Johnsons, the Cutlers, and a host of others, would at once be taught, practically, the absurdity of a Charter which thus made all chance of their accession to the Council impossible; and, in the interest they would hence acquire in its opposition, we should find material help in giving the *coup de grace* to this monstrous and incorrigibly vicious system. The expedient may appear somewhat violent, but the evil it is provided for requires nothing less.

Mr. WAKLEY'S ACTION AGAINST THE HOPE INSURANCE COMPANY.

[The late extraordinary insinuation made by Mr. Wodehouse in the House of Commons against Mr. Wakley, and the replies of the Honourable Member for Finsbury, have called so much public attention to the details of his action against the Hope Insurance Company, that we have felt it due, both to our readers and to our only medical representative in the House, to re-publish the brief Report exactly as it occurs in the Annual Register for 1821, page 433. We have the less difficulty in doing this, as it was to the evidence adduced on this trial that Mr. Wakley so particularly referred for his justification, and which, no doubt, led to the handsome declaration of Sir Robert Peel.—We shall only add, that if there are any points which the Hon. Member may think requiring explanation, we shall do him the further justice of opening our pages to him.—Ed.]

KING'S BENCH, GUILDHALL, JUNE 21.

(*Before the Lord Chief Justice and a Special Jury.*)

Wakley *v.* Barron and others.—This was an action against the Hope Insurance Company upon a policy of insurance for £1,200.

Mr. Adolphus opened the proceedings.

A gentleman of the special jury felt himself bound to state that he was a director of the Royal Exchange Assurance Company; perhaps that circumstance might be an objection to his serving on the jury.

The Lord Chief Justice, after consulting the counsel for the plaintiff, said, there could be no objection.

Mr. Denman stated, that in opening a case of extraordinary interest, he would occupy very briefly the time of the court, Mr. Wakley, the plaintiff, a surgeon of great respectability, and the son of a landholder in the county of Kent, went, in December, 1819, to live at No. 5, in Argyle-street. He married in February, 1820; and on that occasion, deemed it fit to increase his insurance from £600 to £1,200: the accession of property, which would naturally accompany such change in a man's situation would sufficiently account for that proceeding. On the night of the 26th of August, or rather on the morning of the 27th, (for it was between one and two o'clock) a fire was discovered in his dwelling. The flames were seen bursting from the windows; the servants rushed naked from the house; the neighbourhood was in confusion and dismay; but Mr. Wakley himself was nowhere to be found; great anxiety was, as the jury would suppose, felt on his account; search in all quarters was made for him; and, after much unsuccessful toil, he was discovered, drenched in blood, covered with dirt, with a heavy bruise upon his head, and stabs upon different parts of his body, in the house of his next door neighbour, Mr. Thomson. The friends who found the plaintiff in that situation, agitated, trembling, and almost unconscious of what he did, thought it best to put him to bed, and endeavour to restore him to his senses. In bed he remained during the remainder of the night; his house in the mean time was burned to the ground, and his property in it destroyed. Now, claiming in a court of justice to recover his loss by that fire of the 27th August, the plaintiff might fairly expect to be called upon for some account of himself—for some account of what had been his situation previous to his being found in the house of Mr. Thomson. The narrative of Mr. Wakley as to that point, it was now his (Mr. Denman's) duty to lay before the Court; he confessed it was most extraordinary; but he doubted not that it was entitled to, and that it would obtain belief. On the night of the 26th August, about eleven o'clock, Mr. Wakley, being troubled with an affection of the eyes, ordered leeches to be brought, that he might apply them to his temples: at half-past eleven, his servant placed the leeches before him, and went to bed. At that time Mrs. Wakley was on a visit at the house of her father, and there was no one in Argyle Street but the plaintiff and two servants. After the servants were gone to bed, Mr. Wakley applied the leeches to his face, and continued for some time to encourage the bleeding. At length he heard a knock at the street-door, and, on opening it, a stranger appeared, who desired he would immediately go to Mr. Ivatt's, (a patient living in the City) who was extremely ill. Mr. Wakley said, that he could not then leave the house, but that he would see Mr. Ivatt early in the morning. The stranger said, that he had walked fast, that it was hot weather, and that he wished Mr. Wakley would give him some beer. The plaintiff then admitted the man into his hall, and went down into the cellar, in order to draw him some cider. As he returned up the kitchen stairs he received a violent blow, from what hand he knew not; but it stunned him, and he fell senseless to the ground. Awaking from his stupor, (how long after he could not tell) Mr. Wakley saw flame and smoke surrounding him. He found that the house was on fire; and going into the back kitchen, he contrived, by standing upon a meat screen, to force his way through a sky-light to some leads; thence he climbed over a wall, and eventually made his way into the yard of his neighbour, Mr. Thomson. This was Mr. Wakley's statement. From 12 o'clock, which was the time, as near as he could guess, when the stranger came, until two o'clock, when he was found in the house of Mr. Thomson, he could give no account of himself; he supposed he must have lain, during that time, in a state of insensibility. If he was asked, however, to what cause he could ascribe the mysterious visit of his secret enemy, he could, upon that point, perhaps, furnish some clue to explanation. The jury would remember the execution of Thistlewood and his companions for treason. Owing to some infatuation, which it was impossible to account for, a report had been spread, and generally credited, that Mr. Wakley was the individual who, under a mask, had beheaded those persons; and some of the crowd, while witnessing the conflagration, had been heard to rejoice, that punishment had overtaken the masked executioner. At all events, if the plaintiff was unable to give a full account of all that had befallen him on the night of the fire, the jury would see the improbability, nay the impossibility, of his having raised that fire himself. Mr. Wakley was standing in a situation of comfort, nay of comparative opulence; he was rising fast into practice and reputation,—the respected member of an honourable profession; and so far from having anything to gain by the destruction of his property, he would, even after receiving £1,200 from the defendants, stand in the situation of a very considerable loser.

The formal proof in the case being admitted on the part of the Hope Company, Mr. Wakley's policy, the due notice, and other documents, were put in and read.

Mr. George Thomson was then called, and examined by Mr. Curwood.—The witness said—I live in Argyle-street, next door to the plaintiff; his house (No. 5) is my freehold. On the morning of the 27th of August, just before one o'clock, we were alarmed by a knocking at all the doors in the street; I jumped up, looked out of a back window, and found the house next door on fire. The flames rushed out of the back parlour window, and lighted up the yard; I ran down into Argyle-street, and found the street-door of No. 5 open, and the house passage in a blaze. About three quarters of an hour after it was that I first saw Mr. Wakley. He was then in the passage of my house; I do not know how he came there; I had been in and out, removing my plate, &c. Mr. Wakley, when I saw him, was covered with dirt and blood; his clothes were wet, and he had the appearance of a man either deranged or intoxicated. I never saw a man in such a state before. After giving him a little wine, I requested Mr. Parker, our opposite neighbour, to take him over to his house; Mr. Parker did so. After the roof of No. 5 had fallen in, about four in the morning, I saw Mr. Wakley again: he was in bed at Mr. Parker's, extremely languid and ill, and he showed me some cuts on his breast. I think there were three cuts; I saw no bruises. I have been in Mr. Wakley's house, in the dining-room, but not in the drawing-room; the furniture seemed to me to be the same that Mr. Archdeacon Wollaston, the former occupier of the house, had sold to Mr. Wakley.

Cross-examined by Mr. Gurney.—The first alarm was at 20 minutes before two on Sunday morning: not before one.

[A model of Mr. Wakley's house, in Argyle-street, was then placed on the table.]

Mr. S. Parker.—I live at 34, Argyle-street, nearly opposite the plaintiff's house. The first I saw of the fire was, that the flames were rushing from the front parlour windows. I went to the assistance of Mr. Thomson, the last witness. I did not see Mr. Wakley, until Mr. Thomson gave him to my care. He then seemed almost deranged; his face was bloody, his hands covered with dirt, he was much agitated, and his whole body was in profuse perspiration; blood from his ear had trickled down his face. I put him to bed at my house; he vomited extremely in going up stairs. As we crossed the street a thief seized Mr. Wakley's watch; Mr. Wakley seized him, and gave him into the charge of an officer; he then sank down exhausted. I looked at his body; it was much bruised, and he had been stabbed in three places. He repeated constantly, "am I safe?" He drank water greedily in my house. I never saw Mr. Wakley before the night of the fire.

Cross-examined by Mr. Gurney.—Dr. Luke attended him at my house. His clothes remained some time at my house. Mr. Thomson, jun., at last took them away.

Mr. J. Thomson, jun.—I am the son of Mr. G. Thomson, and live with him. On being alarmed, I ran down into the street. Mr. Wakley's door was open, and the lamplighter had a ladder up to the first floor window. I searched for Mr. Wakley, and asked if he was safe. The neighbours said Mrs. Wakley was safe, but they thought Mr. Wakley was burned. I went to the windows at the top of my own house, and called him loudly; but there was no answer. Between three and four o'clock I first saw Mr. Wakley, at Mr. Parker's house. He was languid, and spoke little.

Cross-examined by Mr. Pollock.—I was before the magistrate, Mr. Farren. The dressing coat and waistcoat worn by Mr. Wakley were produced at that time; the examination was at Mr. Parker's house. My father sleeps on the first floor of our house; a female servant sleeps in a back room on the ground floor; my father's window looks into Mr. Wakley's yard.

Mr. W. Gardner said—I was at Mr. Wakley's house about ten o'clock on the night of the fire. His eyes seemed much affected, and he said he was going to put leeches to them. I wished him to come and see my daughter, who was ill; he said he was himself ill; and that he would come in the morning; he asked me to sup; I declined; I reached my house, 294, Oxford-street, a few minutes before 11 o'clock.

Daniel Wicher.—I was servant to Mr. Wakley.

On the night of the fire I went to bed about half past 11: my wife, myself, and Mr. Wakley were in the house. My wife and I went to bed, leaving my master in the back parlour, going to put leeches to his face. I was first alarmed by a knocking at the door and a springing of rattles. I think it must have been about one o'clock. When I came down stairs, I saw the flame bursting from a partition between the two parlour doors into the passage. My wife came down before me. I looked for my master; I made an attempt at both parlours, but could not get near them for the fire. The first I saw of my master was at Mr. Parker's, about six in the morning. I went to live with Mr. Wakley on the 5th December, 1819; just before his marriage. A little new furniture came home at the time of his marriage. The house was pretty well furnished, but not handsomely. My master paid regularly every man his own.

Cross-examined by Mr. Marryat.—My master had bought the most of his furniture from Archdeacon Wollaston. The new furniture, which came at his marriage, was a sofa table, and two card tables, and some other things that came from a Mr. Ashelford. I slept in the front garret of my master's house. I asked my master, before I went to bed, if I should sit up with him; he said not. On the alarm being given, I went to my master's bed-room, which was the back garret: he was not there. I had been asleep when the alarm was given.

Sarah Wicher.—I am wife to the last witness, and lived with Mr. Wakley. The house was extremely well furnished. A great deal of new goods came in at Mr. Wakley's marriage. There was a great quantity of linen of every kind, and very good. Mrs. Wakley's apparel was handsome and abundant. All bills were paid weekly or monthly. As soon as I was alarmed, I ran down stairs, and cried "fire!" The street door was not locked; when I took hold of the lock it opened at once; it was a catch lock, and the door might be shut from the outside.

Joseph Ashelford.—I am an upholsterer. I have known Mr. Wakley since 1816. I knew his house in Argyle-street: it was well furnished, but not in the modern style. I believe that the house contained the furniture mentioned in the inventory delivered to the Hope office. I furnished goods to the amount of £80 or £90, over and above the furniture taken from Archdeacon Wollaston. In December, 1819, I saw the Archdeacon's furniture, and valued it; my estimate did not include fixtures.

Cross-examined by Mr. Gurney.—I gave my opinion as to the value of the things taken from Archdeacon Wollaston. I took them to be worth from £500 to £600. Mr. Wakley bought them for £300; he afterwards brought some furniture of his own into the house. I furnished goods to the amount of £80; they were not paid for at the time of the fire: they are paid for now. I valued the things in the inventory presented to the office. I valued three rose-wood tables in that inventory at £27,

Mr. Gurney.—They are charged, my lord, in the maker's bill at £16.

Cross-examination resumed.—My inventory for the office was made after the fire; and of course from memory.

Samuel Malison.—I was formerly a surgeon and apothecary, in Mill-street, Hanover-square. At the latter end of the year 1818, I sold my business and stock to the plaintiff. My household goods were charged at £40; £400 was given for drugs and goodwill. The gross returns of my business were £600 a year. Mr. Wakley re-sold the business which he bought of me, to a gentleman named Comley.

Mr. Archdeacon Wollaston.—I lived at 5, Argyle-street, and let that house to Mr. Wakley. I sold my furniture for £300 to Mr. Wakley, and gave him the fixtures into the bargain. I dined with the plaintiff after his marriage, and saw that he had plate; additions had been made to the furniture.

Cross-examined by Mr. Marryat.—The price of the furniture between Mr. Wakley and myself was fixed by an upholsterer named Finar. Mr. Wakley did not care to purchase the lease from me; and he paid me an advanced rent of £40 per annum for the house, on that account.

Mr. William Green.—I am an apothecary at Whitechapel, and have known Mr. Wakley three or four years. He first was in business in the city, and seemed to do well for a young man.

Mr. Malison called back.—Over and above the £40 I mentioned, I received £30 from the plaintiff for some articles of furniture.

Mr. W. Goodehild.—I am father-in-law to the plaintiff. My daughter was handsomely fitted out upon her marriage. I gave her £300 for clothes alone; and afterwards gave her £30. worth of plate. Presents were also made by different branches of her family. I gave my daughter the money, and desired her to buy what she pleased; she afterwards offered me the tradesmen's receipts, but I did not accept them. Mrs. Wakley was at my house at the time of the fire; she was unwell, and on a visit to me at Hammersmith.

Miss Mary Goodehild.—Mrs. Wakley is my sister. I am sure that she laid out the money given to her by my father on her marriage.

Mr. Thomas Faithorn.—I have been some time the plaintiff's solicitor. Upon a statement which he made to me after his marriage, I advised him to increase his insurance. It was then £600. I have dined often with Mr. Wakley. I dined with him three days before the fire; things looked as usual. There was always an abundance of plate and glass in his house.

Mr. Denman.—That is my case, my Lord.

Mr. Marryat felt no doubt of convincing the jury that the Hope Company were bound, both in justice to themselves, and in duty to the public, to resist, even to the utmost, the claim of the plaintiff. The jury had heard Mr. Wakley's story. Upon his own admission it was extraordinary; upon the evidence which he (Mr. Marryat) should adduce, it would appear incredible. The worth of Mr. Ashelford's evidence would be easily appreciated, when it was seen that he had valued at £27, tables which, new, had cost only £16. Now there was a clause in the policy held by the plaintiff, that if, upon the making out a claim of loss, any false swearing, or attempt at imposition, was set up, then the claimant should forfeit all benefit of his insurance. Upon that ground, in the first instance, he should contend, and he trusted successfully, that a verdict must pass for the defendants. That fraud, and gross fraud, had been committed by Mr. Wakley in his claim, the jury could scarcely doubt, when they looked at the inventory furnished to the Hope Company. For furniture, which had cost at most £450, £735 was charged; for plate £168 was claimed, though all the melted metal found in the ruins, had weighed only 73 ounces; and articles had been put into the inventory as silver, remnants of which had been found, and which turned out to be merely plated. But the most audacious part of the business was the immense difference between the sums claimed for various descriptions of property and the bills of purchase, and the other vouchers, put in to prove the existence of such property:—Furniture, £730; vouchers under £500; books, £104; vouchers £5.10s.; linen £101; vouchers for £18. Mr. Wakley's apparel £144; vouchers £67. Mrs. Wakley's apparel £300; vouchers under £100; china £163; vouchers £14. And Mr. Wakley was a young man, only a few months a housekeeper, and therefore with every means of proving purchases, which, if made at all, must have been made less than eight months before the accident. There were some points, too, as to which Mr. Wakley's situation had been a little misrepresented to the court. His extensive practice had been spoken of; but no proof had been given; no supply of drugs, nor even of phials, shown. As there had been no proof in support of this great practice, however, there should be some against it; for a gentleman would be called who had attended to Mr. Wakley's business for him during an absence of ten days from London; and that gentleman would tell the jury, that, in the course of the whole ten days, he had attended but one patient, and that patient a woman in a menial station of life. But now Mr. Marryat came to the extraordinary part of the case—to the attack upon Mr. Wakley—to the visit of the midnight assassin. That assassin must have been a man of no ordinary penetration; he must have discovered that Mr. Wakley had a patient named Ivatt, and he must have foreseen, that at the particular hour of his visit, and on the particular night, Mr. Wakley would in person, open the street door to him, (having previously sent all the servants to bed); refuse to attend a patient, and go down stairs to draw beer. He (Mr. Marryat) put it to the jury, whether a gentleman knocked up at twelve at night, and asked for liquor, was not more likely to give the petitioner sixpence, and send him to the next public house, than himself to go down into the cellar to draw cider for him. The assassin, however, it was said, knocked Mr. Wakley down, and stabbed him, taking care, however, not to hurt him very seriously, it should seem, because he went to Hammersmith to his family next day; and even the doctor who attended him had not been called upon the present occasion to speak to the nature of his wounds. Well! being assassinated, Mr. Wakley was found, half an hour after the alarm of fire was given, in Mr. Thomson's house. Where had he been from the breaking out of the fire? Oh, when he found the house in flames, he got into the back kitchen, forced his way through a skylight, on to some leads, and thence got over a wall. But why go through the kitchen, and through the skylight, and over the wall, when he might have walked out at the street door?—for the servants, who came down stairs when the alarm was given from without, found no difficulty in going out by the street door. And, again, why break the skylight to get upon the leads, when there was a back door, out of which he might have walked on to the leads without any breaking at all? Mr. Wakley's face was bloody when he was found. No doubt; he had been applying leeches to it. But his clothes were bloody. Yes, and those clothes had been preserved: they would be produced in Court, and would form, perhaps, the most conclusive evidence that could be adduced against the plaintiff. There was another circumstance worthy the attention of the jury, because it arose out of a gratuitous assertion of the plaintiff himself. It had been suggested by the plaintiff, that, among a variety of valuable properties not insured, he had lost a quantity of bank-notes, and a great number of guineas contained in a certain writing-desk. Now the writing-desk had been burned; and certainly the bank-notes, if there were any, would burn too; but the guineas would not burn; they would not even melt; and yet no guinea, nor vestige of a guinea, could ever be found among the ruins, although the rubbish had been sifted for the purpose. Still the unknown stranger might have stolen the guineas. There were two circumstances against that; first, he had left untouched a pair of silver candlesticks standing close to the desk; and next, although the desk had been burned, the lock had been found in a locked state. A thief, after stealing the guineas, would scarcely have taken the trouble to lock the desk after him. In fact, as the jury would see, Mr. Wakley had been mercifully dealt by; for the murderer had made wounds only skin-deep, and the thief had carried away nothing. Mr. Marryat concluded a long detail of circumstances by expressing his conviction, that the story of the plaintiff would, of itself, afford sufficient ground for giving a verdict to the defendants.

G. Beforth called and examined by Mr. Gurney.—I was a watchman in Argyle Street, on the night of the fire. I was crying half-past one o'clock, when a hackney-coachman passing gave me the alarm. Smoke was coming from the area, the door, and windows of the house, No. 5. I saw no fire then. I knocked and sprang my rattle, and alarmed the neighbours. Bliss, the watchman of the Argyle-rooms, joined me. I remained at Mr. Wakley's door, until the servants, a man and woman, came out. I heard a bolt go before the door opened. The man as he came out, said "Break open that back door, and save my master." I then went to the back door leading to the yard; and finding it fast, I forced it open. There was so much smoke in the yard, that I could see nothing. Sparks of fire seemed to come from the space between the front and back parlours. The kitchen stair-case was full

of smoke; I think that no person could remain upon those stairs any time without being suffocated. Before the servants came out of the house, I distinctly heard a bolt withdrawn: I then heard the handle of the lock go; and the door was opened.

Cross-examined by Mr. Denman.—I did not see the woman come out of the house. I only saw the man servant.

Daniel Bliss.—I joined the last witness when the alarm was given at Mr. Wakley's house. I joined him at the door of Mr. Wakley's, where he was knocking and springing his rattle. I knocked and rang also; and in a few minutes I heard a fumbling within. Almost directly a man came out in his shirt: a woman came out a minute after; she said, "Save my master;" I asked where he slept: she answered, "In the back parlour." I then went to the back parlour door, and tried to open it with my hand, but could not; I then forced it open, and saw the flames coming through the floor at the left-hand corner of the room. The smoke overpowered me, and I retreated.

Stephen Lavender said—I am a Bow-street officer: I saw Mr. Wakley about a week after the fire, and requested he would state to me, in some measure, the occurrences of that night. Mr. Wakley said:—"After my servants were in bed, I was bleeding myself with leeches. While I was doing so, some one knocked at the street door. I went to the door, and asked what the party wanted;, a man said, that he had come from Mr. Ivatt's, who wished to see me immediately; I told the man that I could not visit Mr. Ivatt before the morning: he then said that he had come in great haste, and begged for some small beer. I admitted him into the house, and asked if he chose beer or cider; he said he chose cider. I then wrapped my head in a towel, and leaving the man in the passage, went down to the cellar to draw some. When I was returning up the stairs, I received a blow on the head, which laid me senseless. I lay in that state, as I apprehend, for a considerable time: when I came to myself, I found that the house was on fire. I tried to go up stairs, but finding smoke and flames in the passage, I crawled into the back kitchen. Being alarmed for my safety, I contrived to escape through the skylight of the kitchen, by the aid of a meat screen and trestle; and after getting through the sky-light on to the leads, I got over the wall into Mr. Thomson's yard." This was the substance of what Mr. Wakley told me: he also mentioned, that he had received some anonymous letters previous to the occurrence. I went afterwards into the back kitchen of Mr. Wakley's house, no part of which was burned, and found a meat screen and trestle placed as Mr. Wakley had described. The glass of the skylight was broken and the frames also; the frames were of wood. Mr. Wakley is a trifle taller than I am. If a man was upon the meat screen, there is a beam above which he could reach with his hands, and upon which he might with some difficulty, get; it would require some exertion of strength to do it. Between the beam and the skylight there is room for a man to sit (sitting upon the beam). The chance is, that any person, forcing himself through the skylight would be considerably injured. His hands would be cut.

Mr. Gurney then proposed to produce the clothes which Mr. Wakley had worn on the night of the fire.

Mr. Denman objected, that their identity was not made out.

A witness was called to that point, and the clothes were received.

A figure in bulk and stature resembling the plaintiff, and dressed in the bloody garments which that gentleman had worn on the night of the accident, was then wheeled forward into the witness-box. Mr. Lavender stood beside it.

Mr. George Thomson being called again, said—Mr. Wakley's hands were dirty when I found him in my passage, but not cut, so far as I saw.

Stephen Lavender continued.—There are cuts upon the clothes of this figure. There is one cut in the cape of the coat. There is a cut in the waistcoat, about the middle of the left side, about half an inch in width, done, apparently, with a very sharp instrument. There are two cuts in the shirt, where only one appears in the waistcoat. The cut in the waistcoat is horizontal; those in the shirt are perpendicular.

Mr. Denman.—That might arise from a fold in the shirt at the time when the blow was given.

Mr. Gurney.—In that case the shirt would have been treble, and not double; and there would have been three cuts.

Stephen Lavender continued.—There is a considerable stain on the cut part of the shirt; but there is no corresponding stain on the inside of the waistcoat; there is no stain whatever near the cut part of the waistcoat. I have been frequently in the habit of seeing stains made by blood. The stain here upon the shirt is certainly made by a mixture of blood and water. I did not see the shirt, until five or six days after the transaction; my judgment then was as it is now. If the stain had been made by blood flowing from a wound, it would, no doubt, have been of a much deeper colour than it is. There is a cut about the middle of the waistcoat on the right side. About the same point there are in the shirt several very small perforations, not so large as the cut in the waistcoat, but done, apparently by some fine pointed instrument: there is no stain of blood upon those small perforations.

Cross-examined by Mr. Denman.—Mr. Wakley told me, that he had received two threatening letters before the fire; but he did not say that they spoke of his having cut off the heads of Thistlewood and his companions. He said he believed them to have arisen out of jealousy at his late marriage.

Thomas Harvey.—I am a surgeon, residing at Walworth. I have frequently occasion to see the stains of blood, and of blood and water, upon linen. The spots upon the neckcloth of this figure seem to me to be blood. The stains upon the shirt seem to me to have been made by some material of a lighter colour.

Dr. Stephen Luke.—I reside in Argyle Street, and was called to Mr. Wakley two hours after the fire. I found him with two very slight wounds upon his body, one on the breast, and the other on the lower ribs. One of the wounds had bled a little, the other had scarcely bled at all. Both punctures were upon bone, where there was little but skin to cut. A surgeon (Mr. Keates) had been there before me. I ought to say, that it is possible, a wound made upon a bone might exude a light coloured fluid, similar in appearance to that upon the shirt of this figure; but I do not think, that the wounds which I saw upon Mr. Wakley, could produce so much stain as that which appears upon the shirt.

William Mead.—I am foreman to the Hope Company. I took charge of the ruins of Mr. Wakley's house on the morning of the fire. I was in possession, and a guard fixed, before the fire was out. Watch was kept day and night. We found some plate, but no guineas. We found some plated articles, a liquor-stand, and part of a soup-ladle.

Mr. Gurney.—The soup-ladle is charged as silver in the inventory, at the price of £4 4s., and the liquor-stand as silver, at the price of £5.

Mr. Adolphus.—You are not to assume, that these plated articles are the articles which were charged to you as silver.

Paul Galland.—I am a fireman of the Hope Company. In the ruins of Mr. Wakley's house, I found some silver forks and spoons half melted. I searched for money, but found none. I found that lock (the lock of the desk): the bolt was shot; it was locked.

Edward Leet proved that the silver found in the ruins weighed 73 ounces.

Mr. William King.—I am a surgeon and apothecary. In the autumn of 1819, Mr. Wakley applied to me to attend to his business during a journey he was taking to Devonshire. I undertook to attend all cases except midwifery. Mr. Wakley was absent, I think, about ten days, and I attended one patient, a decent woman, lodging in Avery-row.

Mrs. Field proved that she was the landlady of the house in Mill-street, at which the plaintiff lived before he went to Argyle-street. Mr. Wakley did not take all the furniture away with him; part he left to Mr. Comley. That part was afterwards distrained for the sum of £17; after the distress was paid, some property still remained.

Cross-examined by Mr. Denman.—All the furniture that Mr. Comley had, was that which had belonged to Mr. Malison and Mr. Wakley. No goods came with Mr. Comley, or went away with Mr. Wakley.

The broker who made the distress upon Comley, proved, that he valued the goods in Comley's possession, at £19.

Margaret Grierson said, that she lived with the plaintiff in Mill-street. Mr. Wakley took nothing from Mill-street, but books and house-linen, and some plate. Witness lived with Mr. Wakley about a fortnight in Argyle-street: whether anything came after that time from Mill-street, she could not say.

Mrs. Field, called back, said that Comley did not take possession in Mill-street until April. Mr. Wakley left about Christmas.

James Lahee was appraiser at the transfer in Mill-street from Mr. Malison to Mr. Wakley. The whole of the furniture was valued at £46 12s. including some articles of plate. Witness knew of the distress afterwards upon Mr. Comley; very few of the articles which witness had valued between Mr. Wakley and Mr. Malison were then remaining: the greater part of them had been removed.

Mr. Denman then called rebutting evidence.

Mr. Parker saw the hands of Mr. Wakley after the fire; they were cut, as if by glass. The engines had begun to play before witness first saw plaintiff in the house of Mr. Thomson. Witness could account for the small punctures in the shirt: a lancet lay upon the bed with the shirt; the shirt was in folds, and the lancet lay upon it. Witness sat upon the shirt and the lancet several times, and he thought that the pressure had occasioned the cuts.

Cross-examined by Mr. Marryat.—The surgeon, Mr. Keates, who attended Mr. Wakley at the house of witness, was now in court.

Mr. Marryat spoke to evidence.—No one had seen the cut hands but witness, Mr. Parker; and the surgeon who first attended the plaintiff, and who, of course, must be within his knowledge, was now in court; but the plaintiff's counsel did not think fit to call him.

Mr. Denman commenced his reply by observing, that he, on his part, had proved all that he had opened; but the case opened for the defendants had not been made out in evidence. The plated articles, inserted in the inventory under the head of silver, had been so inserted by mistake, and the error would be found corrected in the bills of parcels, by which that inventory had been accompanied. The vouchers sent in had been as full as, under the circumstances, could reasonably be expected; and property beyond the amount (£1,200) claimed, was shewn by the evidence to have been in the possession of Mr. Wakley. The charge of fraudulent claim, then, being fully got rid of, he would come to the heavier part of the accusation against his client—to that part which affected not only his character, but his life. To suppose that Mr. Wakley had set his own house on fire, was to suppose him contemplating, without any possible motive, the double crime of arson and murder:—of murder, certainly; because, independent of injury to accrue to his neighbours, he must coolly have resolved to burn his own servants to death. The learned counsel then proceeded at great length to comment upon the defendant's evidence; and alluding to the testimony of Beforth, as to the drawing of the bolt before the street door was opened, he said that the jury must suppose Mr. Wakley a fool, as well as a knave, if they credited the statement of the watchman. If the plaintiff was making up a story, he would, of course, take care to unbolt the street-door; because the probability was, that the door would be broken open by persons from without; and the fact of its being found bolted, would, of itself, amount to a refutation of the tale upon which he was proposing to rely. Mr. Denman concluded by observing, that it was competent to

Mr. Marryat himself to call Mr. Keates, if he wished to examine him,

The Lord Chief Justice told the jury that the plaintiff's claim was resisted upon two grounds:—first, that by making a fraudulent claim, in point of amount, he had forfeited all benefit from his policy; and, second, that the fire at his house had not been accidental, but contrived and raised by his own wilful misconduct. If it could be made out that the property in the plaintiff's house fell very short, not of the sum alleged in this case to have been lost, but of the sum insured, then there would seem to be some motive which might induce a dishonest man to set his house on fire; but, supposing that fact to be negatived, there did not appear to have been any motive which could lead Mr. Wakley to commit the crime imputed to him. The absence of all evidence as to motive, however, although a circumstance, important for the consideration of a jury, was not to be deemed conclusive of a cause; for it did sometimes happen that men committed the blackest crimes from motives known only to themselves, and which could never be fathomed by those whose duty it was to consider of their conduct. The plaintiff in the present case, in furnishing his particulars to the insurance office, had estimated his loss at £1,600., although he could only recover £1,200 from the Company. The jury had heard the evidence as to the property in Mr. Wakley's possession, and they would consider how far, upon that evidence, his statement of his claim was likely to be a just one; and estimating the value of the furniture claimed, for they would remember that the greater part of it had been purchased from an outgoing tenant, and had therefore been obtained probably at a reasonable rate. His lordship then detailed the whole of the evidence to the jury, and commented upon those parts of it, which appeared to him most important. The evidence of Beforth as to the undrawing of the street-door bolt was most material; and that of Bliss, as to his having found the door of the back parlour fast, was still more so; because the fastening of the back parlour-door was incompatible with the tale, already extraordinary, told by Mr. Wakley. It was possible, however, that Bliss might have mismanaged the lock of the back parlour-door in his hurry; and it was to be remembered that both the witnesses spoke to facts taking place at a moment of great trouble and confusion. Upon the non-appearance of Mr. Keates, his lordship would make but one remark:—it was certain that the plaintiff could have called him; it was probable that the defendant could have done so. He (the lord chief-justice) wished that Mr. Keates had been called; because the plaintiff, by his own account, must have received a very violent blow upon the head. Now, no witness had spoken to any hurt having been apparent upon the head of the plaintiff. The case, however, was altogether a case for the consideraton of the jury; and, to their decision his lordship, in conclusion, with perfect confidence, committed it.

The jury, after retiring for about a quarter of an hour, found for the plaintiff—Damages 1,200*l.*

OBSERVATIONS ON A WORK ENTITLED "CHEMISTRY IN ITS APPLICATIONS TO AGRICULTURE AND PHYSIOLOGY." BY PROFESSOR LIEBIG M. D. PH. D.

(For the "Medical Times.")

Science in the present day reminds us of an unsettled form of government, in which, having no guiding principle, every one does that which *he* considers right in his own eyes. Through every department of philosophy instead of rivalry of observation, we observe with regret a condemnable struggle for supremacy, a desire to dazzle and confound rather than to convince, to lead rather than to investigate, and to discourage future inquiry by marking out boundaries, beyond which man is forbidden to pass. Chemistry, physiology, geology, and other branches, have really and truly no foundation, no settled principles, no fulcrum on which they can rest their leverage, and it is to this uncertainty and want of basis that many men owe their greatness, or fashionable notoriety.

In the dangerous doctrines of professor Liebig, we see with regret, an arroganee and assumption in modern chemistry, and a desire to take the lead by a force of syllogism and dogmatic affirmation, wholly incompatible with the spirit of free inquiry, and philosophical humility, which takes nothing for granted but that which is based on reason and confirmed by observation; he tells physiologists that their "duty is, not to refute the experiments of others, not to shew that they are erroneous: but to discover truth, and that alone." Our leading geologists speak in the same language and to the same purport. But, is not this vastly absurd? How are we to discover truth when it lies hidden beneath the veil of error, but by first removing that veil? The extent of human knowledge is the natural boundary of the day, but that boundary fluctuates perpetually, every vibration of Time bringing an increase of knowledge: but great names often stand in the way and impede our advances, until some expanded mind, seeing the impediment, removes it. Newton tells us it is not wise to multiply causes, but the real Observer of Nature is compelled to multiply causes as they exist in nature in order to avoid the greater folly of generalizing. Newton's errors of philosophy were not discovered until his supposed facts were first brought into question: doubts of alchemy gave birth to the phlogistic theory, further doubts of this gave birth to the oxygenic theory, and, again, further doubts gave rise to the chloridic theory.

Physiologists do not reject the aid of chemistry, but they reject the syllogistic demonstration as being too confined and letting nature escape through the hands; they refuse to take for granted, the positive affirmation, or the induction drawn from the labours of the closet and at variance with facts of observation. There is little or no analogy between the knife of the anatomist and the crucible of the chemist; the first merely removes impediments in the way of actual observation, and by that means exhibits the secret mechanism of the organic body, but the chemist by destructive distillation, by burning, and by chemical action, produces definite results which may, or may not have existed in the body, and can only be considered as so many demonstrative proofs of the natural tendency of bodies, when set free, to form other unions and in definite proportions. The evolution of ammoniacal gas from a burnt body, is no proof that ammonia existed in the living body, although it may be considered a sufficient proof of hydrogen and azote being constituents of the body. In putrid fermentation all parts of the body decompose, and the elements of air and water set free immediately re-unite with each other, similarity of causes producing similar effects. Thus animal substance yields ammonia, nitric acid, sulphuretted, carburetted, phosphoretted hydrogen; but are we hence compelled to conclude, that they exist in these several combinations in the body? Certainly not.

One of the questions at issue is, "Is carbon the food of plants?" Liebig says that it is, and proceeds to lay down the axiom that "plants derive their carbon from the atmosphere." Physiologists dissatisfied with his explanations, institute a series of experiments, such as sewing seeds of balsamines, beans, cresses, gourds, &c., in pure Carrara marble, and sprinkling them with water containing carbonic acid, the seeds sprang up, but did not attain to the development of the third small leaf: they supplied the water from beneath the marble but were equally unsuccessful. In other experiments it was found that plants lived longer in distilled water than with water impregnated with carbonic acid, but still they perished: others sowed seeds of plants in flowers of sulphur, and sulphate of barytes, and tried to nourish them with carbonic acid, but without success. These experiments Liebig acknowledges were made in the spirit of good faith, but he contends against the manner in which they were conducted, and curiously enough falls back upon the very plea on which his adversaries' arguments are grounded "that many conditions are necessary for the life of plants, that each genus requires special conditions, the absence of any of which is inimical to the growth of the plants. That the organs of a plant, like those of an animal, contain substances of the most different kinds; some being formed solely of carbon and the elements of water, others containing nitrogen, and in all plants we find metallic oxides in the state of Salts." Why this is all that physiologists are contending for: the plant exists by the soil, draws its properties from the soil, and is influenced in its vital action by the atmosphere, which also governs its vital phenomena. Liebig by one fell swoop would discard physiology, altogether substituting chemical action resulting from the accidental introduction of compounds derived from the soil, the juices of plants, and by the same mode of reasoning, the blood of animals is no other than the passive recipient of matters which by chemical action set it in motion.

He says, "we know indeed that an organised body cannot generate substances, but can only change their mode of combination; and that its sustenance and reproduction depend upon the chemical transformation of the matters which are employed as its nutriment, and which contain its own constituent elements." We believe at present that organic bodies do not generate oxygen, hydrogen, or nitrogen, but beyond this nothing is practically known. Lime-secreting polypes *generate* the elements of calx or the earth calcium; fuci and other marine plants *generate* soda; animals *generate* carbon; plants of terra firma *generate potash*, notwithstanding the received idea of its being an element. Liebig may say they are chemically elaborated in the living system: be it so. The action of life is in fact a series of combining, contending and opposing movements, of matter mathematically and mechanically adjusting itself with matter, according to the laws of affinity, motion, and force; for chemical action truly speaking is no other than mechanical union of matter, with matter mathematically adjusted in its parts and quantities, so as to deprive each body of its respective qualities, and to produce a third having properties peculiar to itself so long as it continues under the same conditions. We cannot for a moment consider any one of the undecompounded bodies. as primary simple elements, but merely as modifications of the primary elements: if therefore we admit chemical to include vital mechanical action, we are wholly at a loss to account for the singularly beautiful mechanism of organic bodies, and the continual production of the same species under different conditions of soil.

As observers of nature apart from chemical theories, we could not for a moment admit that the compounds resulting from destructive distillation, or burning. exist in this state of chemical combination in the living organic body, or that the sugar-cane juice previous to fermentation contains malid, oxalic, and other acids; or that ammonia is a constituent of the animal frame, any more than that prussic acid exists in the heels of calves. That hydrocyanic acid and water contain the elements of carbonic acid, ammonia, urea, cyanuric acid, cyanitic acid, oxalic, formic, and numerous other acids, is a beautiful illustration of the versatility of matter, its numerous mechanical and mathematical combinations, and its varying powers.

Of the fifty four undecompounded bodies, many reasons exist for supposing every one of them to be compounds, and in fact there are but three, oxygen, hydrogen, and nitrogen, out of which the complicated phenomena of this planetary body we inhabit, are produced; for carbon whether we consider it as an ingredient of the atmosphere, of the waters, or of the earths, is palpably an extraneous body, locally diffused in its quantities, as locally generated, and not mechanically united as are the elements of air and water. Again, chemists are but imperfectly acquainted with oxygen, or its phenomena of action and combination, and it is from these that I, at least, am led to infer that it is a triple or quadruple compound. What indeed is light? What is heat? What is the electric fluid? Chemists must answer these questions satisfactorily, ere they proceed to lay down positive laws. Some of our experiments may well justify the supposition that oxygen consists of a radical, mathematically (chemically) united with hydrogen and an imponderable body which we denominate heat: on the other hand I entertain the notion of Scoppuli, that chloride is produced by the vital power of animals, and also that iodine, bromine and fluorine are mere modifications of the same radical with hydrogen. Again it is not yet

satisfactorily settled whether hydrogen or oxygen is the *acidifying principle*, for hydrogen alone has the power of changing certain undecompounded bases into real acids without the presence or assistance of oxygen: the admitted fact that acidity is more frequently the result of their combined operations appears to favour this idea of oxygen being a compound.

That the elements of air and water permanently change their condition is palpably manifest by the phenomena of organic and inorganic bodies,—the one being of necessity inseparably connected with the other. The fossils have no existence but by the death of animals and vegetables, which latter exist only by the sufferance of the elements. The minerals are, also, local deposits, and evidently, products of local action taking place in beds formed by organic deposits. The idea of organic bodies being the result of chemical action, is not confined to Liebig; for, under the head of *Animal Kingdom*, in the last edition of the "Eneyclopœdia Britannica," I read that the calcareous bases of the coral and the shell of the mollusca have no positive increase; that the elegant branches of the coral are created by the instinctive labours of the animal inhabitants, which alone are possessed of life; and under the head of *Comparative Anatomy*, the shells of mollusca and crustacea are denied place in the skeleton anatomy.

Having carefully studied these phenomena in various parts of the globe, I do not scruple to say that these are great and fundamental errors—the natural fruits of limited observation and unlimited speculation. The growth of arborescent corals most decidedly resembles that of bone, and vegetative increase; take, for instance, the red coral of commerce:—its existence and capacity of organic action depends upon, and is governed wholly by latitude, dip, and inclination. The time required to perfect its growth, the extent of beauty and solidity it attains, are dependant on the same co-operative causes; it springs from seed, and not from cuttings; it advances to a defined state of maturity by gradual and universal expansion of parts; its animal, vegetable, or animo-vegetable juices being governed in action and distribution by the laws or forces governing vegetable species. The trunk and main branches during life always filled with a milk-like juice are subject to incessant action, and when, as the tree, its acquired solidity prevents further expansion, it increases in solidity and progresses towards decay and death. Its mucilaginous bark is analogous to, and performs the same office as the bark of trees, being, in many species, a means of defence, by which they are enabled to repel non-calcareous animals from affixing themselves thereto,—its mucilaginous extremities are as one with, and subservient to, the general increase of the body.

These and all other branchiform corals have a common cementing base of gelatin and albumen, a mechanical mixture analogous in composition to their vital juices, from whence they are derived. In these juices the earths are disposed in solution, and are received into the absorbents passing through the whole system, and giving off the excess by excretion from the extremities through the porous bark, or skin.

The molluscous tribes exhibit analogous action of general circulation, deposition, and continued positive increase, the duration of their expanding power marking their progress towards maturity; and when rigidity of parts of the cementing base overcomes the force of vital action, they then only rapidly acquire solidity, and the withdrawal of the vital juices is the signal of decay and death. Thus cowries enlarge to a certain size, warm tranquil waters being most favourable to their development, the consolidating shell expanding in all its parts, and the lips of the animal increasing by periodical layers of the slime which constitutes its animal juices.

It is not to the skeleton frame of corals that physiologists are to look for a correct explanation of the varied phenomena of vital action; nor is it to the experiments of Liebig in the laboratory, or the microscopical observations of Ehrenberg, that they can look for a correct explanation of vital phenomena. The shells of molluscous animals, the branches of the coral tribes, and the bones of men and animals, upon exposure to atmospheric influence and decomposing causes, yield up their albuminous cement, and the earths, no longer held together, fall to dust: when in the skeleton state, they all exhibit a porous sturucture; but fancy alone can tenant the several cells with minute independant existences. Tubipora generate individually; but even with them the shell is as much a portion of the body as bone is to animals, and is governed by the same laws of vital action; the acquired powers of resistence denoting maturity. The growth and development of naked and of calcareous polypes, is precisely the same; but the accelerated action produced by means of light and heat, generates earths, which, becoming permanent portions of the system, are productive of solidity, and consequently, of more rapid development to a defined limit: both have, most decidedly, a principle of increase, and, with the mollusca, ought to have place in skeleton anatomy.

In the living structure the woody fibre, and the living or calcareous cell of the polype we observe an analogous vital process, increasing by incessant multiplication of their parts and quantities; both are the receptacles and passive agents of the vital fluid, increasing in solidity or density of structure by continued additions of matters similating to their own component parts. From whence, then, gets the latter its lime—the former its carbon? Liebig tells us that the carbon is abstracted from the atmophere. Mr. Lyall talks of lime being supplied to corals and mollusca by springs existing in the bottom of the ocean; and, when driven from his position, he hazards another and still wilder speculation, that it is communicated to the ocean by rivers: still wilder, I say, as it is *impossible* for the strong reefs to form where they are subject to sedimentary deposition from rivers: and again, where the vast coral formations are forming, there is little or no lime held in solution by the waters, there are no rivers carrying lime therein, and the whole area of ocean bed is covered with formations, sands, and the comminuted parts of animals and vegetables.

Liebig tells us that it is well known organic bodies do not generate substances by simple change of modes of combination. This is assertion without meaning—unphilosophical and untrue; for all the substances of the body are either generated therein, or derived from soil or food. We do not say that they generate oxygen, hydrogen, or azote, but when compounds constituting the food are decomposed by the vital process, they are thereby enabled and do enter into other combinations. Calcium stands in the same position as carbon; we find it locally produced under the influence of light and heat, and without reference to the disintegration of ancient rocks and earths—for this increase takes place in those portions of the globe where no diminution is exhibited. In bulk of aggregate it constitutes a very large portion of the earth, increasing with the increase of living species, by means of the vital processes carried on during life, and by the deposition of organic remains in death.

It is admitted by Wallerius, Linnæus, and other writers, that calx is the resolution of animals; but this admission is not sufficient for the requirements of the mind ambitious to trace effects to their first causes. We apply to chemistry, but here chemistry confesses its weakness.—Not so! it passes into the shadowy realms of fancy to find imaginary causes; or, unwilling to proclaim its incapacity, terms it a simple body, a primary product, a boundary beyond which it is presumption to look for causes:—thus the multitude rest upon the oars of uncertainty amidst the troubled waters of speculation.

Nature, however, more liberal than the intelligent atomic body, offers the clue of the labyrinth, of the path by which alone we can enter the temple where the living fountain is disposed, and in the beautiful and sometimes curiously interwoven chains of events constituting Natural Phenomena, we read the history of the past, and are enabled to understand the present and the future. That the elements of air and water permanently change their condition, does not admit of dispute; for otherwise, the matters termed earth, on which we live and move and have our being, would have had no existence. Every animal and vegetable covering the surface-beds of the dry land and waters is the architect of substance, adding to the soil that which has been taken from the soil, and that which has been taken from the elements, the latter changed in mechanical and mathematical disposition by the vital processes of life; otherwise, whence comes this vast, this continuous increase of the earth, tribes and families producing particular compounds: one laying the foundation and building the limestone edifice, another forming and increasing perpetually vegetable earth.

Men talk learnedly, but ridiculously, of earths being formed from the disintegration of rocks: but what analogy is there between the enormously vast vegetable soils of the plains of America, of Asia, of Africa, and of the great and fertile islands of the earth, with the decomposed matters of the earth. They are, for the most part, carbonaceous vegetable bodies and the atomic portions of bodies blended with animal matters; but, in common with all accumulated earths, the subjects of incessant change in their local unions and dispositions as influenced by climate and association. The carbonic acid gas in the atmosphere is wholly inadequate to supply the perpetually increasing demand for carbon; the oxygen of the atmosphere is wholly inadequate to supply the fluctuating demands of organic bodies, and the permanent but still increasing demands of the fossilising and mineralising bodies; the increase of consolidated matter proves the continuous decrease of elemental matter in change.

The vital action of animals and vegetables, which governs, directs, and controls chemical phenomena, so long as the healthy tone of the organic body is preserved, produces a sequence of events peculiar to species, and governed by, and governing, their peculiarity of organic structure; it also is productive of phenomena common to each grand division; thus, we are enabled to separate the animal from the vegetable—the result of destructive distillation, or burning, in the one being ammonia, in the other, carbon. It is the action of the vital prineiple, and the presence of the vital fluid, that ealls chemical action into existence; and the uses of the one and the other are exhibited by the varied phenomena and beautiful mechanism of life, and in changing the modes of combination of the elements and elementary compounds; and this vital action is ever productive of two or more results, which constitute well-known phenomena. Thus, in the simplicity of animal composition, we observe only a gelatinous substance and water—in the simplicity of vegetable structure, carbonaceous matter and water,—water is the pabulum of both, and upon its presence in due proportions the maintenance of vital action depends. From gelatinous animals, or destructive distillation, the compound, termed ammonia, is produced, and another product, termed carbon, which is said to be the fourth element; the oxygen and hydrogen having previously been driven off. The animal body is, therefore, found to be an union of the four substances; hydrogen and azote, being driven off, unite their volumes and form ammonia, and the burnt body being an elastic fluid, termed carbon. The origin of the two elements we know, but whence comes the latter? It is not a natural mechanical compound of the air; it is not a natural compound of the waters; for, in the form of carbonic acid gas, it is inimical to animal life, and under no conditions does it appear to form the nutriment of vegetable life.

(To be continued.)

Ulceration of the larynx.—Mr. Bunn was consulted by a young man, who presented suspicious ulcers on the scalp: part of the glans penis sloughed, and the other part was destroyed by ulceration. He was more than once placed under the influence of mercury, but foul ulcers continued to appear about the root of the penis, and after a time he had cough, pain in the larynx, difficulty of breathing, etc. He died asphyxiated, and on examining the larynx, it was found extensively ulcerated, with exfoliated portions resembling carious bone, imbedded in loose, soft granulations.

NON-QUALIFIED PHYSICIANS.

(To the Editor of the Medical Times.)

Sir,—You would confer a favour on a number of senior students, who miss the usual clinical remarks of the house physician at the University College Hospital, during his morning visits, by allowing me, through the medium of your widely circulated journal, to ask the reason of Mr. Alchin's being appointed to the office during his temporary absence. True, he has obtained a respectable character at the school, and is generally considered a very well-disposed and amiable young man; but he is not a member of any of the licensing bodies, and ought scarcely to hold such a responsible situation, when so many gentlemen could have been found by the Committee, (as was formerly the case, when Dr. Lancaster and Mr. Mercer discharged the duties of resident medical officer, pro. tem.) who were not only duly qualified, and of some standing in their profession, but had also highly distinguished themselves.

I am, sir,

Your obedient servant,

A Student.

University College—July 15, 1844.

TRANSACTIONS OF LEARNED SOCIETIES.

Pharmaceutical Society, June 11th.—Mr. Morson, in the chair. The following papers were read:—*On Iodide of Potassium, with a New Method for its Formation, by R. Phillips, Junior.*

In this communication, Mr. R. Phillips drew the attention of the society to the adulterations practised with regard to the iodide of potassium. He found the following impurities contained in six samples procured at different chemists. No. 1 was strongly alkaline, and contained water, iodate of potash, and a chloride of potassium or sodium. No. 2 was almost the same as No. 1, with the exception that it contained a larger quantity of iodate. No. 3, slightly alkaline, no water, but a trace of an iodate and a chloride. No. 4 as No. 1. No. 5: this sample was almost pure, containing only a trace of an iodate and water. No. 6 as No. 1. He did not consider the vendors were to blame, but that the discredit rested principally with the manufacturer, although at the same time he thought it the duty of every chemist to ascertain the purity of so important a medicine. The tests are extremely simple. The notes of the Pharmacopœia furnish methods for the detection of water, potash, and carbonate of potash. It is stated that ten grains of iodide of potassium ought to decompose 10.24 of nitrate of silver and if more be required, it is owing to the presence of a chloride. This process is however rather tedious and unsatisfactory; it is better to decompose the iodide with nitrate of silver, to wash the precipitate well with distilled water, and then digest it with a strong solution of ammonia. If the filtered solution, acidified with nitric acid, give a white precipitate, it is chloride of silver, and denotes the presence of a chloride of potassium or sodium. In testing for iodate of potash, some of the sample to be examined should be dissolved in cold distilled water, the solution acidulated with tartaric acid, and a solution of starch added. If the mixed solutions do not become of a dark colour, no iodate is present. The salt, if pure, is but slightly diliquescent. The process generally made use of for the manufacture of iodide of potassium, viz. adding the requisite quantity of iodine to a strong solution of caustic potash, boiling them down to dryness, and fusing the salt in order to decompose the iodate of potash formed, is open to many objections. The potash is always added in excess, and Mr. R. Phillips found it impossible to fuse the salt so completely as to decompose the iodate of potash, without rendering some of the iodide of potassium volatile by the heat employed. The principal objections to the process directed in the Pharmacopœia, are, that in order to get rid of all the iron, it is necessary to have an excess of carbonate of potash, and there is always a slight trace of iodate of potash in the salt thus prepared. Another method is by boiling lime with iodine, thus forming an iodate of lime and an iodide of calcium, fusing the mixture to decompose the iodate, and then precipitating the lime by means of carbonate of potash, carbonate of lime, and iodide of potassium being formed. In trying this process, the author found that the protoxide of iron would decompose the iodate of lime, and thus great trouble and loss would be avoided. The protoxide is easily prepared by precipitation with the alkalies from the protosulphate of iron. The precipitate must be washed by decantation, on account of its being rapidly converted into the peroxide, if exposed to the air, until the solution gives no precipitate with chloride of barium. By this process the iodate was decomposed, its oxygen uniting with the protoxide of iron to form peroxide; it was, however, so mixed with carbonate of lime as to be valueless. It was, therefore, requisite to substitute the carbonate of potash for the lime. Peroxide of iron being a sesquioxide, that is to say, containing ono atom and a half of oxygen combined with one of the metal, it is necessary in order that the whole of the iodate be decomposed, that, for every atom of carbonate of potash used, there should be two present of protoxide of iron. The quantities therefore to be taken, are two atoms, or 280 parts of protosulphate of iron, which are to be decomposed into two atoms of protoxide, one atom or 125 parts of iodine, and one atom or 83.5 parts of carbonate of potash, P. L. On account, however, of the liability of the protoxide of iron to become peroxide, it is better to use rather more of the protosulphate. The protoxide when washed is to be mixed with iodine and carbonate of potash, the proportion of water employed being half a pint to an ounce of iodine. The mixture is at first to be gradually heated, and then boiled for half an hour. The solution afterwards ought to be exactly neutral with slightly reddened litmus paper; if iodine be present in excess, which may be ascertained by testing it with a solution of starch, more carbonate of potash must be added; if it be alkaline, more protoxide of iron and iodine. The sequioxide of iron which remains, after being washed until the liquor, when acidulated with nitric acid, gives no blue colour on adding solution of starch, may be heated red hot for a few minutes; a beautifully pure preparation is obtained, which, on account of its ready solubility in hydrochloric acid, might be used with much advantage in the preparation of the tincture of the sesquichloride of iron.

Experiments on Senna, by Mr. H. Deane.

These experiments were undertaken to determine the best method ef extracting the active soluble principles from senna, so as to found thereon a good formula for a concentrated infusion, and also to ascertain the relative quantities of extract contained in infusions of different densities, prepared from several kinds of senna. The kinds of senna employed were, fine picked Alexandrian; small Alexandrian, as usually met with; the same fanned, to separate the stalks, stones, &c.; fine Tinnevelly; and common East Indian. Three sets of experiments were made. In the first, the proportions of the ingredients were calculated to produce an infusion eight times the strength—in the second and third, only four times the strength, of infusion of senna of the London Pharmacopœia. In the first and second sets of experiments, the senna was exhausted by means of a mixture of one part of rectified spirit and five parts of water. In the third set, water alone was used, and a fifth part of spirit afterwards added to the infusion. In every instance the specific gravity was taken with a 1,000 grain bottle; and the quantity of dry extract placed against the specific gravity in the tables, is the quantity contained in the bottleful of fluid at the density specified. The extracts were dried on a sand-bath until they were hard enough to resist any impression from the finger-nail. The result of these experiments leads to the conclusion that the formula first tried is not capable of exhausting the leaves, but that the second is perfectly so, and that if evaporation in the preparation of concentrated infusions is to be avoided as injurious, it is better adapted to the purpose. The third formula is objectionable, inasmuch as the result obtained from it is both thick and less pleasant, and not so easily prepared, because in warm weather the number of hours the water is necessarily in contact with the leaves, induces an incipient state of decomposition, that is avoided by the use of spirit.

With respect to the relative quantity of extract, it was ascertained that Alexandrian senna of the best quality is superior to all the others for the quantity of extract it contains, and is therefore to be preferred. The small Alexandrian siftings of the bales, should never be used without the impurities being separated. Of the East Indian, the large variety (Tinnevelly) is best, but neither are so full of extractive as the Alexandrian, and, not possessing the same fragrance, are not to be preferred to it; but the common variety is better than small Alexandrian in in its crude state. The following table affords a view of the comparative strength of infusions of senna made with hot and cold water, and the quantities of extract contained in them, from which it appears that cold water extracts the soluble and active portion, nearly, if not quite, as well as hot water.

	HOT INFUS.		COLD INFUS.	
	Sp. Grav.	Grs. of DryEx.	Sp. Grav.	Grs. of DryEx.
1. Picked Alexandrian Senna	1.017	36.6	1.017	37.1
2. Small ditto, as No. 3, Second Series	1.0143	30.	1.013	28.5
3. Ditto fanned, as No. 7, 3rd Series	1.016	33.7	1.015	31.1
4. Fannings of ditto ..	1.0114	26 5	1.0109	24.9
5. Tinnevelly Senna ..	1 0155	31.8	1.0158	31.1
6. East Indian ditto ..	1.0135	29.	1.0138	28.7
7. Leaves exhausted by displacement	1.0025	3.5	1.0025	3.3

This table confirms the opinion above stated as to the comparative value of the different kinds of senna, with reference to the extract yielded by them. The small senna of commerce is the siftings of the Alexandrian, and contains about one-third its weight of stalks, stones, and argel leaves, frequently more, which must of course lessen its efficacy as a medicine. The infusion No. 2, was made with such, and the result shows its inferiority. No. 3, was the same small senna fanned, and although one third of its weight was removed as impurities, it still retained a considerable quantity of argel; the weight of the infusion shows a decided improvement over the former. No. 4, made with the fannings or refuse of No. 2, shows by its low specific gravity the cause of the inferior weight of the latter; the mean of No. 3, and No. 4, being about the same as No. 2. Nos. 2 and 4 very soon became mouldy, particularly the latter. Tinnevelly senna stands next in value to the fanned small Alexandrian. The infusions of this senna were beautifully bright, but not so fragrant as that from pure Alexandrian. The common East Indian senna seems to possess least extractive. The infusions were bright, and much darker than any of the others, and least agreeable in smell. The two last kinds produce by far the brightest infusions both hot and cold, but in each case the cold was not so bright as the hot, although it readily becomes so when heated. Moreover, they appeared to keep much better than the others. The following table shows the quantity by per cent. in some of the infusions of the specific gravity above mentioned:

Specific Gravity.	Dry Extract, per Cent	Specific Gravity.	Dry Extract, per Cent.
1.0595	17.338	1.0135	2.861
1.0454	13.822	1.0114	2.620
1.0309	10.572	1.006	1.123
1.0298	10.506	1.0057	1.083
1.0276	9.410	1.0045	.647
1.023	8.504	1.0038	.481
1.017	3.598	1.003	.418
1.016	3.316	1.004	.597
1.0143	2.957	1.005	.796

Amidst other avocations there is great difficulty in drying the extracts with that degree of nicety that is requisite to render them of much value in the calculation, yet to a certain extent they confirm the general conclusion; but reliance may be placed on the infusions recorded, and the general conclusions are deduced from them.

HOSPITAL REPORTS.

WESTMINSTER HOSPITAL.

Retention of urine, caused by stricture: phlebitis of the cephalic vein: death.—John Lamb, ætat. 40, a sword cutler, residing in Hatton Wall, was admitted into Matthew's Ward, Feb. 4, under Mr. Guthrie. He is of the nervous temperament, short stature and thin, with a peculiar wildness of the eyes, which was afterwards accounted for by his friends, who said he had been flighty for a long while. He attended as an out-patient on the morning of the 4th, in consequence of retention of urine, which had existed since twelve at noon the preceding day. He says he has had stricture for seven or eight years; since the commencement of which he has been subject to occasional pain in the lower part of the abdomen, and had also had an attack of retention of urine, which, however, was removed before ten hours had elapsed. He has had "gonorrhœa and lues frequently during the last twenty years, and has used injections. About sixteen years ago he had an attack of paralysis of the left side of the face, owing to a cold. He is of a constipated habit of body, and addicted to spirits.

He was forthwith put into a warm bath, in which he continued for about an hour; attempts were then made to pass a catheter, and afterwards a bougie, but in each instance the proceeding was attended with failure, a few drops only of urine coming away on the withdrawal of the instrument. He was consequently made an in-patient, and was bled from the arm, and leeches applied to the perinæum; fomentations were employed, and he was again put into a warm bath. In the evening he passed half a pint of water, and about six in the morning another half-pint. A little while afterwards, a mad whim seized him; he jumped up suddenly, left his bed, and ran out of the ward, but was caught at the door of the hospital, whence, after some struggling, he was brought back. The bandage around the arm from which he was blooded, was loosened in the struggle, the incision re-opened, and some blood was lost. The previous evening he had a dose of castor-oil, and this morning an injection was administered, by which an evacuation from the bowels was procured. Mr. Guthrie saw him at the usual hour of visiting the wards, and endeavoured to pass a small elastic catheter without the stylet, but could not succeed, the instrument only entering to the extent of about four inches and a half. A small white bougie was afterwards passed readily into the bladder. Mr. Guthrie directed that the fomentations should be continued, that the man should be kept in bed, and on low diet.

6. He has passed a good night; during yesterday, the bowels being constipated, a dose of purging medicine was given, without producing the desired effect. Two drops of croton-oil were then administered, and repeated, by which means a stool was obtained, accompanied by an evacuation of urine. He says that prior to the retention occurring, but subsequently to the formation of stricture, the stream of water was very small, and he was obliged to void it frequently in the course of the twenty-four hours, passing about half a pint at a time.

7. He is now much in the same situation he was in before the retention of urine came on; he can only make a small quantity of water at a time. Bowels open.

8. He complains of very great pain in the right arm, (from which he was bled). It appears much inflamed, tumefied, and harder than natural. Pulse frequent, hard, and sharp: has a slight headache; skin hot; tongue furred; bowels not open since yesterday. R. Hydrarg: chlorid: gr. iv. pulv. antim. gr. vi.: pulv. rhei. gr. vi.: M. fiat pulvis statim sumendus. Cold lotion to the arm.

9. The inflammation and tumefaction extending; pulse quick, sharp, and frequent, tongue furred. Continue.

11. A deep blush of inflammation is spreading up the arm, and over the pectoral muscle, in the course of the cephalic vein: the pulse is hard and frequent: the arm continues swelled and hardened; the tongue loaded with a deep brown fur: bowels open by medicine which he took yesterday: countenance flushed and anxious: the wild expression of his features appears more marked: complains of great pain in the arm, extending to the chest and back. He has had some complaint of the chest for some time, has cough, and brings up a thick viscid expectoration to a considerable extent. He makes water better. Mr. Guthrie whose attention was particularly drawn to the case by the house surgeon, directed the application of the nitrate of silver in substance, over the whole course of the inflamed vein, to be followed by a poultice.

12. He was exceedingly restless during the night: at present, one p. m., he is evidently sinking: he lies on his back, breathing with great difficulty: the surface is nearly universally cold, and is bedewed with cold clammy sweats: the pulse is very feeble, and scarcely to be felt, and he is constantly wandering.

He died in three quarters of an hour after the visit.

Autopsy—The coats of the cephalic vein were thickened and inflamed, and pus was found in its interior to the extent of two inches; the inflammation extended to the heart, and some of the veins in the neighbourhood had their coats thickened. The stricture was seated at the bulb; the lungs were generally diseased, with several vomicæ in their structure; the cavity of the pleuræ contained about six ounces of purulent matter. The head was not examined.

Contusion of the epigastric region—Daniel Tollend, ætat. 58, admitted into Matthew's Ward under Sir Anthony Carlisle. Tollend is a labouring man, employed in the building of the Tothill Fields New Prison, and was so engaged on the 5th inst., when one of the principal girders broke, and the roof fell in, burying him and two others in the ruins. It appears that the main girder of that particular arch, made of cast iron, had unfortunately a flaw in it, which had not been discovered; it had been tested by an appropriate process, and was found capable of bearing a certain weight, which was laid on it, but, in addition, several other iron girders extended from the sides of the arch to this, and their increased weight was more than it could support, more especially as several beams, which tended to give it additional strength had been incautiously removed. It accordingly gave way, and constituting as it did, the principal support of the roof, brought it down immediately afterwards. The whole weight which fell, was computed at forty tons. Of the two men who were involved in the ruins, one was killed on the spot, and the other taken to St. George's.

When Tollend was admitted, he was exceedingly restless, and apparently in great pain, rolling his head about, a bloody foam issuing from the mouth, and moaning continually, with a full, slow pulse. He was either unable, or unwilling, to answer questions, except in a low, muttering tone, so as not to be understood; the face, hands, and ears were covered with powdered mortar; the conjunctiva of each eye injected; no fracture of any bone could be discovered, nor was there any injury of the head. The eyes were well cleansed by means of the syringe, and oil dropped in to neutralize the lime, and prevent its caustic action. On recovering from the shock, he complained of great pain and weight in the epigastric region and upper part of the chest, for which he was bled from the arm, and forty six ounces of blood abstracted with great relief. Fomentations were directed to be applied to the parts injured.

6. Is much better: pain diminished: pulse full and frequent, about 80; tongue rather furred; bowels open; left eye rather inflamed. The fomentations to be continued.

7. Going on well; the pain is much lessened, and is complained of principally in the right side; bowels open.

11. The pain in the epigastric region has nearly disappeared, but he suffers from pain in the arm in which he was bled; on examination, it was found to be rather swollen and inflamed. A poultice to be applied to the arm, and he is to have a dose of house physic.

12. Inflammation and swelling of the arm diminished: *cont.*

13. Gout has supervened in the great toe of the left foot.

15. Is better: bowels open; free from pain, except in the foot.

19. Discharged, cured.

LIST OF ENGLISH GENTLEMEN WHO HAVE GRADUATED IN MEDICINE IN THE UNIVERSITY OF GIESSEN SINCE JUNE, 1840.

1840.
W. Fiffen Pliff, M.D. July
T. Beard, from London, M.D. August
L. Playfair, Ph D, now prof. of chemistry in Royal Institution, Manchester, Aug
J. H. Gilbert, of Nottingham, Ph.D. Aug.
J. Stenhouse, Ph.D. of Glasgow, Aug.
Fraser, of Scotland, M.D. Oct
T. Laurie, of Edinb. M.D. Oct
W. H. Brown, M.D. of Lond. Oct.
G. Rickwood, of Giessen, M.D. Nov.
S. S. Brome, M.D. Nov.
C. Mayberry, of London, Ph.D. November

1841.
L. Blackmore, M.D. Jan.
T. Piddock, M.D. Jan.
C. O. Hocken, of Falmouth, M.D. February
Harrell, M.D. Feb.
E. Gee, of Bristol, Ph.D. Feb.
Fetlow, M.D. from Liverpool, March
R. Merry, of Lond. M.D. April
J. Jones, M.D. April
G. Irdel, of Southampton, M.D. April
Culverwell, of London, M.D. April
E. A. Turley, M.D. May
E. Mallet, of Dub. Ph.D. May
R. Smith, of Scotland, Ph.D. May
E. Clarke, M.D. May
J. C. W. Lever, of London, M.D. May
T. Hughes, of Lond. M.D. May
W. H. Bayes, of Brighton, M.D. June
T. Brown, of Lond. M.D. June
T. Owen, of Lond. M.D. June
H. Clarke, M.D. June
W. S. Farquharson, Scotland, M.D. June
H. Bird, M.D. July
T. C. L. Ehlers, M.D. July
G. Tillay, of Lond. Ph.D. July
L. Labo, M.D. July
H. Munro, of Kingston, M.D. August
G. Fownes, Lecturer at St. George's Hospital, London, Ph.D. August
Kirkland, M.D. September
Coward, M.D. Sept.
E. Schunk, of Manchester, Ph.D. Sept.
M. Brown, M.D. Sept.
Copeman, M.D. November
Cochrane, of Glas. M.D. Nov.
Baird, Scotland, M.D. Dec.
Hampton Hale, of Sussex, M.D. Dec.
Rainer, M.D. Dec.

1842.
F. Watt, Scotland, M.D. Jan.
T. Edwards, M.D. Jan.
S. Frost, M.D. Feb.
Jefferies, London, M.D. April
Collis Barker, M.D. April
R. Wake, M.D. April
G. Black, M.D. April
Mackenzie, M.D. April
Richards, of East Indies, M.D. April
W. Francis, sub-editor of the Philos. Mag. Ph.D. April
Rayner, M.D. May
R. Lightfoot, M.D. May.
Holland, M.D. May
Harrison, Manch. M.D. May
Swan, Ph.D. May
Sleigh, M.D. June
Scratchley, M.D. July
Chambers, M.D. July
Adams, of Scotland, M.D. July
Prof. Penny, of the Andersonian University, Glasgow Ph.D. July
W. Radcliff, of London, Ph.D. July
Ayre, M.D. August
Edmonds, M.D. August
Clark, M.D. Aug.
Chamberlain Hood, M.D. Aug
Turner, of Scotland, M.D. August
Monro, M.D. August
Amos Coates, M.D. Aug.
Prof. Ronalds, of Yorkshire, Ph.D. August
Lees, Ph.D. September
Edwards, Ph D. September
J. Paxton, M.D October
Astley Holt, M.D. October
Harrison, Ph.D. October
H. Turtle, Ph.D. October
Roden, Ph.D. October
Read of Kensington, M.D. November
Seymour, M.D. from York, November
Magor, of Hungerford, M.D. November
Robertson, M.D. of Portsm. November
Pearson, M.D. November
Taylor Gray, Ph.D. Nov.
Winer, from Bath, Ph.D Nov.
Jackson, from Duckenfield, Ph.D. Nov.
Davies, Glamorgan, Ph.D.
Woodman, Ph.D. Nov.
Llewellyn, M.D. December
Rooke, from York, M.D. Dec.
Husband, M.D. Dec.
Osborn, December
Mountford, Ph.D. Dec.

1843.
Ilicks, of London, M.D. Jan.
Garde, M.D. Jan.
Symons, M.D. Jan.
Davies, M.D. Jan.
Guigley, from Ireland, M.D. Jan.
Martin, from Chichester, Feb
King, M.D. (honoris causa) February
Jones, M.D. February
Meldola, M.D. Feb.
Blythman, Ph.D. Feb.
Williams, Ph.D. Feb.
Milnes, Ph.D. Feb.
Barker, M.D. March
Cooke, M.D. April
Lee, M.D. April
Howard, M.D. April
Fenton, M.D. May
Lovell, M.D. June
Hopkins, M.D. June
Ritchie, M.D. June
Tender, M.D. July
Jones, M.D. August
Adams, M.D. Bristol, Aug.
Smyth, M.D. August
Hodges, M.D. from Irel., Sept
Stubbs, M.D. September
Cronin Ireland, M.D. Oct.
Gardner, M.D. November
O'Ferral, M.D. November
Arthur, M.D. of Lond. Dec.

1844.
Adams, M.D. Jan.
Scott, Ireland, M.D. Jan.
Baker, Ireland, M.D. Jan.
Gibbon, M.D. Jan.
Boye, Ph.D. Jan.
Kernot, Ph.D. Jan.
Goodliffe, Ph.D. Jan.
Murray, Ph.D. Jan.
Wansbrough, M.D. Feb.
Wilmot, M.D. Feb.
Palmer Franklin, M.D. March
Pyne, Ireland, M.D. March
J. Sheridan Muspratt, Ph.D. March
Paull, London, Ph.D. April
Taylor, Notting., M.D. May
Linton, M.D.
Hunter, M.D.
White, M.D.
Price, M.D.
} May
Roberts, M.D. June
Merriman, M.D. one of the Queen's physicians, Jun
Pugh, M.D. June
Bartleman, M.D. June
Achmuty, M.D. June
Brindley, Ph.D. June

PENCILLINGS OF EMINENT MEDICAL MEN.

DR. ABERCROMBIE.

In another and not unprominent niche of our portrait-gallery of eminent practitioners, none, we feel assured, will hesitate to concur in the opinion that the distinguished Abercrombie is deserving of a place. He is, indeed, almost the only physician in the northern metropolis whose name is to any degree known beyond the bounds of the Scotch capital, and he is assuredly the only one—if we, perhaps, except Alison—whose fame, since the days of Gregory, is entitled to the rank of European. Thomson, his early but now superseded rival, may in some measure have, in the outset of his career, equalled him in reputation as an author—for that gentleman's now almost forgotten work on Inflammation once enjoyed a name not inferior to the best of Abercrombie's: but Thomson, since, has been forgotten—forgotten in his politics; his busy, prying, active, and indefatigable disposition has found more congenial pleasure in twisting the Whig influence of that city, and even latterly of the Government itself, in whatever direction he might will. Hamilton, too, in his peculiar branch as an *accoucheur*—a department in which he has rarely been equalled, and never excelled—may at one period have possessed a celebrity scarcely less limited, and a practice, perhaps, more lucrative; but Abercrombie is the only one of the three whose name is likely to last beyond his own day.

This eminent physician is the son of a Scotch Presbyterian clergyman, and was born in Aberdeen, some time, we believe, about the year 1781, when his father filled one of the chief charges in the place, combined, if we mistake not, with a chair in the University; to the rectorship of which, the subject of this sketch, a few years ago, was elevated. He, of course, enjoyed the benefit of a good education—an advantage of ready access to all the natives of that country, and in no district of it more so than in Aberdeen—a city rivalling, in this respect, all England itself, if there be any truth in the saying, "England has two Universities, and so has Aberdeen," quoted by the Southrons in derision, but with all the unctuousness of complacency by the "cannie" men of the North: but to the character of a high classic he has assuredly small pretensions. The Scottish universities, indeed, have scarcely ever produced a man who could vie with those of the South: the metaphysical disposition of the people, and their necessary gravitation to "the useful," incapacitate them from such pursuits; and the habit of not committing to memory, as in England, portions of the authors they have studied, prevents them from making any due parade of the little they have learned. But this may be considered a small objection in the qualifications of a physician, whose reputation does not depend, like the late Sir Henry Halford's, mainly on the facility with which he could construe the *Anapæsta* into wretched English hexameters, or twist Latin into still more miserable nonsense verse.

A deficiency, such as this, might have been fatal to Abercrombie, in the South, where we have heard it gravely said, in answer to remarks that Halford was superficial, and Chambers not particularly bright, "Aye, but see what admirable classies; they have the whole *Anabasis* at their finger-ends:" but, in Edinburgh, whither Abercrombie, after following the initiatory course of medical instruction in his native city, removed to complete his studies, and enter upon practice, it had no such effect. The speculative turn of his mind, on the contrary, was highly conducive to his success in a town especially attached to such considerations and in which, under the name and form of a Club, called the "Speculative," and composed of Playfair, Dugald Stewart, Brougham, Murray, Leslie, Walter Scott, Jeffrey, and Moncrieff, such discussions were then carried on with a brilliancy, a force of illustration and of fancy, which redeemed from that repulsive dryness, which had previously, and has since, been their lot. In this *arena*, however, Abercrombie was not destined to become conspicuous: his comparative youth and shrinking timidity disqualified him from then entering into conflict with these intellectual giants; and when, after a long course of study and reflection, he found that he obtained a mastery of the subject, perhaps more complete and profound than theirs, the pen, and not the tongue, was the instrumentality by which he choose to give his thoughts utterance.

It was, we think, in 1813, that Abercrombie first gave his thoughts, on the mental faculties, to the world; and his work on the Intellectual Power, at once stamped him as a writer of a high order, and what, perhaps, he valued more, as a physician of rising reputation. The publication was unquestionably worthy of its fame. It contained many views, original, if not profound; though it may be doubted whether he has pursued his investigations of the subject to that point of which it is susceptible, or whether he has much surpassed the researches of D'Alembert, Condorcet, and other French philosophers of the last century, many of whose works are now consigned to oblivion, amid the unmerited and indiscriminate obloquy heaped on all (with the exception, perhaps, of Voltaire, whose works have been too celebrated to die) to whom the term of Encyclopediast could in the slightest degree be applied. Abercrombie's work, however, though based on their speculations, is carried out on a principle diametrically opposed. The views of the French writers, it need scarcely be stated, depend mainly on materialism, and are generally supposed to inculcate infidelity; while the early education and inherent bias of the Scotch physician have given a tone to his pages almost fanatically religious. Presbyterianism, of the strictest Geneva school, is stamped on every line; and the stern spirit of Knox, the milder but equally intense fervour of Wishart, were never more conspicuously displayed in times whose rude and savage violence prompted the one to hurl out his anathemas in the pulpit, or the other to maintain his opinions at the stake, than in the modified views of Abercrombie at the present day—modified only because the age has become more civilized. Though passionless and cold-blooded, all their fervour he has adopted, all their fanaticism worked out: and to such an extent does he seem imbued with the spirit of his countrymen, that, in several parts of his work, it may be doubted whether he is not also a devout believer in the mysteries of the "Second Sight." One or two illustrations, which occur to us at this moment, would lead to the inference that the Doctor is either a convert to the authenticity of that earliest instance of *Clairvoyance*, or has been peculiarly careless in the selection of his cases: and his enmity to materialism is so great, as to have led to errors of an opposite extreme. The soul, the mind, and the vital principle, are so confounded occasionally in his volume, that it is problematical whether he does not consider the whole of them as identical; and this leads not unfrequently to inferences so unfounded, that one is at times disposed to regret that he did not follow the sage example of a Borough surgeon, (Mr. Travers) who, when asked at a large assemblage—congregated to discuss the question, "What is Life?"—to enlighten the audience with his opinion on the point, contented himself, if not his hearers, by the brief, sapient, and enigmatical answer: "All I know is, that life is not death," and sat down as satisfied as if he had given utterance to the most profoundly Pythian remark, instead of entering, as might have been anticipated, into a broad and comprehensive survey of the subject of discussion, in which, if he had no views of his own to present, he ought, at least, to have shewn some familiarity with the writings of others on the subject. Abercrombie's errors are of an opposite order; but it is clearly to be perceived that if his speculations be carried to universal application—without which, speculation can never rise into principle—they become equally vague; and, if adopted, would lead to the inference that an idiot must have a mind because he has a spirit, or that an ox must be destitute of life, because it has not a soul to be saved. Such are the preposterous results which follow the identification of these powers, and the application of the most *religious*, praiseworthy tenets, when thus carried out *ad extensum*, not to say *infinitum*.

This view of the subject, of course, prevents Abercrombie from taking any bold and comprehensive grasp, or from following out his considerations from great primary causes to equally gigantic ultimate results. But it is, perhaps, superfluous to criticise, or even thus cursorily to allude, to a work which has gone through eight or nine editions, and may thus be considered as now alike removed from censure and from praise. The title of the volume has possibly, in some degree, led to this result; and it can scarcely be matter of great objection to the author, that he has failed to realize its import. The only other important publication of Abercrombie's—that on the Brain—is of a very inferior order. It contains little or no originality, and may be considered merely as a compendium or embodification of the recognized opinions of others, with a few general remarks and peculiar cases to corroborate his own ideas of the subject. But, in this respect, it differs little from many standard medical works, few of which, if examined minutely, will be found materially to transcend its immediate predecessor in any striking or important truth: and it is, perhaps, not matter of regret that this should be the case, as it leads to the promulgation of substantial facts, instead of baseless theories. Abercrombie's work is, in this respect, one of the best on the subject; though it has never attained, and in all probability never will attain, the popularity of his volume on the Intellectual Powers. This opinion, we are aware, is not generally entertained. On the contrary, the one publication is reckoned so inferior to the other, as to have given rise to the supposition that they were not the same writer's productions; or that, like Hamilton, of single-speech notoriety, the author had so exhausted himself in one great effort, as to be incapable of a similar and a second.

These books however have had the great end of most publications in medical literature: they have had the effect of introducing the author and maintaining him in lucrative and extensive practice. Shortly after the publication of his first volume, Abercrombie removed from an obscure quarter of the old town of Edinburgh to a substantial residence in the new, and he has ever since maintained ground as the first physician in that city. Several aspirants have disputed with him the palm; but though some have latterly run him close, he has had no real rival; and if his practice be now less productive than formerly, the circumstance may be mainly ascribed to the retrograding condition of the northern metropolis, which in aspect, and science, and literature, and every thing save litigation which there flourishes in all its pristine vigour, presents a melancholy picture of decay, and forcibly recalls to recollection a saying of Virgil: "*Ilium fuit*—it once was Troy.

But Abercrombie possesses other claims to practice than his works. His diagnosis is rapid and rarely erroneous, while his exhibition or administration of medicines is so simple that some members of the profession who rejoice in an infinity of remedies do not hesitate to stigmatise him as a quack. This, it must be owned, is a merit in our estimation and perhaps that of the public too. Radcliffe beginning life with ten remedies for one disease, and finishing with one remedy for ten diseases is a fact well known. And Sir Walter Scott was wont to tell a story of recognising a *ci-devant* gardener under the imposing wig and solemn aspect of a village Esculapius whom he had been constrained to consult in the course of a journey through the north of England: "Gracious! Tammas (Thomas) is this you?" said the traveller on making the discovery, "What in the name of Heaven do you mean? how can you practice this imposture?—"Its nae imposture," replied Thomas, "and I do very weel. I keep to twa simples—calumny and laudumy. "Simples indeed!" rejoined Sir Walter, declining to receive any of the calomel or laudanum thus prescribed; but in his later days when he became a subject for the exhibition of half the medicines in the Pharmacopœia, entertaining a profound conviction that this *quondam* domestic did infinitely less mischief than if his stock had been more extensive. Abercrombie's remedies are not confined to a range so limited; but in his mode of treatment he trusts more to aiding nature than evincing art, and he has often been eminently suc-

cessful: many cases are known in which he succeeded by the simplest means, and not a few in which he has saved the patient's life merely by ordering the discontinuance of the harsh remedies employed by others, when he was called in at a period when all seemed hopeless.

Another source of Dr, Abercrombie's success can not be wholly passed over in an impartial sketch such as this:—he has been what is termed a religious practitioner. In no part of the realm is piety held in higher estimation than in Edinburgh, and the circulation of that and its counterpart, cant, is so general that it becomes difficult to distinguish the false coin from the genuine. Some of the medical men in that town, indeed, carry the Pharasaical leaven to such a height that they may be seen distributing halfpennies in the highways—forgetting the maxim that even the one hand ought not to know what the other doeth. But with such professors it is no easy matter to discover the saint from the hypocrite. Abercrombie we believe to have been sincere: though his christianity has been said to consist quite as much in faith as in works, and hence he has been accused of having in the outset of his career carried his prayers to a more outrageous length than when his success gave his gratitude even greater occasion for them: but as with the presbyterians the profession is as much in vogue as performance, words as deeds, "faith not works," as they say, we must not condemn our worthy physician because he agrees not with the standard of a more tolerant country. Fortunately for Abercrombie, his works—like the bricklayer killed by a fall from a scaffold—his works went before him; his paternal descent and education supplied him a pious reputation in advance. He was accordingly readily received amongst the elect, and he profitted accordingly. Yet strange to say, in the greatest instance in which, so far as our information extends, he is reported to have extended his "faith" to "works," obloquy has partially availed him. In the recent schism of the Scotch church he has, we believe, espoused the cause of the seceding clergy, and is said to have subscribed for their support to an extent which is rumoured to have impaired his fortune. By the party whom he joined he has of course been lauded in the extreme, that he has been abused by the other: so that if his popularity has suffered in extent it has profited in intensity.

This early introduction to the "religious world" superseded in Abercrombie any necessity for that connection with Hospital practice which in Edinburgh, as well as in London, is considered desirable for an individual's success. He has accordingly never been attached to any such institution, and has, consequently, neither had nor sought any opportunity for inculcating his precepts beyond that afforded by his publications. A connection with the University of the place he has equally shunned, and it may be doubted whether even he had been desirous of establishing such, he would have obtained a chair within its walls. In the early part of his career the College professorships, were exclusively bestowed upon their satellites by the Conservative Town-Council and Government of the day; and Abercrombie's attachment in some degree to Liberal opinions was of course sufficient to shut him out. When the Whigs succeeded to power, Dr. John Thomson, who—to use Mr. Joseph Hume's elegant phraseology—went "the whole hog" along with him, acquired an influence which no ability of any rival could ever have coped with; and never, it must be owned by those attached to Liberal opinions, was influence more banefully exerted. The whole object of the man seemed to be to provide for himself and his sons. Earl Grey himself never showed such "nepotism"—as this ungraceful motive, by a species of Hibernicism, is termed.—Chairs were taken and chopped with as little ceremony as if they had matter of ordinary huckster. One day a professorship was instituted for the benefit of this disinterested father on his mere assertion that it would prove beneficial, and on another, his son was smuggled into the seat on the allegation that he could read the Lectures just as well as the paternal manager himself. When this was objected to, a new manœuvre was put in force. Failing to get his offspring appointed immediately to succeed him, a convenient friend was put into the place; the son or sons were transferred to like endowments in Aberdeen, Glasgow, or St. Andrews, whence as vacancies occurred they were to be again brought back to the parent city; and all this jobbing was performed as openly and tolerated as tacitly as if there had been no impropriety in the matter. In the chairs at the disposal of the Whig or Whig-radical Town-Council, matters were managed just as indelicately, and these worthies, if not for money at least for money's worth, dispose, and still do dispose, of a chair or a church with just as little ceremony as they would retail a *duodecimo* or vend an umbrella. With such a system any man with the spirit of a man would of course disdain to mix himself up; and Abercrombie, if he ever entertained any such aspirations, is to be honoured for abandoning them when they could be acquired only by a sacrifice of all self-respect. But his retiring habits and lucrative employment in all probability prevented him from indulging in any hopes of this kind; and his time has been perhaps more profitably and agreeably spent amongst his patients or in the bosom of his family.

In person Dr. Abercrombie is a man of short stature, good person, and large well-formed head, with that tendency to the development of spinal deformity which we understand is perpetuated in his offspring. His address is tolerable, and his temperament is cold; evincing little desire to mingle with his fellow-men, and just as little active disposition to sympathize in their sufferings. Nevertheless he bears a fair character for being disinterested and benevolent, and if to this he adds the merit of being beneficent, his beneficence is exempted from the imputation of being ostentatiously exhibited. His large and lustrous eyes indicate intellectual energy, his high and massive forehead capacity for, if not habits of reflection. The lower part of his face presents an aspect less favourable. His countenance is seen to most advantage in repose, when it evinces an appearance quietly philosophic. When he smiles, the expression is less agreeable, and on the rare occasions in which laughter is indulged, the appearance of the mouth becomes coarse. Still on the whole, we believe him to be an amiable man, and he comports himself with modesty. He rigidly adheres to the old professional habits, or habiliments, of blacks and "tights," which show off his small, but well-formed figure to advantage. Though upwards of sixty, he exhibits few indications of age, and the ample hair towering over his lofty forehead, though gray, is so ample that, if a patron of the Rowland, he might be appealed to as an instance of the wonderful virtues of Macassar. Abercrombie, though punctilious in his attire, however, lies under no such imputation of foppery. Though some—of his enemies perhaps—have represented him to be penurious, there is, perhaps, just as little foundation for the allegation as for the representation once in vogue that he was not the writer of the works which circulate under his name. A desire to provide for a numerous family, of daughters exclusively and approaching half a score in number, may possibly have given rise to this imputation, and his retiring habits may account for that inhospitable disposition which has been sometimes laid to his charge.

PERISCOPE OF THE WEEK.

HYPERTROPHY OF THE EYELID.--[This and the six following articles comprise the principal contents of the last number of the Lancet.] Mr. Liston relates the case of a woman, thirty-four years of age, who had laboured under this deformity from infancy. When she came under his care, the left upper eyelid was very much enlarged and thickened, and hung down upon the cheek, reaching as low as the ala of the nose; the skin covering the inner two-thirds of the lid was natural in appearance, but on the outer third the sebaceous follicles were enlarged, and towards the outer angle there were two flat oval elevations, like soft warts, studded with the enlarged follicles. The mucous membrane was more hypertrophied than the skin, and granular, protruding below the margin of the eyelid, and forming the lower part of the tumour. The disease was attended with considerable muco-purulent discharge. The substance of the cheek was partly wasted from the pressure of the hypertrophied eyelid, and the woman was somewhat out of health. The eye was quite sound, and the sight perfect, but weak. The patient's health having been improved by appropriate medicines, an operation was performed as follows, to remove the deformity under which she laboured. An elliptical portion of skin, an inch wide at its middle part, and embracing the diseased structure, was removed by means of a small knife, from the upper surface of the eyelid, and the edges of the wound were brought into accurate contact by four points of the interrupted suture. Water dressing, and strips of isinglass plaster were applied. The sutures were removed two days afterwards, and considerable contraction took place by the fifth day, and continued to do so. The report a fortnight after the operation states that the lid is very much smaller, the margin now extending much beyond the edge of the orbit; the mucous membrane however protruded more than before, and the exuberant portion was consequently excised.

EXCITEMENT OF UTERINE ACTION.—Mr. Tyler Smith observes that uterine action may be excited in either of the three following modes:——1st, by the direct action of the vis nervosa from the central organ, the spinal marrow, in the direction of the motor nerves distributed to the uterus:—2ndly, by the immediate action of the uterus itself, in virtue of its own irritability, on the application of an appropriate stimulus: and 3rdly, by the reflex action of the vis nervosa along incident nerves proceeding to the central organ, and thence reflected by motor nerves to the uterus. An illustration of this example of reflex motor action is to be found in the uterine contraction, and dilatation of the os uteri, excited through the medium of the pneumogastric nerve in the stomach during nausea and vomiting, as shewn by the constant results of practical experience. Mr. Smith remarks that while the fact of the double sympathy between the uterus and the stomach has long been well-known to practical accoucheurs, its occurrence has never been explained on the principles of reflex motor action. The popular adage that "sick labours are always safe," thus meets with an explanation as well as confirmation of its truth.

TRAITEMENT ARABIQUE IN OBSTINATE CUTANEOUS AFFECTIONS.—Dr. Dangerfield states that he has seen the *traitement arabique* employed very successfully in the south of France in the treatment of obstinate cutaneous affections, such as maculæ syphiliticæ, syphilitic psoriasis, idiopathic chronic eczema and psoriasis, and it has even effected a cure in a few weeks in cases of syphilitic psoriasis, where mercury pushed to salivation, decoction of the woods, mercurial baths, nitric acid lotions, &c. have been administered without permanent benefit. The *traitement arabique*, of which a very full account was given in the last number of the *Pharmaceutical Medical Times*, from the pen of M. Payan, consists in the employment of pills, an electuary, a decoction, and what is called dry diet. The pills are made with half a drachm of quicksilver and half a drachm of bi-chloride of mercury, rubbed together, and then a drachm of senna, a drachm of pellitory of Spain, and a drachm of agaric, finely powdered, are mixed with them until the mercurial globules have disappeared, after which they are incorporated with honey, and divided into pills weighing 4 and 6 grs, each. The electuary consists of six ounces of sarsaparilla root, three ounces of China root, one ounce of dried nutshells, two drachms of cloves, powdered, and mixed with honey. The decoction, according to Dr. Dangerfield, is a simple decoction of sarsaparilla, made with two ounces of the root to three pints of water, boiled down to a quart. M. Payan describes it as a decoction of China root and sarsaparilla. The medicines are given in the following manner:—a pill evening and morning, followed by a wine-glassful of the decoction; an hour after the pill, a drachm of the electuary, gradually increased to six drachms, is to be taken, the decoction being drunk at intervals during the day. The *diete seche* consists in the

sole use of cakes, biscuits, and dried fruits, such as nuts, walnuts, figs, almonds, &c., as articles of nourishment, all others being rigorously avoided save in very debilitated subjects, who may be allowed a broiled mutton chop once a day. No drink, except the decoction, is to be taken, and this plan of dieting is to be continuously pursued for twenty-five, thirty, or forty days, and more.

Abscess of the liver and ovarian disease.—Mr. Hogg was consulted by a woman, 55 years of age, who presented symptoms of general disorder of health, with ascites and hepatic affection. The liver was hard, considerably enlarged, and tender on pressure. Under the use of taraxacum, aperients, and alterative doses of mercury, she improved somewhat, but the dropsical effusion continued to increase, she was tapped, and twenty four quarts of fluid drawn off. Its consistence was that of olive oil, horribly offensive, and of a greenish-yellow colour. When the abdominal enlargement had been thus reduced, a lobulated tumour, extending beyond the pelvic into the abdominal region, measuring ten inches in length by five or six in breadth, was discovered. It was extremely tender on pressure, but pain was complained of when the patient was quiescent. Moderate antiphlogistic treatment was adopted, and the use of the vapour bath, under which she rapidly improved, but the appearances of recovery were delusive. The fluid again and again accumulated, paracentesis being performed about twenty-nine times before death, which occurred on the 8th of last March, about three years after Mr. Hogg was first consulted by her. The examination of the body showed the liver to be greatly enlarged and of a dark slate colour. On an incision being made into it, there gushed out a dark grumo-purulent fluid, having a most offensive smell. The organ seemed to have become one extensive abscess, but little of its parenchyma remaining. The ovaries and uterus at first sight seemed blended into an immense diseased mass, but a more careful examination showed that the uterus and Fallopian tubes were free from disease, except an increase of vascularity. The ovarian tumour appeared to be composed of cells, the exact nature of which could not be ascertained, as they seemed as if crushed into each other. The diseased mass was very vascular, several of its arteries being of considerable size; it appeared to be about one-fourth the size it presented after the first tapping.

Cyanosis.—A female, twenty years of age, was admitted into the Hotêl Dieu, under the care of Dr. Honoré, presenting all the characteristics of cyanosis in the most extensive degree. There were not many signs of puberty, and the understanding was imperfectly developed. The præcordial region was not prominent; the dulness was two inches and a half high, and three and a half in width; the apex of the heart was reclined on the fifth intercostal space; impulse smart and short, but considerably stronger and more extensive than natural; it was followed by a diastolic back stroke; opposite the apex of the heart the two sounds were perceived, with an appearance of systolic murmur; but the first was a loud prolonged bellows-murmur, with a very sensible purring tremor, opposite the arterial orifices of the organ, and the second very short and loud. The bellows-murmur was also very evident and superficial over the pulmonary artery, from its valves to the top of the sternum, along the left side of this bone. The murmur was limited superiorly by the clavicle, and on the sides by the right edge of the sternum, and by a perpendicular line proceeding from the external extremity of the left clavicle; no murmur in the vessels of the neck, nor in the course of the aorta. The diagnosis was cyanosis; communication between the left and right side of the heart; probably patency of the foramen ovale; hypertrophy with dilatation of the right ventricle; obstructions of the orifice of the pulmonary artery. She had also an abscess over the right side of the thorax, depending on a carious rib. This was opened, and was followed by a similar collection on the hip. She died after having been nearly three months in the hospital. The examination of the body showed the heart one half larger than natural, and the right ventricle one third more voluminous than the left. The walls of the right ventricle were thickened to the extent of half an inch; the carneæ columnæ were very strong and numerous; the right auriculo-ventricular orifice and its valve were not obstructed nor narrowed; the arterial orifice of the right ventricle was seated at its upper part, near the septum, and was contracted to the size of a goose-quill; its circumference was surrounded by cartilaginous patches, and almost obliterated by small yellowish and fibrinous vegetations, very little adherent to the edges of the orifice. The pulmonary valves were seated higher, an inch above the contraction, so that between the orifice of the ventricle and the pulmonary valve was a little cavity, half an inch high, and one inch wide, covered by the slightly thickened lining membrane of the heart, and containing a polypous concretion. The pulmonary orifice was contracted to the size of a quarter of an inch, and the arterial coats were thinner than natural: no vestige of the ductus arteriosus; the ventricular septum was perforated by an aperture at the mouth of the aorta, constituting a common opening between that vessel and the two ventricles; it was smooth and circular, half an inch in extent. The aortic orifice and valves were perfectly sound. The foramen ovale formed a vertical slit in the septum. The lungs were tubercular, as also the spleen. The tenth rib on the right side was carious, and there were two pounds of pus in the abscess of the right hip; the periosteum was destroyed, and the bone diseased.

The mistura ferri comp.—Mr. Bullock suggests that in preparing the compound steel mixture for stock, the myrrh, and other ingredients, may be made into a mixture, but the iron and alcali should be added to each draught, as they are required; as, for instance, four grains of sulphate, and five grains of the carbonate of soda, or four grains of the bi-carbonate of potash. If the myrrh be not required, the iron and alcali may be mixed with sugar, and kept as a ready prepared pulv. ferri comp. in well-stopped bottles. In that case potash must be the alcali employed. The citrate of the protoxide of iron may be given, according to the following formula:—℞. sulphat. ferri. gr. iv., sodæ subcarbonatis gr. v., saccharl, gr. xxx., aquæ ℥iss., acidi citrici gr. iv. The salts are dissolved separately, and then added together; the draught thus formed being charged with carbonic acid, is very grateful to the taste and stomach. Any of the proto-salts of iron may be thus formed, by substituting the requisite acids.

Ligature of the external iliac.—A case of femoral aneurism is reported from Guy's Hospital, in which Mr. Cooper placed a ligature upon the external iliac artery. Symptoms of peritonitis followed, and were removed by appropriate treatment. The ligature came away on the twenty-second day after the operation, but previously to that he complained of considerable pain in the leg, and a week afterwards the toe became gangrened, the mortification rapidly spreading up the leg. A line of demarcation formed subsequently, and amputation was performed below the knee. The patient ultimately recovered.

Sloughing of the uterus—Dr. Waddy has given in the *Provincial Medical Journal*, the details of a fatal case of puerperal hysteritis, the *post-mortem* examination shewing the peritoneum rather vascular, with a considerable quantity of turbid fluid and flakes of purulent lymph in its cavity. The uterus was enlarged, and its lining coat apparently disorganised. It contained a quantity of dark fœtid fluid. The os and part of the cervix uteri were in a sloughy condition. The right ovary was completely destroyed, and the fimbriated extremity of the Fallopian tube on that side was highly vascular. On the left side of the fundus there were two small abscesses beneath the peritoneal covering, penetrating somewhat into the cavity of the uterus.

Large doses of quinine in epilepsy.—M. Taroni mentions in the *Gazetta Medica di Milano* the case of a young woman who was the subject of epilepsy from fright. Failing other measures, and the disease manifesting a marked periodicity, M. Taroni exhibited quinine in large doses, beginning with twenty grains daily, and gradually raising the quantity to forty grains, which were given daily for six days, after which the dose was gradually diminished. During all this while the cure was progressive, and was finally accomplished.

Superficial nœvus—Mr. Tucker has cured several cases of superficial nœvus (claret stains) by the application of the nitrate of silver in substance. In some of the instances the application of the caustic for a few times was quite sufficient to eradicate the deformity.

Singular case of empyema.—M. Krause, of Dantzic, describes the case of a boy, eight years of age, who was much emaciated, and presented some symptoms of phthisis, the suspicion of which, however, was abated, by finding no difference either in the circumference or movements of the chest. He had a swelling under Poupart's ligament, which presented the appearance of a lumbar abscess, was opened, and a pound of good pus evacuated. The boy died in the course of a few days, and when the body was opened, the case was discovered to be one of empyema on the left side, which communicated by a narrow sinus, through an opening in the diaphragm, along the left lumbar vertebræ, with the abscess in the groin. The lung was tuberculous, and contained a large vomica.

GOSSIP OF THE WEEK.

We perceive by a notice in the "London Gazette," that a meeting of Fellows will be held at the Hall of the College, on Wednesday, the 31st inst., at three o'clock in the afternoon, to elect three additional members of the Council, in pursuance of the provision of the recent Charter. We think it necessary to make known this fact, as the Council have the power of making their notice as limited as they may think proper.

At a meeting of the Council of the Royal College of Surgeons of England, on Thursday last Sir Benjamin Collins Brodie, Bart., was elected President, and Samuel Cooper, and William Lawrence, Esqs., were elected Vice-Presidents for the year ensuing.

The following gentlemen were admitted Members of the Apothecaries' Hall, 11th July, 1844:—William Davy, Christopher Rogerson, John Henry Wise, Stephen Shute Alford, Joseph Stevens Edward Kent Parson.

Appointments.—Surgeons: J. Robertson (b.) to the superintendance of the William Jardine convict ship; J. Atcheson, M.D., to the Victory R. H. Brown, to Haulbowline Hospital, Cove; W. Bruce, M.D., to the Queen.—Assistant-Surgeons: H. Trevan and James Fisher, to the Queen; John Beleher. to the Visago.

Obituary.—Aged 27, Mr. Thomas Potter, surgeon, of Duckinfield, brother to the late Dr. Potter, of Aigburth.

Metropolitan Mortality for the Week ending Saturday, July 13.

Causes of Death.	Total.	Average of 5 Springs.	Average of 5 Years.
All Causes	831	900	946
Zymotic, or Epidemic, Endemic, and Contagious Diseases	219	191	178
Sporadic Diseases—			
Dropsy, Cancer, and other Diseases of uncertain or variable Seat	78	106	111
Diseases of the Brain, Spinal Marrow, Nerves, and Senses.	138	159	157
Diseases of the Lungs, and of the other Organs of Respiration	221	233	286
Diseases of the Heart, and Blood-vessels	24	19	21
Diseases of the Stomach, Liver, and other Organs of Digestion	74	88	69
Diseases of the Kidneys, &c.	4	5	5
Childbirth, Diseases of the Uterus, &c.	5	9	10
Rheumatism, Diseases of the Bones, Joints, &c.	10	5	6
Diseases of the Skin, Cellular Tissues, &c.	1	1	1
Old Age	46	56	71
Violence, Privation, Cold, and Intemperance	11	25	26

No. 253. **SUMMARY.** JULY 27.

CLINICAL LECTURES ON MEDICINE; Delivered at the Great Charity Hospital, at Berlin, hy DR. SCHONLEIN, first Physician to the King of Prussia:—

LECTURE XVI.—Icterus after the Use of Mercury—Itching Sensation in the Skin—Delirium—Tendency to the Deposition of Fat—Death—Result of Post-Mortem Examination—Epicrisis—Cirrhosis Hepatis—Colica Pictonum—The Twentieth Attack—The Influence of Aliments on the Production of this Disease—Paralytic Phenomena in the Extremities—Recovery.. 339

LECTURES ON THE THEORY AND PRACTICE OF MEDICINE, BY DR. C. J. B. WILLIAMS, M.D., F.R.S.:—

Diseases of the Alimentary Canal—Acute and Subacute Forms of Gastritis—Gastritic Dyspepsia—Duodenitis—Intense Enteritis—Inflammation of the Jejunum and Ileum—Softening—Ulceration—Treatment of Gastritis, and Gastro-Duodenitis with Jaundice 340

ON THE PHYSIOLOGICAL ANATOMY AND PHYSIOLOGY OF MAN, BY ROBERT KNOX, ESQ. 342

ON REFLEX NERVOUS ACTS AND THEIR DISTURBANCES, AND THE MORE PROBABLE PARTS OF NERVOUS SYMPATHIES, BY T. W. KING, ESQ... . 343

THE PHYSIOLOGY OF MATERIA MEDICA, as Established by the Latest Researches in Organic Chemistry, Physiology, Pathology, &c., by PROF. T. F. SOBERNHEIM .. 344

PARISIAN INTELLIGENCE:—

Professors Roux and A. Berard on Cataracta—Comparison of the two Methods, Extraction and Couching—Reasons for the Preference given to the former.. 345

Prize offered by the Societe Royale de Medecine de Toulouse 347

Prophylactic Remedy against Ptyalism 347

Proceedings of the Academy of Sciences, July 15th. 347

On the Climate of France 347

On the Mollusca Gasteropodes Phlebenteres.. 347

Extirpation of the Scapula and Removal of the External Third of the Clavicle, for a Tumour developed on the substance of the former 347

Proceedings of the Academy of Medicine, July 15th 347

On the Presence of Arsenic in the Soil of Churchyards, and its Absorption by the Bodies there Interred 347

Discussion on Ophthalmology 347

Observations on Lithotomy.. .. .. : 348

TO CORRESPONDENTS 348

LEADER:—

PROBABILITIES AND IMPROBABILITIES OF MESMERISM 348

REVIEWS:—

The Physiology of Inflammation and the Healing Process, by Mr. Travers 349

Dr. Watson's Lectures on the Principles and Practice of Physie 349

System of Mineralogy, including the most Recent Discoveries, &c., by James Donna, A.M. 350

The Oculist's Vade-Mecum, by Mr. Walker 350

Professor Owen's Lectures on the Comparative Anatomy and Physiology of the Invertebrate Animals 350

ON THE BILE AND THE PRODUCTS OF ITS DECOMPOSITION, BY THEYER AND SCHLOSSER; Translated by KIRBY O'SULLIVAN, Esq. 351

OBSERVATIONS ON A WORK ENTITLED "CHEMISTRY IN ITS APPLICATIONS TO AGRICULTURE AND PHYSIOLOGY," BY PROF. LIEBIG, M.D., PH.D... .. 353

ON THE CLASSIFICATION OF FISHES, BY M. AGASSIZ, of Neuchatel. Translated for the "Medical Times" by W. Phillimore Stiff, Esq... 354

DR. FORBES'S MESMERISM.. 354

RECENT EXPERIMENTS WITH ALEXIS, BY W. B. COSTELLO, M.D. 356

HOSPITAL REPORTS:—

King's College Hospital.. 356

PERISCOPE OF THE WEEK:—

Pericarditis 357

Medullary Tumour connected with the Kidney 358

Ulceration of the Larynx.. 358

Gunshot Wound of the Heart.. 358

Electro-Puncture in Neuralgia 358

A SURGEON CHARGED WITH MANSLAUGHTER 358

GOSSIP OF THE WEEK:—

Medical Reform—Petition from the Medical Officers of the E. I. Co.'s Service—University of London—Clairvoyance in Paternity—Obituary—Naval and Military Appointments 358

CLINICAL LECTURES ON MEDICINE;

Delivered at the GREAT CHARITY HOSPITAL, Berlin, by Dr. SCHONLEIN, first Physician to the King of Prussia, founder of the Natural System of Medicine in Germany, and Professor of Pathology and Therapeutics in the University of Berlin.
Prepared from the German expressly for "The Medical Times."

LECTURE XVI.

Icterus after the use of Mercury.—Itching sensation in the skin.—Delirium.—Tendency to the deposition of fat.—Death.—Result of post mortem examination.—Epicrisis.—Cirrhosis hepatis.

Dec. 8th 1840.—Caroline Buivert, 28 years of age, servant girl.—We have recently spoken of one of the most dangerous forms of icterus, which is produced after having taken mercury for the removal of syphilis. I have observed several such cases in syphilitic women, at the Julius Hospital at Wurzburg, even a long time after the administration of the mercury; the present seems to be a case in point.—The patient had been affected with syphilis several times, and had been in the syphilitic ward of the hospital, a year and a half ago. The icterus, now presenting itself, is of a very intense character; the patient looks as if she had been dyed, or painted with turmeric. She complains of continued hiccup, nausea, and vomiting; the matter ejected consists of the food taken, mixed with a white mucus, slimy, without any appearance of bile. The urine is of a dark-red colour, and on analysis is found to contain the elements of bile; the tongue is clean; thirst considerable; the fever moderate; pulse 90 per minute, tolerably full, and not hard; the skin dry, rather cool; that of the chest and arms is abraded by scratching, in consequence of the insupportable itching, produced by the colouring matter of the bile depositing itself beneath the papillæ of the skin. The delirious state of the patient depends on the deposit of a similar kind of matter, on the membranes of the brain, and the consequent irritation caused by it. Violent delirium is first produced in such cases, which, subsequently, on effusion of serum taking place, becomes converted into sopor. The abdomen is not disturbed, nor is it painful on pressure; no swelling perceptible in any organ.

Prescription.—Potio Riveri with *aq. laurocerasi* for internal use; application of vinegar to the head.

Dec. 9th.—We stated our conjecture as to the originating cause of the disease; to remove any doubt, however, it will be necessary to ascertain what treatment she had undergone for the syphilis; what preparations of mercury had been prescribed, and under what circumstances it had been employed. As yet we have not been able to learn anything regarding it. A fact favourable to our view is this: that the patient has suffered from symptoms of affection of the liver ever since that time, particularly from dyspeptic attacks. The icterus, however, only showed itself during the last fortnight. This form of icterus I have particularly observed in women, and it is generally attended with a remarkable tendency to corpulency,—a condition which is exhibited in this patient; a similar effect is also produced by some other metallic remedies; antimony, for instance, is employed for the purpose of fattening pigs and geese; arsenic is said to be employed for similar purposes in India.

Violent delirium manifested itself last night, which, as already observed, has its origin in the deposit of the colouring matter of the bile on the membranes of the brain (I have never found the substance of the brain itself coloured yellow in such cases); it subsided again towards the morning. The state of the patient is pretty nearly the same as yesterday; the vomiting, however, has disappeared; the stools are hard and light-coloured.

With regard to the treatment of the present case: the principal remedy against diseases of the liver, mercury, would not here be applicable, unless, indeed, we adopted *Hahnemann's* doctrine of "similia similibus." I would propose the "iodine" in this instance, because it forms the antidote to mercury in its effects, and also because it acts on the absorbent system. No great hope, however, can be entertained of the treatment in a form of disease so far advanced, and where probably cirrhosis of the liver has already taken place. The cerebral irritation in the present instance is also a bad sign.

Prescription.—℞. Tr. iodin. gtt. xx. aq. meliss. ℥iv. —Mix. A table spoonful to be taken four times a day; a spoonful of the *electuarium lenitivum* to be taken in the evening. Continue the vinegar to the head.

The solution of iodine was shortly obliged to be discontinued, by reason of the vomiting which it indueed. The state of the patient in every other respect remained the same, until the night of the 11th December, when the vomiting increased, and death suddenly took place, respiration having become stertorous a short time previous.

Result of the post-mortem Examination.—The liver had decreased in substance, was soft, unusually full of blood, of a black colour, and found to be in a state of cirrhosis. The gall-bladder was contracted, but filled with a light-colored bile. The biliary ducts were free; the icterus was, therefore, from no mechanical cause. All the serous membranes, the peritonæum, the pleura, the pericardium, &c., were of a dark orange colour; not so the mucous membranes, nor the kidneys. No changes in the lungs and heart, exeepting that the internal membranes of the vessels had a slight yellow tinge. Finally, the membranes of the brain, the external as well as those lining the ventricles, were impregnated with the colouring matter of the bile; the proper substanee of the brain, however, had its normal colour; the anterior and posterior commissures, the fornix and the septum lucidum, seemed to be rather soft and infiltrated with a yellow liquid. No effusion of serum.

Epicrisis.—We conjectured that the case before us was dependant on a former mercurial course, since the patient had been twice in the syphilitic division of this hospital. The journal, kept during her stay at that period, however, does not altogether justify this eonjecture; as the patient, when here for the first time, was treated after the so tormed "English method," but tho second time with iodide of potass. It is, however, probable that the medical man, under whose care she previously was, had administered large doses of mercury, because she had already taken this medicine previous to her entry into the hospital. No inference, therefore, can be drawn from this.

With regard to the symptoms of the disease, I beg to direct your attention to the two following points:—

1° The restlesssness and delirium, always so unfavourable a symptom in icteric patients; this is caused by the deposit of colouring matter of the bile on the membranes of the brain, and particularly on the pia mater and the lining of the ventricle. The same kind of irritation takes place here, as on the skin, where, as you will remember, so insupportable an itching exhibited itself, as to induce the patient to serateh herself violently. This deposition occasions not only excitement, delirium, &c., in the brain, but also exhibits its effects in the chest: inducing pleuritic irritation, which increases to the most violent phenomena of inflammation, and rapidly terminates in effusion of serum. I have frequently observed this phenomenon in icteric patients, and to no other cause can it be attributed than to this deposit: violent pains suddenly take place in breathing; all the phenomena of pleuritis are developed, and speedily terminate fatally:—in 24 or 36 hours, ending in the production of acute hydrothorax.

2° We had, even during life, expressed our opinion, that cirrhosis of the liver existed, and this has been confirmed by dissection. The substance of the liver in cirrhosis usually diminishes, frequently to an extraordinary extent; the right hypochondrium, in this patient, was found to be quite empty, and the liver could scarcely be felt on pressure under the false ribs. Cirrhosis is mostly combined with atrophy; and when the latter exists, cirrhosis also may generally be presumed. This disease may, however, be accompanied by hypertrophy, in which case the diagnosis will not be difficult, since the state of the organ then becomes appreciable to the touch. The serous portion of the blood in this patient was of a clear yellow colour, and, on analysis, Dr. Simon found the colouring matter of bile in it, but not the other constituents; whilst colouring matter, as well as resin of bile, were found in the urine.

Tho death of the patient took place suddenly, no urgent symptom being apparent an hour before; rattling in the throat came on, accompanied by insensibility, and thus tho patient died through paralysis of the brain, which seems to have been produced by the deposit, above spoken of; since neither extravasation of blood, nor effusion of serum, was found on the brain; indeed, the ventricle was quite empty, and did not contain the quantity of water usually found there in chronic diseases.

Colica Pictonum.—The twentieth attack.—The influence of aliments on the production of this disease.—Paralytic phenomena in the extremities.—Recovery

May 23rd, 1842.—Edward Hellmann, painter

35 years of age. The diagnosis is not attended with any difficulty in this instance. The patient tells us that he has suffered from the same disease nineteen times before, the last time in the preceding December, when he came into this hospital. From that period, he asserts that he has been perfectly well, as far as the organs of digestion are concerned, until about three days ago, when he was again attacked by this disease, after having been frequently subjected, in the way of his business, to the influence of the lead-paint: a very small quantity of which is often sufficient to produce a new attack. I may here remark, that the rubbing together of the dry colours of lead, and their employment in painting, are not the only causes of colica pictonum, but that aliments also, and especially the beverage, exercise a considerable influence upon its production; for the disease is of much rarer occurrence in countries, where the same employment is followed, but where a more mucilaginous beverage, especially good beer, is drunk. I have but rarely had an opportunity of observing it, in the Julius Hospital at Würzburg, where the labouring classes drink less of bad wine, and more of good beer; frequently, not a single case is met with for years; on the other hand, the disease is of extremely frequent occurrence at Zürich, where bad sour wine is usually taken; indeed, we well know that even the use of cyder is capable of producing a similar disease, "the colica of Poicton." The employment alone, therefore, is not the sole cause of this disease, but also the aliments, and especially the beverage, as acid or bad wine, and bad beer (which is particularly in use here), aid in its production.

The phenomena of colica pictonum are very distinct in this instance: characteristic pain in the abdomen, round the navel; the abdomen is not distended, but flattened, or rather concave (this, in some instances, is so much the case, that one may almost see the vertebral column); further, we have obstinate constipation, which has already continued for five days; nausea and vomiting; a peculiar metallic taste; characteristic appearance of the gums; finally, the reflex symptoms, which, in the lower extremities, usually exhibit themselves in cramps of the calves; in our case, however, spasmodic contractions of the muscles of the thigh have taken place,—phenomena which I consider extremely dangerous, because they may terminate in paralysis (if they last for any length of time, and if they return frequently). We have, likewise, something similar to this in the right upper extremity, although under circumstances, which render it difficult to decide whether the paralysis does not partially belong to the luxation of the upper arm, which has existed for some time; we find *paresis* of the right upper extremity, with a simultaneous atrophied state of its muscles, and excessive contraction of the flexors of the hands and fingers, thus preventing the hand being extended. We observed this contraction in a still higher degree, in a recent case of poisoning by lead. Indications of metallic tremor of the upper extremities also exhibit themselves—a symptom which used to be very common among gilders, before the late beneficial alterations in this branch of business.

There are, in this case, two indications for the treatment. The most urgent is, to remove the violent spasmodic symptoms in the abdomen; this demands the employment of narcotics and purgatives. The treatment, however, must not be limited to this; but we shall subsequently, when this first indication has been satisfactorily accomplished, have to administer remedies against the originating cause—the absorbed lead, among which remedies, sulphur holds a predominant rank.

Prescription.—R. Emulsio. ricinos. (℥j) ℥vj. aq. laurocerasi ʒij, sacch. alb. ℥ss.—Mix. A tablespoonful to be taken every hour. Clyster of castor oil (℥ss.); fomentation of herb. hyosc. coct. ℥ij. with tinct. thebaic. ʒij, to the abdomen.

May 24th.—The attack of colic is already subsiding; the pain has not only considerably decreased, but the abdomen is now soft, and no longer retracted. Two intestinal evacuations have taken place, but they are not yet of a natural character. Vomiting took place again, apparently, however, only as the effect of the castor oil. Some irritation of the pulse still exhibits itself; also, the reflex symptoms in the muscles of the lower extremities.

The fomentation to the abdomen, as well as the castor-oil emulsion, to be continued, and the patient, besides this, to be placed in a warm bath, to which a decoction of narcotic herbs is to be added.

May 26th.—The principal symptoms of the colic are on the decrease: the abdomen is soft; the violent tension of the abdominal muscles has disappeared; a slight pain only is sometimes felt round the navel; no vomiting, nor any metallic taste; the tongue begins to look clean; some intestinal evacuations take place daily, without the application of a clyster, and of a more natural appearance; the irritation of the system has disappeared entirely. The reflex symptoms, on the other hand, not only continue in the extremities, but even exhibit a tendency to the paralytic form: deafness, powerlessness of the limbs, creeping sensation along the lower extremities.

We shall continue the castor-oil emulsion, in a diminished dose, and now order the application of sulphur baths.

May 30th.—The patient has taken a sulphur bath every other day, and this, combined with the castor oil, has had a very favourable effect: the abdominal symptoms have entirely disappeared (some copious intestinal evacuations take place daily), and likewise the disagreeable phenomena in the lower extremities, which caused us to fear the supervention of paralysis. The *paresis* of the right extremities is of long standing, and probably will never be removed.

The patient left the hospital as cured, on the 2nd of June.

COURSE OF LECTURES ON THE THEORY AND PRACTICE OF MEDICINE.

Delivered by C. J. B. WILLIAMS, M.D., F.R.S., Professor of the Practice of Medicine, and of Clinical Medicine, at University College.

We now come to the consideration of the *diseases of the alimentary canal*, beginning with inflammation; and perhaps it will be better to commence with the intense forms of inflammation, previous to considering the functional diseases. As to the varieties of inflammation, they are distinguished by the rules which we have already laid down, when treating of inflammations of the air-tubes, and the same divisions of phenomena may here be made; that is to say, the superficial and the deep-seated. This distinction was made by Cullen who divided the forms of gastritis into the *erythematica* or superficial, and the *phlegmonodea* or deep-seated. This definition, however, of the two diseases, does not appear the most exact, and his description is somewhat loose and faulty.

Thus, we know that there is frequently severe pain, with a considerable amount of fever, in the erythematic forms of gastritis; whereas the phlegmonous form is often accompanied by little pain and no fever. Divisions have been attempted by modern physiologists, who have given us several varieties of this disease. Among these, we may remark the *diphtheritic gastritis*, or that form which is attended with the secretion of false membranes; *follicular gastritis*, affecting the follicular apparatus, and which more especially corresponds with the erythematic form of Cullen; and, also, that variety accompanied by *softening* and a tendency to *gangrene* of the textures. All of these may be acute, sub-acute, or chronic. I do not think, practically speaking, we can establish these distinctions with regard to adults, but in children, several of them are to be distinguished after death. I am content, therefore, to divide gastritis into the *acute* or *intense* form which involves all the textures, and the *subacute* species, which may be regarded principally as functional. The one is accompanied by considerable derangement and mischief, while the other is but superficial, and corresponds with the catarrhal variety of inflammation in the air-tubes.

I shall consider, first of all, that acute form of gastritis, which chiefly occurs with dyspepsia, and is commonly known under the name of gastritic dyspepsia. This may not be the most precise or scientific mode of describing it, but it is the best for this reason: that it is more allied in its symptoms, and is apt to occur in many cases, with some forms of dyspepsia. This acute form of gastritis is also found to occur as a consequence of poison introduced into the stomach, and so forth. Acute or intense gastritis is commonly accompanied by pain, beginning frequently like cramps in the stomach, or a feeling of burning, attended by ardent thirst, with a particular desire for cold and acid drinks; generally, too, there is great nausea, and eventually obstinate vomiting. In the early stage, sometimes, there is vomiting of blood. The pain in the stomach is increased by warm fluids; there is extreme tenderness at the epigastrium, where a throbbing is often felt from the action of the neighbouring arteries, and a determination of blood. The fever is commonly inflammatory, but this will depend on circumstances; and, in some instances, especially when excited by certain poisons, it becomes of a typhoid character. Poisons are of themselves depressing; but, independently of this circumstance, where there is a good deal of inflammatory fever at first, there is soon a corresponding amount of depression. The pulse, at first strong, soon becomes weak, frequent, and sometimes intermitting; there is extreme anxiety and restlessness; a great degree of distress and discomfort, and almost agony, depicted on the countenance. At times, there is a chilling sensation. The tongue varies in its appearance; sometimes it is florid and dry, and, in other cases, red and glazed: this is more common in the chronic form. If the vomiting continue, there may be blood thrown up with alimentary substances, or a mucous and slimy matter, and there may even be regurgitation from the duodenum into the stomach. There is great agitation, some dyspnœa, and tormenting thirst. In some cases, the abdomen becomes tympanitic, and a gradual sinking takes place. Frequently, before sinking takes place, a considerable calm occurs in the symptoms; the irritation subsides, the patient appears to be in a state of extreme exhaustion, and the pulse becomes intermitting and extremely weak; the surface cold and the skin collapsed. It sometimes happens that the symptoms are disguised by delirium: the patient does not complain of severe pain, but there will be considerable uneasiness manifested on pressure at the epigastrium. The bowels are generally costive in gastritis, but not so obstinately so as in enteritis.

The exciting causes of intense gastritis are: various circumstances producing severe irritation of the stomach. Drinking cold liquids, after exhaustion by heat, has been known to produce it. A former attack predisposes to a recurrence of the disease, upon exposure to cold. An undue quantity of food, or food of an improper nature, taken into the stomach, is sometimes followed by gastritis. Acrid, or corrosive, poisons will also cause it. Gout is sometimes followed by gastritis. Suppression of the urine is likewise accompanied by a very fatal form of gastritis; but I do not think it is quite right to consider this under the head of gastritis in general. The gastritis that occurs here is accompanied by violent vomiting, and the symptoms of inflammation are very intense; but as we shall find, bye-and-bye, this is rather connected with the non-secretion of the urea through the kidneys. The irritation sometimes is in one part, and sometimes in another, in intense gastritis. This disease sometimes follows a sudden shock or mental emotion. Some febrile diseases, too, produce peculiar irritation of an intense character in the stomach. Erysipelas is accompanied by violent vomiting, intense thirst, and all the other symptoms I have described.

Duodenitis, or *inflammation of the duodenum*, is frequently combined with gastritis; and, when severe, it is attended by pain in the right hypochondriac region, and the liver becomes involved in the disorder. Duodenitis is a frequent complication of gastritis, and then, besides the tenderness in the epigastrium, and in the hypochondrium, there are symptoms of fulness in the liver, and jaundice often supervenes. There is usually, under these circumstances, a great exacerbation of all the symptoms in consequence of the interference with the free secretion of the bile. This imperfect secretion of bile is manifest not only by jaundice,

but by the stools passing of a clay colour. With this complication of gastritis, there is often delirium, and coma. There is sometimes, too, in these cases, an apparent vomiting of blood or black matter, like coffee-grounds, in considerable quantities; and this is apt to occur especially when the duodenum is involved. Duodenitis, occurring in connection with gastritis, is a common cause of acute attacks of jaundice, unconnected with organic disease. In these cases, there is an extension of inflammation to the liver itself, or it may be probably only to the ducts, preventing the discharge of the bile. This may lead to the absorption, and even obstruction and partial suppression, of the secretion. The great reason why gastritis is usually accompanied by disease of the liver, is found in the intimate vascular connection between these two organs, and which thus causes a derangement or disturbance of all the functions.

Before noticing the treatment of this disease, I must advert to deep-seated inflammation of the other small intestines, the *jejunum* and *ileum*, constituting intense *enteritis*. This sometimes occurs in connection with gastritis, in consequence of the effect of poisons; when the disease is excited by irritating poisons, the stomach is often inflamed in the first instance, and the intestines afterwards; or it may be that the symptoms present themselves simultaneously. Perhaps, the most remarkable feature of enteritis, in connection with gastritis, consists in there being no vomiting, although there may be nausea. There may be an immediate increase of pain and discomfort on taking food or liquids, anorexia, thirst and feverishness, with the same kind of extreme pain and tenderness, but it is differently situated. Instead of being confined to the epigastrium, it extends down to the umbilicus, and towards the iliac region. There is, sometimes, tenderness when the pain is not very severe. The pain is at first rather of a spasmodic character, not constant; but, as the disease goes on, it becomes more constant, and less spasmodic. Diarrhœa is not common in the intense form of enteritis. When the disease continues long, it is accompanied by all the symptoms of prostration, as in gastritis: the features become contracted, and the countenance exhibits great anxiety and distress; there is extreme weakness, with an indisposition to move: the movements of the body producing some amount of pain, though perhaps not so much as in peritonitis. Obstinate constipation occurs very commonly, and perhaps it is the most common cause of enteritis that can be mentioned: a neglected state of the bowels, causing irritation to be long kept up by the accumulation of fæces in them, is one of the most common causes of enteritis. The severe attacks are often the result of long continued inflammation. The slight forms of enteritis—gastro-enteritis—are commonly accompanied by diarrhœa. When the inflammation extends to the colon, there is diarrhœa accompanied by a peculiar kind of bloody stools. On the *post-mortem* examination of persons who have died of the acute form of gastro-enteritis, we find various signs of inflammation, according to the especial part affected. Thus, the redness may be diffused, or confined to the punctated or dotted form; or else it may be limited to the follicles, or more particularly to the isolated glands in the duodenum and the ileum, and also in the jejunum. Here, it presents a striated, arborescent appearance, as opposed to diffused redness. Dr. Hope gives a case in which something of the same kind followed the use of tartarised antimony, where the patient took as much as twenty-four grains. It is well to bear in mind the effect of some drugs, and not to use those remedies in such large doses as some adopt. The redness, which is excited by inflammation, is either the striated or punctated form, and occupies chiefly the small intestines. It is seated in the large vessels as well as in the smaller ones, and is often connected with congestion: and, in distinguishing between congestive and inflammatory redness, you are to take into consideration any previous or exciting circumstances which may have occurred. Generally speaking, the redness of congestion is deeper and more diffused than it is in gastro-enteritis. The redness continues long after death; and exposure to the air causes it to assume a sort of bluish-red tint.

Softening is another effect produced by inflammation, excited by the action of poisons. But there is a softening which may be produced independently of inflammation, arising from the action of the gastric juice after death, and, in many instances, I am confident it has been mistaken for the effects of inflammation. This softening is of a chemical character; with the softening of the stomach, there are also found flakes of matter in the intestines, and this is a proof of chemical action going on. Softening may be considered to be inflammatory, where it is accompanied by positive vascular redness, of a punctated or striated appearance, and by ulceration; and if it is accompanied by thickening of the coats, that is another indubitable proof of inflammation. Pus is rarely found between the coats of the intestines and the stomach. Sometimes abscess of an adjoining part makes its way to the stomach; but the intestines and the stomach themselves are but little liable to suppurate. In a few cases, a coating of lymph is found on the lining of the intestinal canal, commonly in young subjects, connected with the aphthous or diphtheritic form of inflammation; this is usually seated in the lower parts of the canal, occasionally in the ileum. I saw a case of this kind in a person who died of scarlatina.

Ulceration is not a common result of the form of gastritis I have been mentioning. Gastro-enteritis is usually a membranous inflammation, and does not tend to ulceration, which is found more commonly in connexion with disease of the glands, occurring in combination with some forms of fever and phthisis. Where, however, obstruction has taken place for some time in the intestines, the parts affected may become ulcerated. These ulcerations present various forms: greatly elevated patches, with depositions of lymph around them. Sometimes, portions of the intestines become sloughy, and under these circumstances perforation takes place. In the ulceration met with in fever, where the follicles become involved, it occurs either separately or else in patches: the glands become affected, frequently, in the form of oval patches. The effects of inflammation occurring in this form, are frequently intussusception and gangrene. It often happens, in connexion with enteritis, that one portion of the intestines becomes invaginated within another which embraces it; the effect of this is to produce a sort of strangulation. Both these parts being under the influence of inflammation, it becomes very intense at this spot, and extends even to the serous coat, or peritoneal lining, on which a layer of lymph is deposited. Many cases of this kind have been mistaken for gangrene; when the circulation is obstructed in the intestine, and blood has accumulated in it, it will undergo a change from red to a dark purple, and then to a bluish green, or livid colour, so that it presents very much the appearance of gangrene. In some instances, however, gangrene is actually present, and this is manifested by matter working down under the membrane, of an extremely fœtid odour. In putrid fever, there is generally discolouration of the intestine, which has often led to its being regarded as gangrenous; therefore, it seems that discolouration may take place to any amount, independently of gangrene. A mode in which enteritis often proves fatal, is by permanent obstruction taking place: the symptoms pass from irritation to those of collapse: the patient becomes more and more feeble, but free from pain, and all the symptoms, so distressing in the first instance, probably subside; the pulse remains in a sinking state, and the patient dies. Sometimes, this occurs from the loss of the vitality of a portion of the intestine, through the intensity of the inflammation.

In *the treatment of gastritis*, we must bear in mind the cause that produces the disease. If it is from poison or improper food, the first indication is to remove this; to neutralise the poison, or to use measures to evacuate the stomach as speedily as possible. In the case of acrid or corrosive poisons, the stomach pump should be used, because it injures the stomach less than any attempts to excite vomiting; and there is this advantage in the use of the stomach pump, that it can be made the means of exhibiting the liquid containing the antidote, and the stomach can be washed out, as it were, by various antidotes adapted to the particular kind of poison. Cold water is generally passed with magnesia or vinegar. After this, will come emetics: *sulphate of zinc* is better than *sulphate of copper*, given in a large dose, and with a good deal of liquid, and other matters of a nauseating kind, such as soap mixed up with oil. If the poison has been present sometime, you must remember that its removal does not suffice to eradicate the disease: and if gastritis has been the result, that has to be treated. With regard to the treatment of intense gastritis, if the symptoms are severe, attended with fever, general depletion may be employed, if the patient can bear it. This may be done, even though the pulse may be weak and thready; but in this, as in all other inflammations, general depletion is of less avail the longer it is delayed. And when the patient has become greatly prostrated, depletion not only does not afford any relief, but, on the contrary, produces much greater depression. Local depletion must be considered on a par with general depletion, in gastritis. Leeches in large numbers applied to the stomach, with a large poultice or fomentations, are useful; this may be repeated until the severe pain is relieved. If the sickness is not removed by these means, we may administer hydrocyanic acid, with a little aperient and saline medicine. If the bowels were active previously, one of the best means of removing the sickness, is a pretty large dose of calomel, or two or three doses repeated: from three to six grains of calomel, with the same quantity of extract of conium or henbane, may be given; and this frequently has the effect of removing the sickness and relieving the bowels. Much has been said against this mode of treatment, in consequence of the irritating effect of calomel applied to an inflamed stomach; yet experience proves to us, that the irritation is far less than the relief given. The peculiar effect of calomel, in increasing the secretions, must here be taken into account, as greatly enhancing the value of the remedy, in spite of the irritation which it causes. In order to relieve the feeling of intense thirst, as well as the vomiting, it is useful to give acidulated drinks so as to cool the stomach. The feelings of the patient must guide us in this, for sometimes they increase the pain, and are not advisable. When the bowels have been pretty well opened, it is requisite to evacuate them from time to time, by injections of castor oil, in order to clear out the lower part of the canal. When the severe symptoms of inflammation are subdued, and there is merely some feeling of uneasiness left, particularly after taking drinks or liquids of any kind, a good deal of benefit arises from the use of alkaline or saline solutions with a little hydrocyanic acid, and a small quantity of carbonate of soda. It is necessary, during recovery, to give, from time to time, small doses of mercury to keep up the secretions from the intestinal canal. In cases of intense gastritis, it is necessary to give, not only calomel, but antiphlogistics generally. This is, however, equally necessary in deep seated enteritis.

In case of gastro-duodenitis with jaundice, after the first inflammatory symptoms are subdued by depletion, it is necessary to remove the hepatic irritation, and the obstruction; for the liver is here, generally, disordered also. Now, besides local depletion, and mercurials, it is particularly useful to employ antimony, especially James's powder, when the liver is in a state of irritation. It is sometimes even preferable to mercury, which, with some habits, stimulates the liver to too great an extent, and does harm: antimony tends more to restore it to its proper action; mercurials, when given, should be of the mildest form; generally speaking, blue pill and quinine, with James's powder, and mild salines, form the most beneficial combinations.

We learn from the "Gateshead Observer," that Mr. G. H. Potter has been elected house-surgeon to the Newcastle Infirmary, in the place of the late Mr. Braid. Mr. Potter was elected by a large majority over the other candidates, Mr. Annandale and Mr. Talmadge; our able contemporary, adds, "we congratulate the institution on the election of an admirable surgeon, and estimable man; without, however, the slightest wish to disparage his able and honourable competitors."

ON THE PHYSIOLOGICAL ANATOMY AND PHYSIOLOGY OF MAN.

By ROBERT KNOX, Lecturer on Anatomy and Physiology and Corresponding Member of the French Academy of Medicine, 1844.

(For the "Medical Times.")

The greater portion of the following papers has been delivered at various times to my anatomical and physiological classes. It is intended hy their publication, to give a plain, and it is hoped, an accurate view of whatever is correctly known of the intimate structure and functions, or uses of the various organs composing the human body. These lectures are especially intended for the use of students of medicine and surgery, and of physicians and surgeons, necessarily prevented by the anxious and harassing nature of their duties from consulting many new works of great merit and research; and thus, by their publication, to supply a *desideratum* in respect to physiological science which still seems to me to exist; viz., the want of a work on human physiology, strictly so called, for a mere glance at most modern physiological works will satisfy any one that they treat more of comparative than of human physiology. We have Muller's assertion recorded in his excellent work on physiology, that the human lymph, respecting which so much has been said and written by physicians and surgeons, was for *the first time* examined by himself a very few years ago; experiments on the nervous system of frogs are still considered as presenting strictly analogous results to those made on man, in despite of the observations of Mateucci; Troja's experiments on the hones of birds, misled himself and most European surgeons in so far, at least, as they thought them applicable to man; nor has it escaped my notice that from the period when I first published some observations on the regeneration of bone in man, authors agreed or disagreed with the theory then proposed, nearly in accordance with the sources of their facts; that is, if drawn from comparative physiology and pathology they were adverse to, and if from human physiology and pathology they were favourable to, the theory then proposed.

Hitherto it must be admitted that physiology has been of but little service to practical medicine and surgery. London surgeons, I have been told, of the highest eminence, say publicly, that there is, properly speaking, no such thing as physiology; and an eminent Scotch physician, who himself lectured on what he considered, doubtless, as human physiology for nearly twenty years, (lecturing not from choice, I believe, but merely because the academical chair of practical medicine which he would have preferred was not then vacant);—this distinguished physician seems to think that practical medicine can be advanced chiefly, if not solely, hy the discovery of new specifics! Lamentable discovery were it true! In four thousand years, physicians have discovered four specifics (?) which yet are not undeniably, and under all circumstances, specific! Sad prospect for humanity! diminishing, however, our surprise at the success of hydropothy and homœopathy, the natural refuge of those who have no faith in physiological science.

But, after all, may it not be that this idea of the inutility of physiology to the practical medical man may have arisen from the mode in which it has been studied, and the mode in which it has been taught, rather than from something inherent in itself? How is it to be expected that a lecturer on physiology, who never practised medicine or surgery; who, in fact, is not a medical man properly speaking, shall apply correctly what is known of physiology to elucidate the functions of the human organs? And if the person he at the same time profoundly ignorant of comparative anatomy, and yet draw all his illustrations from it, what benefit can possibly flow to the student from such a course? I speak of circumstances daily occurring before me. The term, human physiology, too, has been strangely misapplied; even the estimable work of Weber, as translated hy my friend Dr. Willis, is chiefly filled with comparative physiology, although the title of the work of necessity leads to an opposite idea. In the first or introductory part of a physiological work recently compiled for the use of *students* and practitioners in medicine and surgery, the said student is told that "there are organised bodies in which life may be said to be *dormant*;" that there is a state of life which is *active* and by inference a state necessarily in which *life* is *not active*; then follows a long section on the chemical composition of inorganic bodies and the probable composition of Glauber's salts; then follow yeast and sugar, gum and starch, gluten, and caseine, lignine and fibrine; the nucleated cell is, of course, not forgotten, nor the materia vitæ of Hunter, and the creation of the first parents of each species hy the Almighty. Plants, moreover, we are told, exhibit "no mortal phenomena;" now, if the student finds such disquisitions simple, and views them as a suitable *introduction* to the history of human physiology, he will not in his mental phenomena resemble any of the thousands of students whom I have had the honor to educate.

Much and long reflection on what I have seen has produced in my mind the deepest conviction that from the hitherto received modes of studying and teaching physiology in this country at least, much mischief has arisen to the public and to professional men. Some thirty years ago a medical man who had been surgeon, apothecary, physician, always a *general* practitioner, lecturer on surgery (!) practise of physic, pathology, &c., &c., who, in short, had been everything, and tried everything, and who, had he really known but a little of sound human anatomy and physiology, might then have been said to know something of everything, fancied himself equal to the duties of a hospital surgeon, no very onerous duties one may suppose after the specimens we have lately had; but here it happened that his practical physiological knowledge came to be tried, and was found wanting: for although he had read every physiological work from Galen to the present day, and aided hy his friends had studied the circulation in the foot of the frog, and dissected alive innumerable dogs and cats, tying their arteries with threads and cords of every strength and form, forgetting all the time that frogs, and dogs, and cats are not men and women, he did not know the very simplest facts in *human physiology;* for cutting down on the superficial femoral artery above the upper origin of the sartorius muscle he expected to *see it pulsate;* and not *seeing* this, and forgetting the use of his fingers, he cut on the other side of the *sartorius* muscle, still hoping to see that which could not he seen; and failing here again, he boldly cut through the sartorius. I need not complete the history of the case; I repeat, the plainest facts in *human* physiology are misunderstood or not comprehended by these egg-hatching, frog and snail-torturing physiologists. Before me is a statement of one of these non-medical physiologists, viz., that the membrana decidua is a membrane crowded with *large* nervous sinuses! He must surely have forgotten that he was looking through a microscope. My talented and esteemed friend, Mr. John Russell, informed me that he was, eighteen years ago, present at an operation in a neighbouring county, where *five* medical practitioners attempted to tye the brachial artery, and were so practically ignorant of the force of the heart that they caught up the artery with a forceps, and without passing any ligature beneath it, merely tied a thread round the portion so raised up; which, of course, shortly was forced off hy the returning tide of blood and the work had to be recommenced! They were nearly an hour in getting the vessel secured, which was at last done hy himself, though not a surgeon; and yet these persons had dozed away several winter sessions in listening to lectures on *physiology*, and when spoken to would use many learned physiological words with great fluency.

One unhappy result of the uncertainty of of physiological disquisition and its highly theoretical character, is the success attending any bold or even empirical assertion as to the functions of any particular organ, and the pathological effects consequent to, or caused by, a disturbance in the functions of an organ, however trifling the disturbance may be, amounting, perhaps, merely to a slight displacement of the organ:—a mal-position of the womb for example has been discovered to be the cause of numerous ailments of the most harrassing description, all dependent on, and remediable hy a rectifying of the displacement! And the profession listens to this! and snivelling, drivelling, routine idiots who are unequal to any observation of their own, or to criticize correctly the hasty assertions of others, call all this clever! Sharp practice it is, no doubt, to thrust a steel and unyielding sound into the womb, tilting it up, pushing it backwards and forwards, and round and round, with the chance, too, of there being something in the womb before the sound was thrust into it, and with a certainty of the contents creeping from it thereafter if of a certain nature at least. Now, I ask the profession generally, what is there in the history of the unimpregnated womb to warrant my ascribing to its slight mechanical displacements, such complicated evils, as unceasing pain, uterine discharges, wasting of the whole body, &c.? And even admitting that relief may occasionally arise from attempts made to remedy this fancied displacement, is it not more reasonable to suppose that such therapeutic agency has effected a cure of evils originating in a totally different source? A *solid staff* passed a few times into the male urethra will occasionally cure the most obstinate gleets, that is mucous discharges, arising from, or connected with, a relaxed state of the membrane, and so will the common speculum relieve the relaxed vaginal membrane to which it may be applied, from discharges similar in their nature to those from the male urethra, though arising generally from very different causes. In like manner, may the solid staff be made to enter the womb; and by a temporary residence there alter the morbid surface, relieving for a time. All this it is not difficult to understand; but when we are told that symptoms of a most harrassing nature arise *very frequently* from a mere altered position in an otherwise healthy organ; in the position of an organ, which naturally has not, nor ever can, have any great fixity of position; then is it time to call on the human physiologist, and demand of him an explanation of such anomalies. How it happens (if it does so happen), that the accidental displacement of an organ which neither has, nor can have a fixed position, should give rise, not rarely, but very frequently to the most extraordinary train of morbid symptoms, rendering life miserable, and reducing the originally stout, healthy, robust woman to a state of great and deplorable weakness and decrepitude? Now, without saying more, I do not hesitate denouncing this doctrine, and all such doctrines, as disgraceful, but often extremely profitable hobbies, rode by professional men taking advantage of the deplorable ignorance of the mass, and of the avowed unsoundness of most physiological theories; they are by no means novel, and when one hobby gets a little worn out, a new one is easily substituted. I well remember an individual practising as a physician, and with much success as regards a profitable return, who rode five or six hobbies successively in this city; the spine, the teeth, the urethra, and the liver. And now another follows with mesmerism and displaced uterus! There are a number of works, on what is called popular physiology, works replete with truisms and vulgar errors, clothed in agreeable language with a smack of philosophy. I glanced hastily at one of these works a short time ago (a work said to have gone through six or seven editions), and stumbled on a passage which amused me; the bodily peculiarities of the heavy phlegmatic Dutchman are gravely, and with a becoming spice of philosophic disquisition, attributed to his residence amongst bogs, and fens, and marshes, and in low countries. Profound philosophy! sufficiently ancient! But it is not antiquity, nor custom, that makes truth—"Truth, Time's eldest daughter," though it be; and, therefore, in despite of Hippocrates and Dr. Combe, I must continue to doubt his theory, the more especially as I find that the living in a bog does not make of the Irish a heavy, stolid, unintellectual boor like a true Dutchman; does not take away his musical ear, and his taste for music; has not depoetized the race; whilst on the other hand, the descendants of these same frog-like Dutchmen of Holland, who have now, for nearly 300 years, occupied the driest soil and most cheerful sunny clime

in all the world (Southern Africa), are still as heavy and stupid, and boorish, and devoid of all wit as ever. I may be told that such physiology as this I speak of and such physiological works are below criticism; it may be so; but seven editions of a work is rather against such a view.

And now to bring this introductory chapter to a close, I may briefly state what will be the plan of this work.

Human physiology, or the history of the functions of all the organs and features composing the human body may, for the convenience of description, be divided into three parts:—the I. comprising a history of the tissues composing the animal frame; the II., the history of the organs formed by these tissues; this comprises special physiology, or the history of the organs in the adult male and female; the III., the history of the ovum, or the production of the human being from the embryo. If we add to this a brief section, descriptive of the races of men, we shall then in as far as my ability goes, have concluded man's physiology, embracing in the outline—

I. Man viewed with reference to all other matter, organic and inorganic;—the physiological anatomy of the tissues.

II. Man viewed with reference to space; the special physiology of the adult male and female; the races of men.

III. Man viewed with reference to time; the development of the individual from the ovum or germ.

The purely historical part of the work will best suit its concluding section as being of infinitely less consequence to the student. Whether De Witt (Albinus), or Boerhaave, or Mr. Walker, or Sir Charles Bell, did first discover the separate and distinct functions of the spinal nerves and spinal bundles, is a matter of but little moment to the student, until the facts themselves shall have been made known to him.

My wish, in conclusion, is, that the present course of papers be considered as the commencement of a "Student's Library," embracing in its plan not merely physiological anatomy and physiology, but all those departments of knowledge usually required to be studied by the medical student, and not neglected by the medical practitioner, and this view I have taken the liberty of pressing on the attention of the spirited proprietors of the *Medical Times*.

(To be continued.)

ON REFLEX NERVOUS ACTS AND THEIR DISTURBANCES, AND THE MORE PROBABLE PARTS OF NERVOUS SYMPATHIES.*

By T. WILKINSON KING, F.R.C.S.E.

Physics and Humoralism limit nervous theories—Muscle acts from distension, or reflex agency, or volition—the co-ordinating cords of sympathetic motions are gathered up in the medulla oblongata; and the lower segments of the medulla have no excito-motory power in man.

The pathology of the nervous system is sufficiently beset with its own natural difficulties; yet I cannot but think that a prevalent disposition to impute to the nerves all those disorders indiscriminately which seem most inexplicable, is our greatest impediment. When the known natural functions of the nervous systems are well impressed on the mind, it will be difficult—without losing sight of them—to err in the explanations of pathology to the extent which some unhappily have gone to.

We shall not here attempt to analyze all nervous disorders, but shall endeavour to dissect a few of them in such a manner, as may suffice to show the only mode of proceedure we deem likely to prove satisfactory. It is almost self-evident, that the subject can only be treated with advantage by successive and detached examinations.

The decided exeito-motory acts, and the more positive effects of disturbance, whether capillary or mechanical, in the several parts of the brain, &c., involve two capital divisions of nervous pathology. Innumerable phenomena, referred to the first, on any pretext, or no pretext, still remain to be investigated, and arranged; and when this is done, in a very different manner to any we have yet seen attempted, and not till then, may we entertain more fixed expectations of a reasonable classification of nervous disorders.

The dependance of the brain. &c., on the quantity and quality of the blood, deserves much attention. Cerebral repletion, or syncope, the circulation of wine, bile, urine or opium; the dependance of the brain on posture, on respiration, and on the muscular support of the whole vascular system, if fairly weighed, suffice to corroborate the idea of the connection of the nervous and humoral circulatory acts.

When tic affects the upper lip, and the division of the infra-orbitar nerve destroys the pain, is it not a sufficient evidence that the disease is simply an error in the nutrition of the *nerve of the affected part*. If a purgative, a blister, or quinine cure the same, does it not corroborate the like inference? If a disorder be variable, we would ask what more evidently universal and varying cause is there to attribute it to than that of the capillary functions?

If opium allay pain, or gin give courage, is it not in part because of its universal distribution; of the humoral influences it exerts on muscle, secretion. &c.?

The comfort of a meal is the sense that all parts are refreshed and aiding one another.

Dr. Hall says, that Tetanus "is indubitably of a reflex character," and that hydrophobia is indubitably of centric origin—the first, nerve-irritation, and the latter, poisoning of brain-substance. I fear however that the indubitable is far from the demonstrable.*

As a safeguard against exclusive views of sympathy, irritation, excito-motion and excito-secretion, let us duly consider the facts in which no such influences are discoverable. Cancer in a young jaw, is hardly worse than a natural tooth. Ulcer, aneurism, laceration, or fungus, involving medulla, or brain, or the cord of a nerve of sense or motion, has in the general, but simple, local specific effects. Nor is it commonly otherwise, when *any* part of the sentient or motor- nerve is disordered.

Humoral and physical processes in the body are variously combined with nervous acts, and these last are, perhaps, the most intricate of all. They would, however, seem to be almost as readily illustrated by pathology as by experiment; and a wise and prudent physician need not, we should think, ever to delay to make use of each physiological fact as it presents itself, with all reasonable distinctness and force, remembering always, that a basis of mere probability requires strict adherence to the language of caution. For a physician to be represented as only humoral, or exclusively nervous in his views, seems a very sad picture; but to hold only an imperfect nervous doctrine is still more partial and objectionable. To see old and real exeito-motory acts adduced to establish new and fanciful excito-secretory functions, is even a yet stranger case. Intestinal irritations are funny things to cause coma or convulsions; arrest of bile, or urine; tenesmus, or strangury, just as they please. Magendie justly smiles at the *imaginary* disorders of parts which remain yet *undiscovered*, giving rise to *terrible* unknown diseases.

Keeping in sight humoral and physical agencies in animal processes, we hope, ultimately, to unravel some of the nervous acts, and especially those in the commencement of diseases.

Nerves are for conduction: sometimes, of the results of external impressions; sometimes, of motive impulses. †

Certain nerves conduct to perception; others to voluntary muscular contraction.

Can it be that cords of the splanchnic ganglia conduct only to motor fibres, as of bowel or artery; and rather to sustain or endow with power, than to direct action?

Independently of ordinary sense and volition, we have impressions conveyed towards the brain, and motions determined from it; and these last functions seem superadded very variously to the preceding.

"There are facts which show that instinctive actions, even in animals endowed with brain and nerves, do not depend on sensation. I took a live kitten, a few days old, and divided the spinal marrow, by cutting it across at the neck. The hind paws being then irritated by pricking them, and by touching them with a hot wire, the muscles belonging to the posterior extremities were thrown into contraction, so as to produce the motion of shrinking from the injury. The same effects were observed in another kitten, after the head was entirely separated from the body. In repeating this experiment, I found that when the spinal marrow was cut through, between the *lumbar vertebræ* and *os sacrum*, the *posterior extremities* lost their irritability, but the part below it, *the tail*, retained it. It might, therefore, be said, that the spinal marrow, below the division, served as a sensorium; but it may be answered, that when the head is cut off, its irritability remains, as appears by the motion of the ears when pricked or touched with a hot wire; and as the extremities are also irritable, it will not be said that consciousness and sensation exist in two separated portions of the same body. Nor can it be admitted, that sensibility and consciousness may remain in the head after separation; for, if mere compression of the carotid arteries abolishes sensation and thought, by interrupting the circulation in the brain, how much more must the superior violence of decapitation have this effect? In an acephalous monster, the like *phenomena* were observable. It moved up its knees when the soles of its feet were tickled; it performed the act of suction; passed urine and fæces, and swallowed food. It is on record that the same took place in the case of one, in which the spinal marrow, as well as the brain, was wanting(!) The like takes place with regard to insects; for, after the head of a bee is separated from the body, the hinder part will sting, upon the application of such a *stimulus* as would excite the same action in the animal in a perfect state. These facts show clearly that instinctive, or rather automatic motions, may be exerted, without the intervention of the *sensorium commune*, and, therefore, without sensation or consciousness."*

The movements of the body which are involuntary and without consciousness are numerous and very dissimilar.

First, we see a contractile fibre whose usual† direct stimulus seems to be a slight overstretching only.

Secondly, we find a muscle whose involuntary act is directed by a cord, from the brain, which cord is only excited (at times) through another nerve passing to the brain. Here the latter, the incident, or exeitor nerve, is analogous to one of sense; the unfelt, or unwilled, reflex act in the brain or medulla, resembles, or is in lieu of, mental reflection: and the involuntary motor or muscular nerve in this excito-motory process, is as a nerve of volition. Consciousness, however, interferes more or less in most exeito-motory processes.

It is said, that the length of the spinal marrow is the source, or centre, or arc of reflex functions in the adult man; but there seems to me to be the

---

* See "Remarks on Some Opinions of Nervous Sympathy," T. W. K., *Medical Times*, May, 1843, p. 135.

* Mr. Grainger (on the Spinal Cord) gives a strong single case of traumatic tetanus, cured by the division of the incident-nerve, but opposite facts of different kinds are as yet in overwhelming majority.

† The nervous influence seems essential to the development of muscle, as use is to its subsistence. Divide its nerve, and the muscle soon loses its irritability.

The Paria's limb anchyloses and wastes almost to a crooked rod of skin and bone. I know not what the vis nervosa is, beyond the fact and effects of use, fatigue, and renutrition, which last is proportioned to the exhaustion and to the matters in the blood.

* *Select Dissertations*,—Sir Gilbert Blane, Bart., p. 262.

† In particular instances this may be combined with other excitation, as in different muscular sacs.

weakest grounds possible for such a supposition, and for the three, or four years past, at least, that I have had this view in mind, I have met with nothing to induce me to think otherwise.

The view I entertain is, that with all kinds of actual or efficient division of the spinal marrow, there is loss of *all* sense, and of *all* motion below, and that in the supposed cases in which reflex signs appeared with the absence of sense and motion, the division of the spinal cord was positively incomplete; or (in a very few cases) uncertain.

I do not scruple to state that the well recorded cases prove my point, and that the ill-recorded notes may be found by no means against me. I suppose if the ticklish patient recovers, that his paraplegia has not been very severe; and when I read that softening has divided the cord in the conclusion of a chronic case, I do not conclude that the softening preceded the excito-motory spasms: my inference of course does not affect, and is not affected by, experiments on cold-blooded animals, or even by those on immature mammalia. These have been the source of many errors: they are useful to guide research, but useless to determine conclusions as to man.

Mr. Brereton who has been long singularly devoted to clinical medicine at Guy's Hospital, writes to me as follows.

"From the year 1836, to the present moment, I have lost no opportunity of testing the truth of the reflex doctrine, and during this time I have written two papers in which it has been discussed.

My conviction is, that it is never developed where sensation is *fully* and *completely* destroyed. I say fully and completely, because it may be very slight, or it may be much modified and yet reflex action go on, but when it is so destroyed as I have presumed, I have never witnessed reflex phenomena. One of the most interesting cases on this point, which has come under my eye, was a patient of Mr. Key's from accident, who had fracture of the tenth and eleventh dorsal vertebræ, and as he lay *completely deprived* of both motion and sensation, for upwards of *twelve months*, full opportunities were afforded of experimenting, and yet with all attempts, success never followed; not even the introduction of the catheter could produce this action. In this case autopsy proved a complete section of the marrow."

It is said that more careful observation will make reflex phenomena in man, more common :* but did not Hippocrates pinch half-paralytic limbs? Again, in simple paraplegia from the fourth dorsal vertebra, why do not the bladder and anus retain their proper functions, if the medulla is a source of reflex power? Mr. Brereton continues:—

"In a paraplegic boy, lying in Lydia, motion was completely lost, and reflex action was easily induced; but we found out that he had sensation. In a boy in Job, during the last clinical course, it was observed that on *first experimenting, reflex action could not be produced, but after being persisted in for some time it could;* and, strange to say, it was discovered that after this experimenting, for a few minutes, *sensation also returned.* It must be added, however, that the *reflex power* is neither in direct, nor inverse ratio, to the sensation present; for it is no uncommon thing to see much of the former with but little of the latter, also little of either and much of either.

I have never been able to induce the violent actions—or by tickling the great toe of the right foot, and throwing the muscles of the left leg into strong action." Mr. Brereton also informed me, that he was referred, by an eminent authority in this matter, to two cases, then in the Dreadnought, where sense was lost, but reflex action was excitable. But, subsequently, Mr. Molloy, a very intelligent gentleman, discovered sufficient signs that sensation also was not annihilated in either of them. It is certainly true that the great advocates of the reflex function have, as yet, produced no very great array of facts to establish what has been assumed as to man; and, of course, a clear pathology is not to be anticipated until the physiology is made plain.

It does not require to be demonstrated in the present day, that excito-motory phenomena are not equally manifested in all animals, or in all periods of life. It is in fact evident, that from the worm or insect cut in pieces, to the frog divided transversely into three parts, or the young rabbit with its medulla cut in two, there is a gradual decline in the freedom and variety of reflex acts. In man, however, there is not a single fact to show that the division of the spinal marrow, at any point between its lower end and the phrenic-nerve-roots, has ever been attended with any reflex motion connected with the lower segment. This is very far from being a mere negative assertion. Swords, daggers, balls, luxations, fractures, executions, &c., have left us ample records besides the known effects of gradual and limited diseases. The medulla has been divided in every possible way and at every part,—patients have survived days, weeks, or months.

Paraplegia has in addition been induced by injury and by disease at every point below the origin of the phrenics, and recovery has followed in due course. Partial arrest of sense or of motion in various forms and grades are common, and yet with all,—among the countless candidates for medical and philosophic fame—it has *only* been amidst the last mentioned partial cases that a few *indistinctly excito-motory* facts have been collected*. This view of the matter gives an entirely new import to these facts of reflex influence. Morbid anatomy shows how much of the cerebrum may be dispensed with, at least for a time. By it we know the lobes of the cerebellum are not vital essentials; and by it we see the facial reflex acts successfully arrested, as well as those of the abdomen, ribs, &c., until only one or two inches of central nodus and medulla are left—the unquestionable centre of the excited acts.

The sympathetic co-ordination of movements, or the fact of excito-motory function in a plain and limited signification is unquestionable. A certain sense, or something instead of sense, leads to a certain movement or series of motions, the happy correlation of which, considering complex cases, is perhaps, next to the mystery of intelligence, the wonder of our bodies. More or less unconsciously, and in spite of the will, the feeling of the feet and other parts, regulates the balancing acts of the frame. Sight or sound, as it were, wakes up all to attention. Smelling calls for an especial respiration, as do also the acts of ingestion and those of the pelvic outlets. Even the processes of the mind have involuntary influences over the muscular organs.

It seems to me sufficiently certain that the true excito-motory acts have all their centres in the medulla oblongata—hither all the excitor nerves come, and hence the motor depart. The physical correlation of all parts requires this gathering up of the reins for combined actions. Divide the medulla, near the loins, and the sphincter ani no longer controuls the reservoir above. Paralyse the abdominal muscles, and still the bowel empties itself.

Without denying that proper functions belong to the cord, we must remember that all properties of the nerves are to be expected from it. The terribly convulsed body of the slaine, when the cane is thrust down the canal, is one striking proof of this. Priapism and contractio vesicularum seem numerically much oftener connected with cervical than with lumbar lesions.† Again, the uneasy mode in which feeling and motion are at times restored after partial lesions, and the various partial and unequal losses of sense and motion, are like so many mere difficulties of nervous cords.

Desault records the passage of a ball through the lungs, the vetebræ *and the medulla*, without any sign of paraplegia. Olivier repeats this, and also that a soldier marched, &c., with the point of a sword lodged in his loins, and dividing the lumbar medulla, for a whole month. Sword points may travel in a month; and with fractured spine, during a revolution, the marrow might get divided between the death bed and the autopsy;—but I have rather adduced these assertions to illustrate the need of some discretion as to *facts*,* which seem more like dreams—not only rare but opposed to all common sense. The Corsican judged better of Lavater, Gall, mesmerism, pretended prescience and clairvoyance. "Such things may be, *but*, they are not." We may have need of a similar dogma; or, at least, to remember that there are both dispositions and selfish interests inclining to favour delusions. The true spirit of hydropathy and homœopathy is "away with your common sense!" The most subtle quackery makes the freest use of truth, but pretends to a great deal more.

36, Bedford Square.

---

* ‡* The total at present, is nearly comprised in about six satisfactory examples, by Dr, Budd and Mr. Busk, (Med. Ch. Tr. Vol 22) and rather more of a different character by casual observers. It is notable that paraplegic children do not evince most excito-motion.

* Something remains, they tell us, keenly enough, for better observers at the bedside than the world has yet seen.

† Doubtless much blood is needful for the first, and vesicular distention to the second.

* Olivier (Obs. 48) admits another marvellous case. A child, eight years of age, with caries, deformity, and wasting, is found to have lost four inches of the medulla by compression; *all* the membranes being left *clear*, as well as an inch and a half of the lower end of the cord. It is inferred that sense and motion survived this lesion, but a philosopher convicts himself when he gives less than ordinary substantiation to statements which demand extraordinary proof. Bayle seems once to have been thus carried away. Olivier ascribes sudden death on two occasions to exertion and pulmonary emphysema, but, as yet, we can only say *he* could not discover or suspect more. The same applies when sudden death is set down to the irritation of a simple erosion low down in the trachea.

THE PHYSIOLOGY OF MATERIA MEDICA.

AS ESTABLISHED BY THE LATEST RESEARCHES IN ORGANIC CHEMISTRY, PHYSIOLOGY, PATHOLOGY, &c.

By the celebrated Professor T. F. SOBERNHEIM.

Translated for the 'Medical Times,' by SIGISMUND SUTRO, M.D

(Continued from page 327.)

As regards the independant motor functions of the sympathetic nerve, it may be remarked that Wilson Philip saw the circulation continue even after the complete removal of the spinal marrow—an assertion fully confirmed by Volkmann. The latter physiologist cut the heart out of a frog, filled it with air, and hung it up to dry; and still he saw it pulsate on the second day. Lately, the fibres of the sympathetic nerve have been found to be of a peculiar and independent nature. We owe this important physiological discovery to the persevering and able researches of Volkmann and Bidder. The results of their microscopic investigations are: that the sympathetic us forms an independent nervous system, the chief sources of which are the ganglia. The fibres of the sympathetic nerve are distinguished from those of the cerebro-spinal nerves, in the following manner: they are paler, less tortuous in their direction, lie together in the form of little fasciæ, have an innate yellowish grey colour, and are *considerably thinner*. E. H. Weber remarks, that the fibres of the sympathetic nerve, both in man and in frogs, are, on an average, about half as thick as those of the nerves of the skin and of the voluntary muscles. Volkmann and Bidder concluded, from the most careful experiments, that the sympathetic us gives off more fibres than it receives, and that it must, therefore, possess a source of fibres within itself. If the sympathetic us arise from the spinal marrow, the sympathetic fibres ought to be found in the roots of the spinal nerves; but, when these are carefully examined, among fifty medullary fibres, scarcely one is found to be sympathetic, and how can that suffice to explain the mass of sympathetic fibres that exist? The ganglia, both of the spinal nerves and of the sympathetic, are the central sources from which the sympathetic fibres arise. Spinal ganglia chiefly produce those sympathetic fibres which are destined for the posterior branches of the

spinal nerves; in the anterior branches, sympathetic fibres are likewise found; these, however, do not arise from the spinal ganglia, but from the ganglia of the sympatheticus itself.

Now, we must examine—*how the intestinal secretions act upon remedies.* The first condition of remedial efficacy, is its solubility in the intestinal juices. The gastric juice consists of pepsine, of a free acid, of organic substances, and of salts. The pepsine, discovered by Schwann, and isolated by Wasmann and Pappenheim, is secreted by the cylindrical glandular cells of the lining membrane of the stomach. Pure pepsine is, according to Wasmann, a mucilaginous, yellow, substance, soluble in water (the solution shows acid reaction, on account of a small quantity of acetic acid intimately combined with the pepsine, and which is not easily separated from it), is precipitated by most of the metallic salts, acids (given in small quantities), and alcohol, without losing its digestive power, This power is so considerable, that 1-60,000th of pepsine, weakly acidulated, dissolves albumen within six or eight hours. Its distinguishing chemical character is, according to T. F. Simon, its being precipitated by dilute acids, when dissolved in a small excess of solvents, as also its being thrown down from its solution by cyanate of iron and potassium. Pepsine is distinguished from albumen by its being precipitated by acetic acid; from casëine by the non-precipitation of the latter from the acid solution, by cyanate of iron and potassium. According to Pappenheim, pepsine is an albuminous substance, soluble in water, dilute acids, and dilute alcalies; insoluble in alcohol; is destroyed by concentrated acids and alcalies; precipitated by an excess of concentrated muriatic acid, and by almost all metallic salts; it is decomposed by some oxides, in the neutral solution, and transformed into coagulated albumen; it putrifics easily in neutral and slightly alcaline liquids, and becomes mouldy in acid solutions; it displays its activity in a temperature of from 15° to 32° (Reaumur,) and is completely destroyed above 80° (Reaumur.) Deschamps very lately obtained the efficacious principle of the rennet, and called it *chymosine* (from *chumosis*—chymification.) The *chymosine* is obtained by pouring a little excess of ammonia into the rennet, then filtering, washing, and drying the precipitate. It resembles gum; is very soluble in water; soluble in acidulated liquids (the solution coagulating milk); is precipitated by carbonic acid, caustic alcalies, and by tannic acid. It is secreted only from the pituitous gastric membrane. Sea salt exercises a stimulus on the latter membrane, and increases, in consequence, the secretion of chymosine. As to the free acid of the stomach, it was considered as hydrochloric acid (by Prevost, Le Royer, Braconnot, Tiedemann, and Gmelin) partly combined with free acetic acid according to some, and partly with free lactic acid according to others. But Heincfeld showed, by careful microscopic and chemical experiments, that the free acid of the gastric juice is simply an organic acid —namely, lactic acid; whilst the inorganic, the hydrochloric, is formed by the decomposition of the chlorides contained in the digestive liquid. The lactic acid is developed in the stomach from the nutritive substances, particularly from sugar of milk, which forms, with fat and casëine, the principal constituents of milk; and, also, from sugar and amylaceous substances. The lactic acid, most probably seconded by the ammoniacal salts contained in the gastric secretion, effects the organic analysis and partial metamorphosis of the nutritive substances, besides contributing to the decomposition of the remedies introduced into the stomach. The *lactic acid*, discovered by Scheele, and so abundant in the animal organism, was first mistaken for acetic acid, till Berzelius showed its true nature; Milscherlich also isolated it in a perfectly pure state. When concentrated, it appears as a fluid, of the consistence of syrup, colourless and inodorous, of a very acid taste, soluble in water and alcohol, also in ether; its constituents are,—C6 H12 O6.*

It forms, with bases, readily soluble lactates, (with the exception of the lactate of zinc, which is difficult of solution,) many of which are found in the organic secretions (for instance, lactate of ammonia in the gastric juice); and, according to the important discovery of Henry * and others, urea is also combined with lactic acid. It coagulates albumen, casëine, milk, crystalline (the casëine-like substance of the crystalline lens) and globuline: it dissolves minutely divided flesh and fibrine, and, like acetic acid, also the blood-cells.

Remedies are dissolved and transformed by the gastric juice, and then combine with its organic constituents. The experiments of Tiedemann, Gmelin, Eberle, Schwann, Purkinje, T. F. Simon, &c., show that sugar of milk, mannite and dextrine, are transformed into lactic acid; the casëine of the milk, coagulated by the digestive principle, is transformed into an albuminous substance. Citric and tartaric acids are transformed, according to Fremy, into carbonic acid. The *decomposition of remedies* proceeds according to chemical principles. Thus, the carbonates of soda, of potash, and of magnesia, are so decomposed, that their carbonic acid is disengaged in the stomach, whilst the bases combine with lactic acid, forming lactates. The bi-carbonates of these bases are decomposed in a similar manner, with the exception that the disengaged carbonic acid is partly absorbed by, and combined with, the free alcali of the blood (soda), and excreted again through the urinary organs: as is shewn by the urine of those patients who have taken these bi-carbonates for some time, as a preventive against the formation of gravel or stone. *Fats* are likewise partly decomposed: the margaric, elaïnic, and stearinic acids, decompose the chlorides of the gastric secretion, and form with them margarates, elaïnates, and stearinates.

(To be continued.)

* The crystallised sugar of milk consisting of C12 H24 O12, the discovery (as lately made by Pelouze and confirmed by Fremy) of the metamorphosis of sugar of milk into lactic acid, and of the spontaneous production of lactic acid in the milk, is easily explained.

* The researches of this physiologist, on the combinations of urea, show indisputably that urea is always combined with an acid in the living organism; in man and carnivorous animals with lactic acid; in herbivorous animals with hippuric acid; and in birds and reptiles with uric acid. The lactate of urea consists of one atom of lactic acid, one atom of urea, and one atom of water: its formula is,—C2 H3 N4 O2 + C6 H4 O4 + OH2.

PARISIAN INTELLIGENCE.

(FROM OUR OWN CORRESPONDENT.)

Paris, July 18, 1844.

On Cataracta. In my preceding letters, I gave, in a series of lectures, the opinions of Professor Velpeau on this disease: to day, I intend laying before your readers those of Professors Roux and A. Berard on the same subject.

The distinguished surgeon of the Hotel Dieu, in a lecture just delivered, expresses himself as follows. Having lately operated on several patients for cataract, I take this opportunity of comparing the two methods (extraction and couching) generally employed, and my reasons for preferring the former. Before so doing, I will, 1° *briefly describe the operation itself*: it may be divided into four stages. In the first, the eye is firmly fixed; the upper lid raised by an assistant, and the lower depressed by the finger of the surgeon; as to the instruments invented by oculists, and which are called *ophthalmostats*, I consider them useless in the operation by extraction, though I sometimes employ them in that by couching.—In the second, the cornea is divided: the incision must be oblique, the opening sufficiently large to permit the escape of the lens: for instance, somewhat more than a quarter of the circumference of the cornea. The puncture must be made at about half a line, or a line, from the point of union of the selerotica and cornea, a little above its transverse diameter, by means of Richter's triangular knife, which must be pushed obliquely from above downwards, and from without inwards, so as to come out opposite the inferior extremity of its perpendicular diameter, and thus cut the cornea through.—In the third, the capsule is divided. Wenzel often opened the capsule in the second stage; I myself have done it accidentally, but I do not recommend it; on the contrary, I think it ought always to be done with a peculiar instrument; for this purpose, I make use of a small *serpette*; a cataract needle may likewise be employed. In the fourth stage, the lens is removed by means of gentle pressure on the upper part of the eye; if that is not sufficient, it must be extracted with the cataract needle. Should a slight portion of the vitreous humour escape, it is of no great importance. 2° *I will make a few practical remarks*, on points to which little, if any, attention has been paid in dogmatic treatises—(A.) It sometimes happens that, though the patient has been operated on with great care and dexterity, though the consecutive accidents are very slight, and the pupil offers no opacity, still the patient sees no better than he did before. Whence proceeds this extraordinary phenomenon, and how can it be explained? In my opinion, in the following manner. Evidently, the normal functions of the eye, its achromatism after the extraction of the lens, cannot be regained ere a change takes place anteriorly in the form of the vitreous humour: that is to say, instead of being in the physiological state, concave, to receive the lens, it must become convex, in order to replace the part removed. Now, if the vitreous humour, after the operation, does not become convex anteriorly, sight cannot be restored, because the rays of light, in penetrating into the eye, and meeting with a concave instead of a convex surface, are refracted in an irregular manner, and do not form the image of the object on the retina. All that will be perceived, is the difference between night and day—(B). You may have remarked that, before operating, I invariably press the eye gently, without your perhaps knowing my reasons for so doing. I will therefore explain them to you: the more so as I consider this precaution highly useful. It is well known, and generally admitted, that, in their physiological condition, the different component parts of the eye present a certain density, which, if increased or diminished, constitutes a disease, and without which its functions are impaired, if not abolished. By experience, I am convinced, that an unusual degree of firmness accompanies an anæmic state, or various other morbid conditions, for it is then that the patient perceives sparks, flashes of light, and other bad symptoms. On the other hand, when the eye is softer than natural, it is a certain proof that the *hyaloides* is very thin, and that the vitreous humour is more liquid than it ought to be. The practical consequence to be drawn from these facts, is, that, in the latter case, the danger of the vitreous humour escaping by the wound, in the operation of extraction, is greater than if the eye offered its normal consistency. To impress on your minds the utility of this examination, I will relate a case which occurred to me. Being called to operate on a person affected with cataract, notwithstanding a careful examination, I failed in discovering the state of the parts; on the cornea being divided, a portion of the vitreous humour escaped through the wound, to such an extent, as to necessitate the non-termination of the operation. Fortunately, no consecutive accident took place, and the eye was, shortly after, in the same state as before my attempt. Some time after, couching was successfully done by another operator. This proves to you, how necessary it is to ascertain, if possible, the precise state of the eye, according as it is harder, or softer, than it ought to be; as thus you will be prevented performing an useless, if not dangerous, operation.

Comparison between extraction and couching; reasons for the prefereuce given to the former.—In order to show the advantages and inconveniences of the two methods, it is necessary to consider every circumstance which may exercise an influence on the operation; to compare two cases similarly placed; to admit, for instance, that both were performed with equal dexterity, precision, and under the same circumstances. And here, in order to reap all the benefit possible, you must become acquainted with my opinions on certain points concerning the operation by extraction,

with certain rules from which I never depart. Thus,—1° At what period ought cataract to be operated on? In this, I partake of the general opinion:—not until it is arrived at maturity, that is to say, until it is as complete and opaque as possible. The conduct of a surgeon would be rash and inhuman, were he to operate before the cataract was completely formed, because he thus makes his patient undergo useless sufferings.—2° With regard to cataract, several distinctions present themselves; it sometimes happens that both eyes are equally affected, the disease having commenced in both at the same time, and developed itself in an equal degree; or one eye may have been attacked before the other: in which case, one cataract is completely formed, while the second is still incomplete; finally, one eye only may be the seat of the disorder. This last, however, is very uncommon, as, when one eye is affected, the other sooner or later becomes implicated; this law, to which all double organs are subjected, would be an object well worthy of our attention, were it not that it would at present draw us too far from that under consideration. But, under such circumstances, what is to be done? Ought the two eyes to be operated on at the same time, when the cataract is complete in both? I answer affirmatively; and in this respect, I differ from many practitioners, who say that one eye ought first to be operated on, and subsequently the other; allowing a few days to elapse between the two. Experience, and it has not been wanting, has confirmed me in the opinion that patients, when operated on upon both sides, the same day, see better, and have fewer consecutive accidents, under the same circumstances, than those who are treated otherwise. I have not made out a statistical table on this point; for when I considered the immense number of operations performed, I found it would be almost impossible for me to do so; but, from the numerous facts I have observed, I am convinced that such is the case. When the operation is performed on both sides, at the same moment, you may entertain the hope of succeeding in one eye, if not in the two; whereas, when done at different periods, accidents may come on which may end in the loss of both eyes. I therefore say, that, in the generality of cases, you must operate on the two cataracts at once; but, as there is no rule without an exception, so you may be obliged to yield to the wish of the patient, and operate on different days. But, were you to perform couching, while convinced that extraction is the most advantageous, you would be guilty of an inexcusable act of condescension unworthy of a member of our noble profession. And, now, I will compare the two methods: 1° *As to the operation itself.* Evidently, extraction requires greater skill and dexterity than couching; in the former, the operation must be done with precision; in the latter, on the contrary, it is far easier, consisting simply in introducing a cataract needle through the cornea or sclerotica, and depressing or lacerating the opacity, leaving its absorption to nature. But is this sufficient to warrant the conclusion, that extraction is very difficult, and ought, consequently, to be seldom performed? Evidently not. 2° *As to the immediate accidents which may result.* I admit that they may be serious when extraction is performed by an unskilful hand: when the surgeon is not assisted by intelligent and attentive persons: or when the patient does not submit quietly and willingly; the incision may be too large or too small; the iris may be divided, which may cause inflammation of that membrane, followed by deformation of the pupil: this phlegmasia is, however, not so dangerous as might be supposed, being sometimes very slight, and in general soon disappearing; the vitreous humour may protrude, so as to render the extraction of the cornea difficult: this complication, though serious, is not so great as it appears, and in numerous cases in which it occurred to me, I have often succeeded in restoring sight; moreover, you have a proof of the exactitude of this fact, in a patient lately operated on, and still in one of my wards, whose sight will, in all probability, be restored; whereas another, operated on, without any accident occurring, will, I fear, not be so fortunate. It may, therefore, be concluded, that, often, apparently serious accidents have no injurious effect on the result of the operation, and *vice versâ*. As to couching, how many accidents are caused by it, notwithstanding its simplicity. Thus, the iris, retina, and other internal parts, may be wounded; the lens, after being depressed, may return to its original position, necessitating a second, a third, or even a greater number of operations, which produce inflammation more or less intense, &c.: this constitutes the principal danger attendant upon both methods; and were it possible to avoid it, the operation would rarely fail. It is to this complication, and that resulting from the form of the anterior portion of the vitreous humour, that want of success in extraction may be attributed; such, at least, is the conclusion to which I am led from long practice, and which you ought never to forget. You must not suppose, however, that inflammatory symptoms are more frequent, because the wound of the cornea is larger in the operation by extraction: no such thing being the case. Do we not see, daily, wounds made with a pointed instrument, hardly visible, give rise to dangerous accidents, whereas large incised wounds heal rapidly? And why should not this circumstance take place in the eye, as well as in other parts of the body? Besides this, there is another difference between the methods, viz.: that, after couching, the patient never sees so well as before the operation, as if the image of the object were not clearly made on the retina.—3° *As to the result of the two operations.* I can here speak from experience, for I do not think any surgeon, or oculist, has performed these operations oftener than myself, or compared them with greater care and impartiality. Thus, I began at Beaujon Hospital, where I remained 4½ years, and I continued them at the Charité, until 1815 or 1816; up to this period, I had performed six hundred operations, half by extraction, half by couching; and it is the result of the notes taken of these 600 cases, which made me conclude that the former operation ought to be preferred. In establishing the statistics of these operations, you must take note, not only of the number of cases, but likewise of the number of eyes operated on: thus, you may operate on one or both eyes; and, in the latter case, it may succeed in both, fail in both, or succeed in one and fail in the other. Now, of ten cases, suppose all the patients in the former category see; this would be a very fortunate result; and in the latter, five see with both eyes, and five are blind; here the number of eyes, in which sight is restored, is the same; but what a difference with respect to individuals! It is, therefore, highly necessary to neglect none of these different circumstances, in order to form a conclusive opinion. The statistical tables, on which I formed my conviction, include the operations performed in my private, and in my public, practice; and the result is, that the operation succeeds three times in five, considering the number of patients, and seven and a half times in ten, considering the number of eyes; this difference arises from the fact that, in many cases, the two eyes were operated on in the same person. Thus, as you may perceive, it is not without reflection, supported by experience, that I have come to the conclusion that, as a general method, extraction ought to be preferred to couching.

—Professor A. Berard has just published the following remarks on the same disease. An erroneous opinion is current, not only among the generality of practitioners, but, likewise, among those who occupy themselves specially with diseases of the eye, and the operations which they need, that one eye ought not to be operated on before the cataract is completely formed in the other. The reasons they give in favour of this opinion are:—1° The lens no longer existing on one side, the eyes have not an equal refracting power; consequently, the sight is more or less disturbed, and strabismus, or diplopia, may be the result.—2° The operation not only exposes the eye affected with cataract to inflammation, followed by the loss of vision, but may likewise compromise the sound one, as may be seen in a case published by Professor J. Cloquet.—3° If, after operating on one side, the other eye becomes affected, so as to necessitate a second operation, the patient runs a double risk, since the inflammation may extend to the other, and produce fatal results.—4° In operating successively on the two eyes, it often happens that both are lost, whereas, in doing so, the same day, when inflammation takes place, it is almost always limited to one eye, the other recovering its normal functions more or less perfectly. Here, it is admitted, that the cataract affects both eyes, and may be operated on at the same time,—a fact which I consider very possible, and a method which, except in some few cases, I constantly follow. These are the objections that have been made against the operation, when one eye alone is affected, and I will easily prove that they are more specious than real.—1° Though it is indubitable that the contraction of the lens causes a notable modification in the refractive power of the eye, yet it is not correct to state that the sight is always impaired; for numerous cases have been recorded, proving the contrary, by Maitre St. Jean, Wenzel, Professors Roux, Velpeau, &c., to which I can add my own experience. Therefore, the first objection, however plausible it appears, is altogether unfounded. It is true, that some persons are inconvenienced by the inequality in their sight; but this may easily be remedied by making the patient wear spectacles, the glasses of which are adapted so as to restore the lost equilibrium.—2° The next objection is far more serious, and, doubtless, the operation ought to be proscribed, if facts, similar to that related by Professor Cloquet, occurred frequently. Fortunately, this is so uncommon, that it can have no weight in the subject under consideration. Whoever thought of rejecting venesection, because this operation has sometimes caused fatal phlebitis? But it may be answered, venesection is excessively useful in many diseases, and the unfrequency of phlebitis is sufficient to justify our performing it. True; and if so in this case, the same reasoning is not less exact in cataract; the more so as not only myself, but likewise several distinguished colleagues, Professors Roux, Velpeau, &c., have never witnessed a case like that of Professor Cloquet. This observation is not sufficient to authorize the conclusion, that the operation ought not to be performed.—3° The preceding remarks are applicable here.—4° Experience has not confirmed the conclusions on which this objection is founded. Thus, it frequently happens that when both eyes are operated on, the same day, they may be lost from the accidents produced by the operation; on the other hand, very frequently, the operation on one eye succeeds. It must not be supposed, that I advise removing the cataract on one side only, when both are affected; all that I wish to establish is, that the eyes are equally subject to consecutive accidents, let the operation be performed on one or on both, and that the cause of its harmlessness or danger must be sought for elsewhere. The following case is a proof:—A woman, affected with diabetes, was operated on two years ago, unsuccessfully; a fortnight back, I depressed the crystalline lens. No consecutive accidents took place, and a few fragments of the capsule form the only obstacle to vision. Similar observations are not uncommon. Having thus refuted the different objections made against the operation, I will now indicate the advantages to be attained in so doing, and the inconveniences which result if we act otherwise. 1° *One eye only affected, the other in its normal state.* In this position, the sight being destroyed on one side, the patient cannot appreciate distances, as M. Magendie has justly asserted; his visual horizon is diminished by the eminence formed by the ossa nasi, whence a greater liability to receive injuries on the affected side; his head is held in a false position, being naturally turned, so as to bring the good eye as forward as possible. Now, all these accidents disappear with the cataract. 2° *In one eye, cataract complete, in the other, cataract beginning.* If the patient is left until the second is completely formed, he may remain in darkness several months, or even a year; this is avoided by operating successively. To these advantages, though sufficient to authorize the operation, I will add others not less peremptory. In waiting, the cataract, from simple, may become complicated with amaurosis, abnormal adherences of the iris, &c., which would

have been prevented by an early operation. It is well known, that the opacity of the lens almost always extends itself from one eye to the other, especially when the disease comes on spontaneously, in aged persons. In these cases it often happens, that the disease is completely formed in one eye, the other being in its normal state, and, by operating immediately, the latter is never affected; nay more, the operation in one eye causes the cataract in the other not only to remain stationary, but even to decrease. Howevever extraordinary this fact may appear, it cannot be doubted, since numerous authors, St. Yves, Wenzel, J. Stevenson, Weller, Maunoir, &c., have recorded authentic cases; and what is still more surprising, this takes place even when the operation fails. Doubtless, this does not occur in every case, but it is sufficient (as the facts observed by me attest) that it should do so in one half, to justify the conclusion that the cataract ought to be removed. And, if certain physiological phenomena take place in one eye, simply because they are produced in the other, such as contraction of the iris, movement of the eye, &c., why should not pathological phenomena be submitted to the same sympathetical influences? The facts observed by M. Serre, Professor at the Faculty of Medicine, Montpellier, (Gazette Medicale, No. 8, 1842) shew how great an influence one eye has on the other. After the operation on one side, in three cases, the sight was not restored, though the pupil appeared in its normal state; but, after operating on the other eye, vision not only returned in the latter, but likewise in the former. It may, therefore, be concluded, that the objections are not founded on facts, and that the operation is not only useful, but even necessary.

Prize.—The *Société royale de Medecine de Toulouse*, offers a prize of £12. for the best memoir on the following question: "Point out by anatomo-pathological facts and clinical observation, the cause of strangulation in bubonocele and hernia cruralis, and deduce therefrom the most appropriate treatment." Memoirs must be written in French or Latin, and sent pp. to M. Ducape, Secretaire General, before the 1st March, 1845.

Prophylactic Remedy against Ptyalism.—Dr. Schoepf, Professor of the University of Pesth, recommends the following tooth-powder, while administering mercury, in order to prevent salivation taking place. ℞. Pulv. alumin. exsiccat. ℥ij. pulv. cinchon. ℥j. m. To be employed by means of a soft brush morning and evening.

Academy of Sciences. Sitting of the 15th July—Baron Ch. Dupin in the Chair.—Books received: "Medals of Creation, or First Lessons in Geology, and in the Study of Organic Remains," 2 vols. By G. A. Mantell, LL.D., F.R.S., &c.—"Greenwich Observations for 1842," under the direction of G. B. Airy, Esq., M.A., Astronomer Royal.—"Catalogue of the Places of 1439 Stars, deduced from Observations made at the Royal Observatory, Greenwich, from Jan. 1, 1836, to Dec. 31, 1844."—"Transactions of the Royal Society;" parts 1st and 2nd, 1843, and part 1st, 1844.—"Quarterly Review," March and June, 1844.—"Human Physiology," 2 vols., with upwards of 300 illustrations. By Robert Dunglison, M.D.

On the Climate of France.—Memoir read by Dr. Fuster, in reply to M. Gasparin's report. In this Memoir, the author asserts, that the cold was long and intense in France during the Roman domination; that the grape-vine in the west, was 4° more to the south, than at the present day; in the centre 4½°, and in the east 3°; that the fig-tree was 5° more to the south;—that when Cæsar invaded Gaul, the winters were excessively cold, and heavy rains and tempests very frequent;—that the cold was produced by the presence of immense forests, lakes, marshes, bogs, &c.;—and that these last, freezing as soon as winter came on, converted the country into an immense *glacier*.

On the Mollusca Gasteropodes Phlebenteres. By M. de Quatrefages.—This Memoir, and the following, were addressed by the author from Messina.—*Digestive organs*: composed of an anterior orifice, in the form of a small opening, communicating with a large buccal cavity by means of a short canal; tongue cartilaginous; sometimes, several teeth; œsophagus short, ending in the stomach; intestiual tube short and large, little or no convolutions; anus, sometimes at the extremity of the body, sometimes in the middle, and sometimes at the point of union of the anterior third with the posterior two-thirds, on the median line or on one side, but always dorsal; liver never forms a distinct organ, but is composed of glandular masses. —*Circulation*, in general, does not exist, even in the rudimentary state; in some, there is a heart with arteries; in others, only a heart.—*Sexual organs.* They are ordinarily hermaphroditic.—*Nervous system.* Highly developed—composed of four ganglions, two by two, separated, or united superiorly; there are also distinct sub-œsophagian and buccal ganglions. All possess organs of hearing and of sight; the acoustic nerve short; the eyes formed of a crystalline lens, surrounded by a pigmentum, a vitreous humour, and a retina formed by a development of the optic nerve.—From these researches, the author concludes: 1° That the number of the species of phlebenteriæ is thirty; of these, twenty-nine were until now unknown; six belong to the family of the *Dermobranchiata*, six to that of the *Ramibranchiata*, and eighteen to that of the *Enterobranchiata.*—2° That the peculiar character of this species is, the union of the digestive, respiratory, and circulatory organs.—3° That this causes the disappearance, in some, of the respiratory organs.—4° That, for the same reason, the circulatory organs are simplified more and more, until they disappear. No veins: the heart and arteries wanting in the greater number, and when they exist, their functions are similar to those of the dorsal vessel in insects.—5° That, in none, the liver exists as a distinct organ.—6° That the genital organs are not symmetrical.

The same author addressed a Memoir, on the Sexual Organs, the Eye, and the Ear, of the *Annelides*, and on the Envelope of the *Mollusca* of the Mediterranean.

Extirpation of the scapula, and removal of the external third of the clavicle, for a tumour developed in the substance of the former.—Case communicated by M. Rigaud, Professor of Surgery at the Faculty of Medecine, Strasburgh.—Frantz, ætat 51, tall, thin, lymphatic, while a soldier, became affected with rheumatic pains in the left arm, which became, towards its centre, the seat of a tumour. The swelling, externally, was more apparent than elsewhere, and there it was soft, elastic, similar to that of *encephaloides* in the second stage, and seemed to be distinct from the surrounding parts. This tumour was removed; but six months after, it became necessary to perform amputation in the scapulo-humeral articulation; the patient soon got well. Eight months after, a tumour appeared in the spot corresponding to the axilla, accompanied by pain, insomnia, and soon acquired the size of the two fists; the author, convinced that it was produced by an *osteophyte*, determined upon removing the scapula, and the external portion of the clavicle. To accomplish this, two semi-elliptic incisions were made, each of about eleven inches in length, beginning about one, or one and a half, inch above the acromion, and extending below the former cicatrix; a chain saw was then passed under the clavicle, and the bone divided just before the insertion of the trapezius muscle; the skin covering the scapula was raised, and the bone drawn gently from the vertebral column, and removed. Two months after, the patient was quite well.

On the anatomy and physiology of the ova, and the corpus luteum, in the ovaria of women and mammifcræ—by Dr. Deschamps (de Melun). The author concludes:—that the ovum is composed of the Graafian vesicle, and the ovule of Baer;—that the ovarium offers all the component parts of the ovum, viz: chorion, albumen or the white, membrana vitellina, and vitellus or yolk;—that fecundation produces always the corpus luteum;—that the number of the corpora lutea are dependant on that of the fecundated ova;—that their presence is consequently a certain proof of fecundation

Academy of Medecine. Sitting of the 16th July—M. Caventou V. P. in the chair. M. Bousquet, for the *Comité de publication*, enumerated the different memoirs &c., which are to be inserted in the next volume of the memoirs of the Academy.—Professor Adelon regrets that the learned report, made by M. Melier on the *concours* for the *Civrieux prize*, was not included, and proposes that it may be placed on the list.—The *comite du publication* is requested to examine this proposition.

On the presence of arsenic in the soil of church-yards, and its absorption by the bodies there interred. —By Dr. Ollivier d'Angers. Two years ago, Professor Orfila read a memoir on the presence of arsenic in the soil of church-yards, in which he established that, as this substance was in an insoluble state, it could not be absorbed. The following medico-legal case confirms the exactitude of this conclusion. A man and a woman were accused, the former of poisoning his wife, the latter her husband, in order to remove all obstacles to their marriage. The bodies were dug up and analysed; nothing was discovered in the female; on the contrary, in the man arsenic evidently existed; the woman was, therefore, incarcerated. During the trial, doubts having arisen, exhumation was performed a second time, and the viscera, as well as the soil of the cemetery, were sent to me. On examination, the liver of the man, and the soil, were found to contain arsenic, whereas there was none in the body of the woman, or the other organs of the man. A remark must here be made, that the coffin of the woman, on being lowered the second time, burst open, so that the body was in contact with the soil, for several months, and yet there was no arsenic in it; proving, that the insolubility of the arsenic prevents its absorption.—Professor *Roux:* To what cause, do you attribute the presence of arsenic in the soil?—Dr. *Ollivier d'Angers:* It is not easy to establish the precise reason; our colleague, M. Chevalier, who has published a memoir on this subject, can perhaps give us some information.—M. *Boullaye* enquired, in what form is the arsenic in the soil?—*M. Chevalier:* In the department of the Vosges, there are arsenical mines; consequently, the soil naturally contains this metal; in the cemeteries around Paris, on the contrary, it is found on account of the immense quantity employed in manufactories. Therefore, in the country, where the bodies were buried, it must be sought for in the geological formation of the soil. —Professor *Orfila:* In the memoir which I had the honor of reading to the Academy, I proposed solving two questions: Can a body yield arsenic to the surrounding soil? Can the soil yield it to the body? To the first, I replied, affirmatively; and to the second, negatively; and the fact, just related, proves my opinion to be correct. As to the form in which the arsenic presents itself in the soil, it is generally under that of arseniate of lime.—M. *Chevalier:* In a Memoir, which I propose reading to the Academy, I will mention a curious fact, viz.: that all the bones of the workmen of a small country town, where numerous copper manufactories exist, as well as the soil, contain copper.

Discussion on Ophthalmology.—MM. Cornac and Chevalier proposed continuing the discussion in a special Sitting. This proposition, combatted by MM. Velpeau, Roux, Nacquart, was rejected.—Professor *Gerdy:* The speaker, after concluding that the diseases of the eye ought to be divided into varieties and species—the former needing simply a few pathognomonic signs, whereas the latter present important differences in their causes, anatomical lesions, symptoms, diagnosis, prognosis, and treatment—went on to assert:—that the same causes may inflame the different tissues of the eye, and that it is impossible to assign peculiar causes to the phlegmasiæ of such or such a tissue;—that all the anatomical lesions present great analogy, and so little variety, that it is impossible to describe them separately, or, at least, that they may be described in a general manner;—that the symptoms are nearly the same, no matter what tissue is affected;—that the same remarks are applicable to the treatment; consequently, that the divisions established, according to the tissue affected, are arbitrary and inexact, and that these diseases ought to be considered in their *ensemble*, and not divided and sub-divided, according to the German school.—Professor *Velpeau:* Before entering into

the discussion, I wish to correct an error attributed to me, and of which the author of the memoir, on which I made a report, partakes: viz., that the disease was epidemic; I did not say this, but that it appeared to offer some of the characters of an epidemy. This established, I will now proceed to examine the opinions announced by Professor Gerdy; as to those of Professor A. Berard, I need say nothing; for we differ but in some minor points only. Professor Gerdy concludes:—That the nature of the disease ought to be considered rather than the seat. But in wounds, followed by hæmorrhage, what surgeon is there who does not seek to ascertain precisely the seat, as the treatment differs greatly, according as the blood proceeds from an artery or a vein. Who, therefore, would dare to say that, the nature of a disease known, its seat is without importance?—That the causes are the same; this I cannot admit; for do we not see that conjunctivitis may reign epidemically, whereas this never takes place with keratitis, or iritis? Again, who is not aware that the same cause may give rise to different diseases? Does not cold produce pneumonia, pleuritis, peritonitis, rheumatismus, &c.?—That the constitution of the patient modifies more or less the local disease; this no one denies.—That the inflammation, if at first limited, soon spreads to the surrounding parts: this daily observation proves to be incorrect. Do we not see inflammation of the conjunctiva limited to the lids? And, when we cure ophthalmia purulenta, it is because we prevent its spreading to the other parts, for when this occurs all our efforts are vain.—That specific ophthalmiæ exist: this leads me to suppose, that it is rather my opinions, than those of the German school, that Professor G. combats; since I do not admit them, at least in the manner advanced by the followers of Beer. I consider arthritic, menstruous, hemorrhoidal, and the numerous other, ophthalmiæ, as merely speculative; the only one I can admit, is the syphilitic; as to the scrophulous, it cannot, in my opinion, exist, as *I do not believe in the existence of scrophula*,—That the treatment is always the same: but, is cupping the orbit, which he considers so useful in some cases, applicable against conjunctivitis? and the nitrate of silver, so heroic a remedy in conjunctivitis purulenta, is it suitable in keratitis or iritis? Certainly not. To resume: I consider: 1° That these affections differ, according to the tissue, and, according to the peculiar circumstances, in which the patient is placed. 2° That, according to their seat, they give rise to different symptoms. 3° That their mode of development, their termination, and their treatment, is not the same.—M. Nacquart proposed closing the discussion (adopted).

Observations on Lithotomy. Communicated by Dr. Segalas, M.A.—M. M——, curate of Gresle, near Roanne, Loire, was affected with pains in the bladder, and frequent desire to make water; sounded by Dr. Faure, the presence of a calculus was ascertained, and the patient was recommended to me. When sounded anew, I easily discovered the calculus, which *was large and very hard*, a circumstance which did not astonish me, as I have remarked that the affection in this class of persons always presented these characters. Lithotrity, at the earnest request of the patient, was thrice employed, but unsuccessfully; and the pain and other symptoms increasing, lithotomy was proposed and accepted. No consecutive accident followed the operation, and a month after, the patient was quite well. The calculus weighed $4\frac{3}{4}$ oz., offered a circumference of $7\frac{1}{2}$ inches by 6 inches, and presented the form of a kidney bean.—M ——, ætat 65, shoe-maker, from Mainers, Sarthe, of small stature and thin, was lithotomized after one attempt at lithotrity. The *sonde-siphon* could not here be supported, as in the former case; consequently, as soon as the urine escaped through the wound, which took place till the 12th day only, the patient was catheterized, at first every second or third hour, and afterwards when needful. The cure was complete on the 20th day. The calculus here was as hard as the other; weighed $2\frac{3}{4}$ oz.; offered the shape of a wheel; circumference 6 inches by $4\frac{3}{4}$ inches. The learned Academician terminated by stating, that he was prevented presenting the patients, on account of the discussion on ophthalmology, and the *comité secret* which took place the same day.

GARLAND DE BEAUMONT, D.M.P, B.L., & S., &c.
Honorary Physician to the Spanish Embassy.

NOTICES TO CORRESPONDENTS.

Mr. J. S. *sends us a long letter, in which, among other matters, he affirms that an argument has been used against mesmerism by one of the "public's best possible instructors", which shews that the author knew nothing about it, The "public's instructor" says that anything like a peculiar influence is given up, and that hence it is absurd that one party should be put* en rapport *with another. Ergo, &c. Our Correspondent shews that such an influence is not given up, and if it were that the relationship might still be useful, and that the instructor does not know that Mesmeric subjects vary in the character of their manifestations.*

We must decline the papers of H. S., M.D., Natus, A Constant Reader, Bath, and a University Man. The papers on "Chloride of Soda," "Cases of Strangulated Hernia," and "Mesmerism a Boon to Science," *lie at the office for the authors.*

A. M.—*Any party may prosecute for an indictable offence. Lapse of time makes no difference. An illustration of the practice is furnished by Sir George Stephens' prosecution of Zulueta.*

H. S. M., *who sends us his name, narraies to us an incident, which he alleges proves, in a rather insulting form, Mr. Weiss' low opinion of the honour of the profession. Our correspondent had purchased from Mr. Weiss some elastic catheters, which, not suiting, he wanted to have exchanged. The answer was, that once before the shop had changed catheters, and, on examination, those taken back were found to have been used. However respectable our correspondent, Mr. Weiss would decline, therefore, to take his word, or that of any medical man, that catheters had not been used.*

A Surgeon *and others.—We shall publish the list of English gentlemen who have graduated at Heidelburgh next week.*

H. S. D.—*The recipes will be found in our Almanack for* 1844.

Mr. Hutton.—*We shall endeavour to gratify our correspondent.*

Mr. M'Donough's *letter will not be overlooked on a fitting occasion.*

H. M.—*We really cannot answer our correspondent's numerous enquiries. Professional etiquette prohibits some; want of space, others.*

Mr. Poyser's *numbers* have *been sent. "Workesworth" is a very incomplete direction. Gentlemen should send full directions clearly written, or they embarrass the Post Office, and inconvenience themselves.*

Cyclops' *suggestion is good for another day.*

Mr. Dalton.—*We have received this gentleman's report in the* Gniana Royal Gazette.

Mr. F. A. Jones *has sent us the* best *of apologies, and we beg in return to make him ours. The highest debts of honour to a medical man, are those incurred by him to the Journal that instructs, defends, and entertains him, and it is, or will be, very gratifying to us to think that we have not one in our body of subscribers, who forgets to stand right with himself, us, and the profession.*

Dr. Michael Peyrone (of Turin).—*The original paper by this distinguished chemist on the action of ammonia on the protochloride of platinum, will appear next week.*

Dr. Charles Clay.—*An original paper by this eminent accoucheur, "On the Mode and proper Time for making Examinations per vaginam, in Cases of Labour," &c., will appear next week.*

Mr. Waite, Member of the R.C.S. and of the Imperial Academy of St. Petersburgh.—*We hope shortly to publish the valuable paper we have received from this eminent dentist. It contains some important views on dental operations.*

Dr. Knox.—*A communication by this celebrated anatomist, on the osseous structures, will appear next next week.*

Dr. Tiedemann.—*We have received an important communication from this distinguished foreign savant.*

We hope also to insert next week the very valuable communication of Dr. Waters, of Torrington Square, as well as a Lecture by Sir B. Brodie and a Pencilling of Mr. Liston.

We have received a host of Communications from other gentlemen, and shall announce next week the very few that our space will allow us to accept.

THE NEXT

PHARMACEUTICAL NUMBER

OF

THE MEDICAL TIMES,

(*No.* 3,) *of Colossal Size,*

Containing the enormous number of 96 QUARTO COLUMNS of closely printed Therapeutical, Chemical, and Pharmaceutical Information, will be ready on the 1ST OF AUGUST. It will contain selections of the important articles in all the other Scientific Journals, with several Original Papers of the highest importance. *The printed matter in this Number (price 5d.) will be equal to a Half-Guinea octavo Volume of four hundred pages.*

*** We have received so many letters from subscribers requesting the Pharmaceutical Number of the Medical Times, as to raise the agreeable impression, that we shall be consulting the wishes of all the gentlemen receiving numbers directly from the Office, in forwarding their copies monthly. On the 1st of August, therefore, we shall send to all our subscribers, and if there be any gentleman not needing the Pharmaceutical Number, he can favour us with the intimation by simply striking out his name from the cover, and directing the Journal back to us. On the other hand, gentlemen wishing to continue it, (and not being in advance on our books,) will oblige us by forwarding their subscriptions, viz 3s. per half year, or 6s. per annum.

THE MEDICAL TIMES.

SATURDAY, JULY 27, 1844.

Ut magus, et modo me Thebis, modo ponit Athenis.
HORACE.

We have had recently three medical editors breaking a lance with Mesmerism. The Editor of "*The Provincial*" attacked it chivalrously: he of the "*Gazette*" Quixotically—while our friend, Dr. Forbes, assaults it with all the vigour of a Don Amadis, and all the manner of a Sancho Panza. After pondering over the incidents of this triune Editorial warfare, we are filled with hopes for the ultimate fate of Mesmerism. The Irishman, when told that his sick friend was under the *care* of three physicians, exclaimed that "he was irrecoverably lost, the malady and the physicians being more than even a healthy man could survive." And how on Irish logic can we despair of a patient whom our contemporaries have pronounced moribund? The life, with such a certificate in its favour, would pass muster at the strictest of insurance offices.

"There is," says our sententious brother of the *Gazette*, "one great difficulty that meets us at the outset, and prevents us accepting Alexis as prophet, or viewing him with the same reverence as the ancients did their sybils and pythonesses—their interpreters of futurity: it is this: that since Christianity was given to man for his guidance, the oracles have been dumb." If our contemporary belie all evidence, and be not, in addition to *our* Hippocrates, the Dryasdust of the *Gentleman's Magazine*, and reverend monitor of the *Evangelical Record*—he has, after this sentence, an indubitable claim on the appointments. In one happy phrase, he has epitomized for us a whole volume of Ecclesiastical History, and Theology, adding the connecting link of a ratiocinating Philosophy. The eloquent M'Neile's sermon, proving Mesmerism Satanic, may, by a natural anachronism, be, at some distant, some *very* distant day—if both be remembered—traced to this apothegm as its germ. Yet novel and powerful as is the argument it contains, one could submit against it an objection or two, which would imply our contemporary to be just one degree worse than his own "dumb oracle,"—a

very misleading one. If we have read church records well, the heathen oracles did not close their mouths till three centuries after Christianity was given, *(testibus Iamblicus et Porphyrius)* and *our* Theology offers us no reason in the world why the foreseeing power of Pagan divinities, which are supposed to have outlived the revelations vouchsafed on Mount Sinai, should be made necesssarily impossible by those bequeathed us from Mount Olivet. But supposing us false in facts and heretics in divinity, whence follows it (if we may occupy the forbidden ground our contemporary has forced us on,) that because the Pythian power has ceased, the believer of that must necessarily disbelieve the Clairvoyance of Alexis. Are the only questions that can arise from the so singularly attested doings of Alexis, their falsity and Satanic origin? If he think so, we cannot compliment our brother editor on the extent of his "causality." We fear there are many things in heaven and earth not dreamed of in *his* philosophy. One thing is clear, that our friend has no doubt about diabolical Clairvoyance, though he hesitates about the time when it can be manifested, and possibly the *locus quo*. Now, using the *argumentum ad hominem*, may we be allowed to ask, what is there in infernal constitutions, which confers a high *intellectual* privilege, man may not *possibly* share? There is no very great irrationality in attributing to man a spiritual essence, and, indeed, the argument of our contemporary, resting, as it does, on Christian grounds, pre-supposes the belief. If thus, *the knowing power* of both be identical in type, we should be glad to learn on what principle *high* and god-like endowments shall be freely predicated of demons, and obstinately denied as impossible to men? If the Gazette will not believe Clairvoyance, however sustained by testimony, because "there is no effect without a cause, no function without an instrument, no organ not necessary to its office," on what possible grounds can it *consistently* attribute clairvoyance to the unseen spiritual agencies it speaks of. Is *their* sight "an effect without a cause, a function without an instrument," the performance of an office without an organ? In short, our contemporary cannot bandy such arguments against Mesmerism with any show of reason, until he first abandon his Christianity. When he teaches us how the disembodied see, we shall be glad to hear from him an exact description of the only instruments by which the *divinæ particula auræ* incorporate, can acquire its knowledge.

If Mesmerism were opposed by no stronger argument than the necessity of believing it "Satanic" if true, it might count on a speedy and pretty general reception. The true point against it—one it must, whatever its pretensions, have the greatest difficulty in surmounting—is the necessity of establishing claims which appear almost beyond the possibility of proof. Though the facts contended for do not necessarily contradict our present *knowledge*, they must be owned, if true, to be *additions* to it which, startling to excess in themselves, are made the less credible by contradicting at least some of our *theories*. Now as, on the one side we will not believe Mesmerism till its doctrines shall be attested beyond doubt, by facts numerous and irrefragable—on the other, we will not refuse to enquire into it, until its incongruity with *reason* be demonstrated. While we own that it will take much, very much from the Mesmerists to do the first for us, we must add that we have yet seen or heard nothing which has effected the second.

The presumption arising from the *ordinary* qualities men at all times and places exhibit, is too strong to allow us to admit lightly facts which clash with its adoption as an universal rule: but, as experience has already proved that there is much in the psychical condition of man that is not ordinary —as we *must* believe, in reference to our organism, not a few things that have no analogy to other portions of our knowledge—we hold it an important part of a fair courtesy, and wise philosophy, not rudely to shut out from our scientific tribunals pretensions of so tangible a character, and so open to essay, as those presented in the present day by Mesmerism. We know of no greater absurdity than that such a subject should be left in doubt and incertitude, or transferred from our care to that of the public. It is too important, either as a deception, or as a truth, to be left as it is. Manifestly, and beyond doubt, as our own eyes and hands have assured us, it contains some truths which science will be thankful for, and must, some day or other, incorporate in her boundaries as well-defined, and well-recognised portions: it doubtlessly contains, also, some very mistaken hypotheses, and it is our duty to the public, patiently and conclusively to examine and point them out. As its whole foundation for whatever credit it can attain, are either *facts*, or things advanced for facts, there can be no reason for our declining the jurisdiction. Wherefore, our advice on this point is the very opposite to that of our contemporary, who thus delivers himself:—"firmly believed in by one party of very respectable, very intelligent men, it is utterly scouted by another party of equally intelligent persons. These two parties should agree to differ on the subject of Mesmerism. The believers *ought* to cease making proselytes among the incredulous; the unbelievers ought to give over endeavouring to shake the faith of the credulous!" We would not have our learned friend's *ideas* on the diffusion of science!

But though our worthy brother requests his readers not to endeavour to shake the faith of the credulous, he is not above trying to do it himself. Here is a specimen of his manner:—

"There is an *a* in the word?" says the youth. The unsympathising male sex, who perceive that if Alexis could read with his stomach, as he pretends that he can, he would require to ask no questions, are all brutally silent; they will not say whether there is an *a* in the word or not; but the tender heart of a female friend cannot resist the insinuating query, and it confesses that there *is* an *a* in the word. "And an *i*?" continues the gentleman. *Conticuere omnes*—all are silent; but by and by it is wrung from another sympathising she soul that there is an *i* in it; and then, having immediately before been asked to read the word "Rouen," which he could not do, the prophet is delivered, and with the final throe gives utterance to the word "Paris," that word having an *a* and an *i* in it.—And this satisfies the believers in magnetism, and somnambulism, and second sight! If it does, they may be assured that it also satisfies the scoffers at their system."

We cannot, of course, say whether or not the writer is correct in hazarding the guess, that this one experiment would "satisfy a believer;" but, if he imagine that a disproof of Mesmerism's pretensions exists in the fact of the youth correctly pronouncing first, that a closed box contained two letters out of twenty-four; secondly, that it contained a word precisely of five letters; and, finally, that that word was "*Paris*," he must have notions of evidence that would make him a very indifferent judge or juryman. We can well understand that the experiment may have been inconclusive—for aught we are bound to know, the box was imperfect, or there was a collusive communication with the somnambulist—but if, as our contemporary surmises, there were no such illicit means of knowledge, and the result were a mere chance coincidence, we do not hesitate to say, that considering the number of letters in the alphabet, the variety of letters in words, and the quantity of words in a language, the three successively correct guesses (so easy and natural in the eyes of our friend) form the most wonderful circumstance—not to say miracle—of which we have any recollection. We will go further, and venture a moderate wager, that our contemporary shall guess for a month on successive words, with all the aids of assent when right, he thinks so useful to Alexis, and that he shall not be correct in his conjecture with regard to any single word. We invite him to try.

Without quite agreeing with another contemporary, Dr. Forbes, who has, we fear, too microscopic an eye to see the whole of any very large question, we shall yet do ourselves the pleasure of concluding with some remarks of his, on the subject we have been discussing. We recognise in him a painstaking opponent of Mesmerism, who, like ourselves, adopts, while opposing it, the plan—not usual with its antagonists—of seeking acquaintance with the facts which are brought forward in its favour. One half the obscurity and perplexity on this subject arises from the fact that positive opinions are being constantly volunteered by persons who really know nothing about it.

"I think it right to state that, even now, I only avow myself a sceptical doubter—not an utter disbeliever—as to mesmerism. I am still open to conviction when such evidence of its truth is afforded me as is deemed necessary in any other scientific inquiries. The things I have myself seen most assuredly increase very materially the doubts I before entertained; still I do not regard them as sufficient to prove the utter falseness of mesmerism: they prove nothing more than their utter insufficiency to prove its truth. Even the positive proof of trickery and collusion on the part of its professors, however, would afford no sound reason for declaring it to be false. Like medicine, or any other branch of natural science, it may be true although it be professed and practised by charlatans, cheats, and rogues. Give me the same kind of proofs of *clairvoyance* that I have of other scientific truths, and I will believe it."

REVIEWS.

The Physiology of Inflammation, and the Healing Process, by Benj. Travers, F.R.S. London: Highley.

Mr. Travers in this small book, adds some not unimportant facts to those previously known about the phenomena of inflammation. But as we shall in a short time be laying before our readers an abstract of all that is known on the important subject of this work, we shall for the present dismiss Mr. Travers' opinions, with the single remark, that while some are obscure, and others disputable, many are novel and important, promising to have some day a bearing on practice, now little expected, and rife with good results.

Lectures on the Principles and Practice of Physic, delivered at King's College, London. By T. Watson, M.D., F.R.C.P. &c. London: Parker.

The peculiar merit of these lectures is their *judiciousness*, a judiciousness at once intellectual in its character, and pleasing in its results. This is the all-pervading quality, and the reader can open no page without feeling that his author has exactly the characteristics which must *secure*, and, we are happy to add, *deserve*, a place in the highest rank of successful *prac-*

tical physicians. As Louis may be considered no bad type of the higher class of *French*, Watson is a capital specimen of the higher class of *English*, physicians. As the first are strong in the science of the profession, the second shine in the art; and hence, without underrating the anatomical and pathological attainments of Dr. Watson, which are not inconsiderable, we can assure our readers that those anxious for the aid of a man pre-eminently gifted with shrewd tact, and *practical* skill, cannot do better than consult the instructions in the work before us.

System of Mineralogy, including the most recent Discoveries, Foreign and American, by JAMES DANA A.M., London and New York: Wiley and Putnam.

Here we have the second edition of one of the few enduring works which American genius has contributed to sterling, orthodox science. Valuable as originally published, seven years back, it is incomparably improved in the edition before us, which just issuing from the press, is the most recent, and probably the most accurate text book on the subject in any language. There is added a mineralogical bibliography, minutely complete up to the present time, with an index containing an essentially useful list of the perplexing synonyms, which have so much puzzled students, and retarded the progress of the science. We can freely recommend this beautiful work as valuable to *all* mineralogists, and essential to those who would add to their knowledge of the mineral wealth of America. With a few notes, it would not make a bad English text-book.

The Oculist's Vade-mecum, a complete Practical System of Ophthalmic Surgery, by JOHN WALKER, Surgeon to the Manchester Eye Hospital, &c. London: Longman; Manchester, Simms and Dinham.

A work like the present, embracing the description of a very large number of diseases, and that description given as an epitome of each, does not admit of regular analysis; all that is left for the critic is to glance through the book, to ascertain its salient points, and to determine whether it is calculated to fulfil the promises of the author, by supplying a *vade-mecum* or *manual* on the subject on which it treats. Such, we fear, can scarcely be said of the present work. Although one of exceeding value, it does not "constitute a faithful representation and view of the present state of ophthalmic surgery," inasmuch as it does not refer sufficiently frequently to other authors, and to standard works on ophthalmic medicine and surgery, nor to many papers of practical value which have appeared in the columns of the medical periodical press. In this respect, it might be more complete and more perfect; indeed, some of the works that are quoted are not worthy that honour, not being works of authority. As a record of Mr. Walker's experience,—as an emendated transcript of his valuable lectures, which were published some time since,—the work is one of high merit, and well worthy a careful perusal by every member of our profession, to whom we can on these points conscientiously and strongly recommend it. The descriptions of the diseases are accurate, and are such as to be readily available for practical purposes. Some few errors have certainly crept in, but they are such as may be fairly referable to the differences in the character of disease, which will present themselves to every observant practitioner. With respect to the treatment, were we disposed to be hypercritical, there are some points respecting which we might fairly join issue with our author, on the score of incorrectness, arising from his not having tried the plans of treatment to which allusion is made. Among these may be mentioned the stimulant applications to the eye, in cases of external ophthalmia, more especially in the various forms of purulent ophthalmia, which are so successfully treated at the Royal Westminster Ophthalmic Hospital, by the application of the nitrate of silver ointment. Neither the formula for this ointment, nor the mode of using it, are correctly given by Mr. Walker, who frankly acknowledges he has never employed it. Notwithstanding these few blemishes, the work now under notice, is one of standard value, and fully deserving the patronage of the profession.

*** We owe an apology to Mr. Walker for the delay that has occurred in noticing his work.

Lectures on the Comparative Anatomy and Physiology of the Invertebrate Animals; delivered at the Royal College of Surgeons in 1843, by RICHARD OWEN, F.R.S., Hunterian Professor to the College. Pages 392., 8vo. London, 1844.

Human anatomy and physiology constitute the great corner-stones of medicine—the only sure foundations of pathological and therapeutic knowledge: nor is a profound acquaintance with the internal structure and functions of the inferior animals less essential to the physiologist and the student of zoology, than to the medical philosopher. No one can acquire a clear insight into the physiology of the human organs, unless he have borrowed from comparative anatomy all the powerful light which that interesting science can alone shed upon his researches. Anatomical structure, again, is the broad and solid basis upon which all consistent and philosophical arrangements of the animal kingdom must ultimately repose. Had the late Dr. Haighton, of London, sagely condescended to examine, ere he promulgated his peculiar views, the site and connections of the spleen in certain of the lower animals, we never should have been favoured with his specious, but ephemeral theory of the functions of that organ in man and the mammifera. Had the illustrious Swede been as accomplished a zootomist as he has shown himself an accurate observer of the external forms of natural objects, the lobster and the shrimp would never have figured, in the Linnæan system, among insects; nor the cuttle-fish and the oyster among the worms. Nor by any zoologist, even slightly acquainted with the anatomical and physiological peculiarities of the *Cetacea*, would those singularly constructed mammifera of the deep have been referred, as by the elegant, though short-sighted and superficial Pennant, to the class of fishes.

The great and increasing attention which has, of late years, been devoted, in the schools of Britain, to the study of comparative anatomy, and the number and excellence of the works which have successively issued, in its illustration, from her press, at once attest the correctness of our views, and augur well for the interests of medical science, and for the elevation of the attainments and character of its professors. In this previously neglected path of inquiry, John Hunter led the way. Several men, of powerful and highly cultivated intellect, have followed in the same track; thrown light upon its obscurer parts, and lessened, or removed, the difficulties by which it was obstructed. But, among these, no one has gone so far to emulate the zeal and reputation of his illustrious predecessor; none has so successfully aspired to occupy a niche in the temple of science by the side of Pallas and Humboldt, of Cuvier and Geoffroy-Saint-Hilaire, as the distinguished lecturer whose work we have now the pleasure of introducing to our readers' notice.

To attempt within the narrow limits to which our notice of Professor Owen's lectures must necessarily be restricted, the analysis of a book of facts extending over nearly four hundred closely-printed pages, would be alike futile and unsatisfactory. Nor is such an attempt at all requisite. For no lover of the natural sciences—no real student of comparative anatomy, could be satisfied with the scanty information, relative to such a work from such a writer, which can be conveyed through the medium of a review, however elaborate and comprehensive: he will obtain possession of the work itself, and satisfy his thirst for knowledge at the fountain-head.

Of the twenty-four lectures which constitute Professor Owen's valuable work, the first and introductory lecture is devoted to a classification of animals. This, to us, is the least intelligible and satisfactory portion of the volume. Indeed, we know not whether we precisely comprehend the principle of classification, especially with regard to the radiated division of the animal kingdom, which the professor has exhibited; nor, as far as we do comprehend, discern its superiority over the simple and luminous arrangement, employed, avowedly at the suggestion of the professor himself, by Rymer Jones, in his admirable Outline of the Animal Kingdom. As some of our readers are probably, to their misfortune, unacquainted with the work of Professor Jones, we shall exhibit the arrangement in question, and terminate our review by a few cursory observations on it.

The whole animal kingdom, then, is distributed by Professor Jones into five sub-kingdoms, instead of four, the number adopted by the lamented Cuvier, by Blainville and Professor Grant. This additional sub-kingdom has been gained by dismemberment of the vast, heterogeneous and chaotic assemblage of invertebrate animals classed together, by the French zootomist, under the general designation of zoophytes. In many of these animals, no vestige of a nervous system has yet been discovered. These constitute a distinct sub-kingdom, *Acrita*, of Macleay and Owen: we greatly prefer the more consistent and expressive designation, *Cryptoneura*, applied to it, by Rudolphi. The remnant, which exhibit nervous matter distributed through their structure in a thread-like form, are congregated, by Owen, into a second sub-kingdom, under the title of *Nematoneura*. This brief explanation will suffice to prepare the student's mind for the comprehension of the following synoptical view, transcribed, with some variations, from the work of Professor Jones*.

ANIMAL KINGDOM.

First Subregnum, Cryptoneura, Rudolphi, *Acrita*, Macleay, *Protozoa*, of other zoologists; comprehending part of *Zoophyta*, of Cuvier, *Actinozoa*, of Blainville, and *Cycloneura*, of Grant; contains five classes, Spongiæ, Polypi, Polygastrica, Actiniæ, Stevelmintha or Parenchymatous Entozoa.

Second Subregnum, Nematoneura, Owen; made up of the remnant of, *Zoophyta*, of Cuvier: also five classes, Bryozoa, Rotifera, Epizoa, Cœlelmintha, or Cavitary Entozoa, Echinodernata.

Third Subregnum, Homogangliata, Owen; *Diploneura*, Grant; *Articulata*, Cuvier, *Entomozoa*, Blainville: six classes, Cirripeda, Annelida, Myriapoda, Insecta, Arachnida, Crustacea.

Fourth Subregnum, Heterogangliata, Owen; *Cyclogangliata*, Grant; *Mollusca*, Cuvier; *Malacozoa*, Blainville: six classes, Tunicata, Conchifera, Brachiopoda, Gasteropoda, Pteropeda, Cephalopoda.

Fifth Subregnum, Myelencephala, Owen; *Spinicerebrata*, Grant; *Vertebrata*, Cuvier, *Osteozoa*, Blainville: five classes, Pisces, Amphibia, Reptilia, Aves, Mammifera.

A cursory survey of this arrangement will shew how precisely in the number of the Subregna, and how nearly in that of the classes belonging to each, it corresponds with the celebrated quinary system of Macleay. This coincidence is the more curious, as we have reason to believe that the arrangement was not framed with any view of supporting, or illustrating, Macleay's theory. The philosophic mind, whilst surveying with admiration, the talent and ingenuity displayed in the construction of that system, cannot reflect without pain and regret, on the perishable nature of its materials, and the instability of the basis upon which the specious edifice has been erected.

Among the more conspicuous defects of the zoological arrangement, proposed by Professor

* See *A General Outline of the Animal Kingdom, &c.*, by Thomas Rymer Jones, 8vo. London, 1841.

Owen, and adopted by Rymer Jones, are the separation of the simple Polypi from the *Bryozoa* or Polypi with ciliated arms, and of the *Cirripeda*, from the Molluscous Classes. Again, some animals, which from their external characters, have been classed among the *Cryptoneura*, obviously belong, as possessing the distinct rudiments of a nervous system, to *Nematoneura*. Of this discrepancy, an example presents itself in the *distoma* or fluke genus. Yet, with all its defects, we regard this arrangement as far preferable to the faulty classification of Cuvier,* and a great improvement upon that of Grant: † and we consequently regret that Professor Owen has not adhered to it in his present lectures. The time for a perfectly harmonious and philosophical arrangement of the animal kingdom has not yet arrived. The powers and opportunities of a gifted and energetic mind, like of that Professor Owen, will be more profitably occupied in collecting the facts and materials still wanting for it, than in premature and abortive attempts at the completion of the noble edifice.

In conclusion, we earnestly recommend every student of medicine and the physiological sciences, to possess himself of Professor Owen's volume; peruse it with unwearied attention, and regard it as his text-book in the comparative anatomy of the invertebrated animals. Would to Heaven that our rulers were more capable than they have hitherto proved themselves to be, of duly appreciating the exalted services of such men as Prof. Owen; and felt disposed to stimulate and reward in a less stingy and calculating spirit, such important labours; that they would divert to the encouragement of its best and noblest benefactors, some portion of the honours and emoluments, now almost exclusively lavished upon the gilded pests, and the titled destroyers, of their species. Then would not the philosopher or the patriot, as he turned from the splendid and humiliating contrast, shewn in the munificent patronage of men of science, by our continental neighbours, have reason to deplore in bitterness of spirit, this disgraceful inferiority of a land which, in all other respects, soars proudly above its rivals; nor blush for his country's dishonour.

ON THE BILE AND THE PRODUCTS OF ITS DECOMPOSITION,

BY THEYER AND SCHLOSSER.
(Translated for the "Medical Times," by Wm. Kirby O'Sullivan, Esq.)

(Continued from page 308.)

Treatment of the Bile with Potash.

The action of caustic potash on the bile has been already investigated by Demarçay; he has called the product a crystalline acid, cholic acid. We repeated these experiments with fresh, pure bile, in different ways: at first, with perfectly concentrated caustic potash ley, in which the bile was boiled for some days, the mass being employed in successive portions. A weak, ammoniacal smell was observed, which was nearly lost in the prevailing saponaceous one; when the mass which separated from the ley was, after this, removed, and purified from adhering potash, by edulcoration with water, it dissolved perfectly forming a brown-coloured liquid. Acetic acid was added, until a slight acid re-action was produced, when a thick, white precipitate separated; it was of a soft consistence, insoluble in cold water, and melted in boiling water, and was thus readily purified from adhering acetic acid; it dissolved very readily in alcohol, the solution being rendered milky by the addition of water; left to spontaneous evaporation, a transparent, dirty-yellow, glutinous mass separated, but no trace of a crystalline body.

If caustic potash be fused, and dry pulverised bile added to it, a violent re-action takes place, accompanied with a strong evolution of ammonia and hydrogen; the mass becomes brown; and if the operation be continued until no more ammonia is observed, then dissolved in water, and decomposed with an acid, — acetic or sulphuric —a precipitate, similar to the above, falls, which, shaken with alcohol and æther, and allowed to rest, deposits after some time a resinous mass; small crystals may also be observed on the sides of the vessel. The action here appears, however, to have been too violent, as, in the residual ley, besides carbonate, oxalate of potash was also found.

If a concentrated solution of the bile be added to a dilute caustic-potash ley, the whole boiled, and, whenever the substance begins to separate on the surface, water added, that the whole may remain dissolved; and if this ebullition be continued without interruption for some days, until ammonia ceases to be evolved, the ley then concentrated, until the soap separates perfectly in lumps, the mass, thus separated, removed and dissolved in water — a solution, more or less dark, according to the duration of the boiling, is obtained, which, when decomposed with dilute sulphuric acid, yields a pure, white, flocculent precipitate, which, when stirred with a glass rod, attaches itself to it, and coheres together, forming a yellowish tough mass, which hardens on exposure to the air: when nothing more is thrown down from the solution made to re-act slightly acid, the mass should be warmed in water, in which it becomes soft, divides readily, and makes the water milky; the milky water should be decanted, fresh water added, boiled, and the fluid again changed; this operation should be repeated until no trace of sulphuric acid remains. By this procedure, the mass, when the water boils, suddenly becomes harder, granular, and crystalline, so that, at length, it may be easily reduced to powder between the fingers. The whole should now be placed on a filter, the fluid allowed to percolate, and the mass on the filter to become dry, and then washed with æther, until it passes through colourless; the body is then dissolved in alcohol, which readily takes it up, heated to ebullition, and water added, until the solution begins to be milky; it should then be allowed to cool, and remain undisturbed for some hours. If the solution, which, in the meantime, becomes perfectly white and opaque, be now poured off, a deposit of crystalline needles will be found on the bottom and sides of the vessel; when the mother-liquor is concentrated, a fresh quantity of crystals is obtained, which, if coloured, as is generally the case in the first operation, should be heated again with alcohol, and crystallized in water. They form colourless, small, needle-shaped crystals, which, when slowly crystallized from æther and alcohol, yield partly small plates, and partly figures of a tetrahedral form: examined under the microscope, they appeared to belong to the oblique prismatic system; they nearly dissolve in an equal bulk of hot alcohol; scarcely at all in water, and very little in æther; more readily in a mixture of æther and alcohol. The alcoholic solution re-acts acid; when boiled in water, they also communicate an acid re-action to it; they fuse at 266° F.; burn with a smoky flame, leaving a scarcely combustible, voluminous, charcoal behind; heated with caustic potash, no ammonia is given off. They possess, at first, a sweetish, but, subsequently, a pure bitter, taste; their powder violently irritates the nose. They dissolve readily in alkalies, and can be separated by saturation with common salt: they decompose the carbonates of the alkalies, with effervescence, forming, with them, compounds easily soluble in water and alcohol.

Dried at 248° F., and burned with oxide of copper and chlorate of potash, the following results were obtained:—

	Grms of Substance.		Carbonic Acid.		Water.
I.	0·4085	gave	1·0415	and	0·3605
II.	0·435	"	1·1085	"	0·3865
III.	0·3566	"	0·9108		
	0·3205	"		"	0·2824
IV.	0·3355	"	0·8585	"	0·2947

	I.	II.	III.	IV.
Carbon	70·10	70·07	70·23	70·36
Hydrogen	9·79	9·85	9·77	9·74
Oxygen	20·11	20·08	20·00	19·90

CHOLATE OF LIME.

If cholic acid, suspended in water, be heated with a solution of carbonate of soda, it dissolves, perfectly, with evident evolution of carbonic acid; if carbonate of soda be added until all the acid is dissolved, the solution filtered, and decomposed with chloride of calcium, a thick, white, voluminous precipitate forms, which easily settles. It should be washed with water, to free it from excess of chloride of calcium, and from chloride of sodium, then filtered, dried, and treated with alcohol; by boiling, the cholate of lime dissolves, leaving the carbonate of lime undissolved; the solution is filtered, the greater portion of the alcohol distilled off, and the residue allowed to cool. The lime-salt now separates in thick, white, curdy masses, which should be filtered, placed on a tile, and then dried at 248° F. It forms an extremely fine, bulky, uncommonly light, white powder, very like carbonate of magnesia; not quite insoluble in water; very readily soluble in alcohol, also in acetic acid, from both of which it is separated by water.

Substance.		Sulphate of Lime.		Per Cent. of Lime.
0·3761	gave	0·0676	equivalent to	7·46
0·6029	"	0·1085	"	7·47

This makes the atomic weight of the anhydrous acid, 4410.

With another part of the solution of the acid in alcohol, to which water had been added, until it became slightly turbid, hydrate of lime was boiled; a combination of both took place; if an excess of hydrate of lime is employed, the mass solidifies on cooling; alcohol is to be poured on this mass, and the whole boiled. This boiling should be repeated with fresh portions of alcohol, as long as anything is dissolved, and filtered. The alcohol should then be distilled off, until something is observed to separate, when it should be allowed to cool. In this way, a salt of lime is obtained, perfectly similar to the preceding, having the same lightness, and containing the same quantity of lime, as when dried at 248° F.

0·5893 substance, gave 0·1045 sulphate of lime.

Burned with chromate of lead:—

	Substance.		Carbonic Acid.		Water.
I. ..	0·4271	gave	1·0378	and	0·35
II. ..	0·4903	"	1·1875	"	0·40

This gives the composition, in 100 parts, as follows:—

	I.	II.
Carbon	66·81	66·60
Hydrogen	9·09	9·05
Oxygen	16·74	
Lime	7·36	

BICHOLATE OF SILVER.

Cholic acid was treated with an aqueous solution of ammonia until it was completely dissolved, and the solution heated until it did not exhale this alkali, and gave a neutral reaction; the solution was then decomposed with a solution of nitrate of silver, containing a little free acid; a thick, white, flocculent precipitate was obtained, which readily deposited; it was washed by decantation and thrown on a filter. The precipitate was compact, did not blacken on exposure to the air, but, when dry, had a slight greyish tinge; was somewhat soluble in water, more so in alcohol and acetic acid, from which water throws it down. Dried at 212°, and burned with oxide of copper and chlorate of potash:

	Substance.		Carbonic Acid.		Water.
I. ..	0·5486	gave	1·291	and	0·438
II. ..	0·4685	"	1·0945	"	0·3735

0·719 substance gave 0·0648 silver = 9·68 oxide of silver, per cent.

0·55 ditto 0·0505 ditto = 9·86 ditto.

In 100 parts:—

	I.	II.
Carbon	64·71	64·24
Hydrogen	8·85	8·85
Oxygen	16·76	17·06
Oxide of silver	9·68	9·86

13269 of acid in this compound express an equivalent of silver.

NEUTRAL CHOLATE OF SILVER.

If a solution of carbonate of soda be added to a solution of cholic acid in weak spirits of wine, until it reacts alkaline, evaporated to dryness, and treated with absolute alcohol, the cholate of soda only will be dissolved, while the carbonate remains undissolved; it should be filtered, re-evaporated

* See *Le Règne Animal*, distribué d'apres son organization, &c. In our review of the forthcoming *Lectures* of Professor Owen, on the Vertebrate Animals, we shall expose the more striking errors and defects of Cuvier's celebrated Arrangement of the Animal Kingdom.

† See Todd's excellent *Cyclopædia of Anatomy and Physiology*, Article, Animal Kingdom.

to dryness, the mass dissolved in water, and decomposed with a solution of fused nitrate of silver. An extremely gelatinous, white, precipitate is obtained, which deposits with great difficulty; washed by decantation, and thrown on a filter, it forms a mass very like fresh precipitated alumina. When dried, it shrinks into small brown lumps, which, when pulverized, give a light brown powder. It is only slightly soluble in water, readily soluble in alcohol and acetic acid, from which water re-precipitates it; dried at 212° F., and burnt with oxide of copper, the following results were obtained:—

Substance.		Carbonic Acid.		Water.
0·5579	gave	1·153	and	0·389

Substance.	Silver.	Oxide of Silver.
0·5986	gave 0·1206	corresponding to 21·64 per cent.

In 100 parts:—

Carbon	56·83
Hydrogen	7·73
Oxygen	13·80
Oxide of Silver	21·64

Making the atomic weight of the acid, 5257.

CHOLATE OF SODA.

If the process given above, for the preparation of the silver salt, be followed in obtaining this salt, namely, separating, with absolute alcohol, the neutral compound from carbonate of soda, and then an equal quantity of æther be added to this alcoholic solution, a soda salt will fall, after a very short time, in clusters of long, fine, crystalline needles; thrown on a filter, and dried, they yield a white powder of a pure bitter taste; are very readily soluble in water, also in alcohol, from which they are separated by æther; they are also soluble in acetic acid. They give, with chloride of mercury, a white precipitate, soluble in alcohol; with a solution of sulphate of copper, a blue precipitate, with difficulty soluble in alcohol; with chloride of iron, a light yellow precipitate, also soluble in alcohol; and with sulphate of magnesia, no precipitate. Dried at 248° F., and burned with chromate of lead,

	Substance.		Carbonic Acid.		Water.
I. ..	0·602	gave	1·4725	and	0·5113
II. ..	0·4722	"	1·1552	"	0·3995

0·5502 substance gave 0·0695 carbonate of soda.
0·397 " 0·05 "

This gives, in 100 parts:—

Carbon	67·26	.....	67·27
Hydrogen	9·42	.....	9·38
Oxygen	15·92	.....	15·97
Soda	7·40	.....	7·38

Which makes the atomic weight 4892.

CHOLATE OF LEAD.

Cholic acid was dissolved in aqueous ammonia: the excess of the latter driven off by boiling, and the neutral solution precipitated with acetate of lead; the precipitate was white and flocculent, deposited quickly, and admitted of being washed rapidly by decantation. In order to remove a little carbonate of lead, formed during the operation, the precipitate was treated with boiling alcohol, as long as anything was dissolved; filtered; the alcohol distilled off, and the residue evaporated to dryness in a water-bath. The lead compound gradually falls from the concentrated alcoholic solution in warty, crystalline, masses; it is little soluble in water, but soluble, however, in acetic acid, from which water throws it down. Dried at 248° F., and burned with chromate of lead:—

Substance.		Carbonic Acid.		Water.
0·5484	gave	1·0525	and	0·3565
0·4928	"	0·9457	"	0·3178

Substance.	Sulphate of Lead.	Oxide of Lead.
0·59	gave 0·21	equivalent to 26·18 per cent.
0·719	" 0·255	" 26·19 "

In 100 parts:—

Carbon	52·78	.....	52·77
Hydrogen	7·21	.....	7·15
Oxygen	13·83	.....	13·89
Oxide of lead..	26·18	.....	26·19

From this, the atomic weight of the acid is=3929.

CHOLATE OF BARYTA.

The best method of preparing it, is to pour a boiling hot solution of cholic acid in alcohol into boiling baryta-water. For this purpose, a flask should be nearly filled with baryta-water; heated to ebullition, thus preventing the access of air to it; cholic acid added, drop by drop, and the solution shaken strongly, by which the baryta salt separates in thick flakes. The whole should then be rapidly filtered; washed with warm water, as free as possible from air, until the liquid which percolates no longer re-acts alkaline; and the precipitate poured on a tile, in a dry state. This salt is not so light and bulky as the lime salt; it is very little soluble in water; pretty easily soluble in alcohol and acetic acid, from which it is again thrown down by water. Dried at 248° F., and burned with chromate of lead:—

Substance.		Carbonic Acid.		Water.
I. ..	0·3207	gave 0·6995	and	0·2515
II. ..	0·289	" 0·6316	"	0·228

Substance.	Sulphate of Baryta.	Baryta.
0·4172	gave 0·1142	equivalent to 17·96 per cent.
0·4083	" 0·1118	" 17·97 "

In 100 parts:—

	I.		II.
Carbon	59·97	.....	60·10
Hydrogen	8·70	.....	8·75
Oxygen	13·37	.....	13·18
Baryta	17·96	.....	17·97

This makes the atomic weight of the acid, 4368.

TREATMENT OF THE BILE WITH CARBONATE OF POTASH.

Berzelius, in his *Lehrbuch der Chemie*, says: that, by boiling for some hours an alcoholic extract of the bile with carbonate of potash, precipitating the solution by acetic acid, and washing with water, he obtained a mass of fine crystals, netted together. We have not succeeded in obtaining them, although we boiled, for a number of days, a solution of pure bile with carbonate of potash ley, always diluted with sufficient water to keep the mass dissolved. A smell resembling that from glue was perceived, and after the mass separated, from the continued concentration, it was removed from the ley, and dissolved in water; no precipitate could be produced in this solution, either by acetic or sulphuric acid. The whole liquid was, therefore, decomposed with acetate of lead, by which a plaster-like precipitate was produced, which, freed from adhering acid and carbonate of potash, by washing, was dissolved in boiling alcohol, and filtered. From this combination, the oxide of lead was separated by a stream of sulphuretted hydrogen, and after filtration, the liquid was evaporated. By this means, the precipitation of a white, granular, mass, was observed, which, on further evaporation, increased; it dissolved readily in water, from which it could be crystallized; was precipitated from its aqueous solution by alcohol; this was taurine, as the analysis also confirmed; it gave, when burned with oxide of copper, 727 cubic centimetres of mixed gases: 142 cubic centimetres of which were nitrogen, and the remainder carbonic acid. This expresses pretty nearly the proportion of 1 to 4, or 1 equivalent of nitrogen to 2 of carbon. The body which remained, dissolved in the alcohol, was evaporated to dryness, after which, it no longer dissolved clear in water, and became milky by boiling. From this it may be seen, that no other change was produced in the bile by carbonate of potash, than a solution of bilic acid undergoes alone by long boiling, without the use of potash.

From the consideration of these results, we can see, that the cholic acid is not very constant in its combinations; it may, however, be allowed us here to attempt to draw a conclusion, from the atomic weights of some of its salts, of its composition and formation from the bile.

We find, that the atomic weights of the lime compound, prepared in both ways, and of the baryta salt, agree with that of the acid salt of silver. For, if we take the atomic weight, 4410, calculated from the lime salt, or 4368, that deduced from the baryta salt, three times, we get a number expressing the atomic weight of the above-mentioned silver salt. If we deduce a formula from these, as from the silver compounds of choloïdic acid, the metamorphosis of the bile, under the influence of the agents described, may be sufficiently explained in the following way:—

Hydrate of Bilic Acid.

	Theory.		Found.
C_{44}=3337·4	..... 63·40	.....	63·70
H_{36}=449·26	..... 8·53	.....	8·84
N =177·04	..... 3·36	.....	3·45
O_{13}=1300·	..... 24·71		
5263·7			

Bilate of Soda.

	Theory.		Found.
C_{44}=3337·4	..... 60·21	.....	60·12
H_{35}=436·78	..... 7·88	.....	8·5
N =177·04	..... 3·19	.....	3·30
O_{12}=1200·	..... 21·67		
NaO= 390·9	..... 7·05	.....	6·95

Cholic acid is produced from hydrate of bilic acid, by the separation of two equivalents of carbonic acid, and one equivalent of ammonia.

Hydrate of Bilic Acid .. C_{44} H_{36} N O_{13}
C_2 H_3 N O_4

= Cholic Acid..... C_{42} H_{33} O_9

Cholic Acid.

	Theory.		Found.
C_{42}=3185·7	..... 70·83	.....	70·36
H_{33}= 411·82	..... 9·15	.....	9·74
O_9 = 900·	..... 20·02		
4497·52			

Cholate of Lime.

	Theory.		Found.
C_{42}=3185·7	..... 67·19	.....	66·81
H_{32}= 399·34	..... 8·42	.....	9·09
O_8 800·	..... 16·89		
CaO 356·02	..... 7·50	.....	7·36

The formation of choloïdic acid may be explained, if, from the elements, hydrate of bilic acid, taken three times, the elements of 3 equivalents of taurine be subtracted, and 13 equivalents of water added.

3 Equivalents Bilic Acid .. C_{132} H_{108} N_3 O_{39}
—3 Equivalents of Taurine.. C_{12} H_{21} N_3 O_{30}

= C_{120} H_{87} O_9
+ H_{13} O_{13}

= 2 Equiv ...oloïdic Acid C_{120} H_{100} O_{22}

Choloïdic Acid.

	Theory.		Found.
C_{60}=4551·24	..... 72·53	.....	72·23
H_{50}= 623·98	..... 9·94	.....	10·10
O_{11}=1100·	..... 17·53		
6275·22			

Choloïdate of Silver.

	Theory.		Found.
C_{60}=4551·24	..... 59·77	.....	59·22
H_{49}= 611·50	..... 8·03	.....	8·16
O_{10}=1000·	..... 13·13		
AgO=1451·6	..... 19·07	.....	19·35

Dyslysin may result from choloïdic acid, by the separation of 4 equivalents of water.

1 Equivalent Choloïdic Acid.. C_{60} H_{50} O_{11}
— 4 Equivalents Water..... H_4 O_4

= Dyslysin..... C_{60} H_{46} O_7

Dyslysin.

	Theory.		Found.
C_{60}=4551·24	..... 78·13	.....	78·22
H_{46}= 574·06	..... 9·85	.....	9·68
O_7 = 700·	..... 12·02		
5825·30			

We are of opinion, that, in the preceding paper, which occupied us unremittingly for a whole year, we have come to certain results, in reference to the knowledge of the composition of ox bile, and its products of decomposition. From the analysis of Demarçay, made seven years ago, in the same place, and in Paris, as well as those of Kemp and others, the bile, taken from different animals, has a constant composition, independent of the food consumed; in the healthy state, its constituents undergo no change, and, therefore, cannot be considered any more as a mixture of heterogeneous substances.

The constancy of its composition and properties admit of the conclusion being drawn with certainty, that the organ in which it is generated, and from which it is secreted, does not, like the nerves, act as a filter, by which substances, in so far as they are soluble, may be separated from the blood; but, on the contrary, exerts a certain definite influence in the conversion into bile of the matter supplied to it; and this conversion or union—a fact

which cannot be denied—consequently requires that decompositions and combinations must be effected by the action of this organ.

It has been supposed that the bilic acid, prepared from the bile, is different from the organic compound, which, with soda, forms this secretion, because the natural bile is not precipitated by acetic acid, while the soda-salt of the bilic acid, prepared from it, is rendered turbid and gives a precipitate with this acid.

This could not be otherwise; and it is easily explained, when the reader remembers that the bilic acid, from the moment it comes in contact with water after its separation from the soda, undergoes a change which consists in its being decomposed into taurine and choloïdic acid.

All bilic acid, when kept for a longer or shorter time, yields a residue of taurine, even when immediately re-dissolved in the same alcohol, and must, consequently, bo always contaminated with choloïdic acid, which is precipitated in the artificial soda-salt by acetic acid;—the resulting precipitate is, therefore, pure choloïdic and not bilic acid.

OBSERVATIONS ON A WORK ENTITLED "CHEMISTRY IN ITS APPLICATIONS TO AGRICULTURE AND PHYSIOLOGY." BY PROFESSOR LIEBIG M. D. PH. D.

(From a Correspondent.)

(Continued from page 273.)

Supposing carbon to compose 2-1000th parts of the atmosphere, in the form of carbonic acid gas—which I do not believe it does—this sum of its presence is wanting to supply:—firstly, the animal—secondly, the vegetable—and, thirdly, the mineral kingdom. Let us now consider the wants of each.

Although individual animals, whether of the land or water, do not attain the size of forest trees, yet, when we cast our eyes abroad upon the earth, we find their wants and requirements of carbon, when taken in the aggregate, equal in extent to the requirements of the vegetable kingdom. The inhabitants of the deep, in the process of respiration, evolve carbonic acid gas: carbon also enters into their organical structure. From whence, then, do they derive their carbon? Is it from the waters? If so, the quantity of carbonic acid gas must, primarily, have been in excess, inimical to every form of life—inimical to the natural operation of nature in generation and decay. But, says Professor Liebig, and others, "it may have condensed in beds of coal." If so, bitumen must have been a primary product: but this is contrary to what we know, for the deeper we descend into the earth, the less abundant we find this material, and at the lowest depths it eventually disappears. Again, the bituminous beds are almost invariably disposed in laminated plates, between beds of organic exuvia, principally of oceanic animals, now in their mineralized state: and these bitumens are no other than organic remains of giant reeds, ferns, and grasses, spagnum, and other vegetables, united, more or less, with animal as well as vegetable matter: for Liebig has yet to learn that the greater portion of the bitumen of this earth is mineralized *animal* matter,—such are Judean pitch, much of the anthracite and bituminous coal, petroleum and naphtha springs, so common in Asia, Afria and America, and the *siderate* and *carboniferous* rocks. The requisite supply for one year's consumption of carbonic acid gas, for animal, vegetable, and mineral requirements, is more than the whole atmosphere could afford; and the concentrated carbon of the earth would supply many atmospheres larger than this earth.

Physiologists and chemists are both profoundly ignorant of the nature and origin of undecompounded bodies, and the phenomena of their generation and increase. In the ocean, carbon increases with the increase of *animals* and vegetables; the first generating it, the latter receiving it, by abstraction from the waters and the earths to which they are affixed. Every bed of earth is a monument of the past, whether it be vegetable mould, calcareous matter, coal or rock; and every forming bed offers incontestible evidence of its increase, and the causes of that increase. In the ocean, animals devour each other as they do marine plants; still, notwithstanding this waste, life continues to multiply in its quantities, and the whole period or existence of an animal, and of a vegetable, is employed in elaborating solid matter, and giving it in this manner to the earth; and, finally, on its natural death, every portion of the solid frame-work of its body is also added to the earth: thus, by the united labours of myriads upon myriads, the solid matter of the earth increases in every vibration of time. Even admitting that marine animals do not generate carbon, but simply abstract it from the medium in which they are placed, still the economy of nature is the same,—general waste and universal increase; the means point to the attainment of the same ends; and that which would otherwise have been lost in the building process of the earth, is now elaborated into a more consolidated form by the vital action of plants.

But it is not absolutely necessary that marine plants should act as the seavengers of the animal creation, for there are causes which contribute to remove a material so inimical to animal life. These organic remains of animals and vegetables still continue to increase in solidity, by processes analogous to vegetable organizations; they unite the carbonic acid gas with their quantities, absorbing carbon, oxygen, hydrogen, and nitrogen; and, thus, new chemical and mechanical changes take place, and the mineral kingdom is produced.

Liebeg by the authority of his name would perpetuate vulgar errors—he improves but does not enlarge knowledge—he tells us that the earths and alkalies are abstracted from the soil, and his whole system of natural philosophy, or rather the universal basis of his theory is, that the sum of consolidated matter termed the earth and the undecompounded gascous bodies is ever the same, without increase and without diminution. Is this the fact? most assuredly not! The experiments of physiologists furnish many proofs to the contrary, observation furnishes many more. Boyle says, that after having nourished slips of several kinds of plants in water and observed them well, he opines that there may be a real assimilation and transmutation of water into the substances of the vegetable; and that by the change in the molecular disposition of the water, various concretes are formed, having firmness, opacity, odours, tastes, smells, colours, and other manifest properties differing from one another. Recent discoveries which have enabled us to separate this elementary compound, have verified these opinions to a certain extent.

Conceding to Liebeg that the carbonic acid is derived from the atmosphere, still his theory would be as vague and inconclusive as ever: from whence, I ask, comes potassium and other earths. Experiment proves that seeds sown in pure sand, common shot, and shavings, and other dry substances, not only grow on being watered, but pass through all the gradations that are necessary to bring them to perfection: and, on analysis, they are found to contain the various earths, acids, resins, carbon, &c., as if they were cultivated in the natural soil. Admitting, which is truly the case, that the experiments of physiologists are frivolous, the explanations offered by Liebeg why plants will not grow in vessels of pure Carrara marble are equally frivolous. I have frequently seen large trees springing from the top and sides of the ruins of marble edifices. In the moist climate of Bengal, the pepul tree may often be observed springing from the crevices of old palace walls of marble: it is a tree of rapid growth and wonderful expansive powers, and its roots, as they seek the earth, rend asunder the most ponderable blocks. There are numerous other species to be found locating themselves in similar situations in hot moist climates, and the ash may often be seen in this country, crowning the ivy mantled tower. In the latter, potassium or potash *might* be a constitnent of the decomposing material, but not so in the former, and yet on destructive analysis, the usual per centage of this earth is produced.

Again, the forest tree springs forth from aluminous, siliceous, and calcareous earth, yet shall this earth, which exists not in the soil, together with many other compounds, &c. be produced: it is nurtured by the rains, or derives its moisture from the earth; its vital powers increase with its growth and expansion, and as gradually decrease when these powers of expansion are overcome by the acquired rigidity of parts produced by continuous positive increase of earth, elaborated by vital action; and, as vegetation increases, so in the absence of removing causes, the vegetable earth termed *humus* increases. Again, the tree does not of neeessity yield the earth's sodium or potassium, as is manifest in fossilized or mineralized wood; and here the act of silicification, carbonization, or mineralization, is not accompanied with abstraction of earths, but it is a remodification of their elementary constituents.

The islands of the Pacific, Southern, and Indian oceans, the great and extensive ranges of soils intersecting the earth as newly formed lands, are, generally speaking, composed in entirety exclusively by oceanic organic matter, they contain no potash, nor do tho waters which leave them contain potash. The first plants accidentally introduced or spontaneously generated, yield, on burning, the earth soda and no potash; as these plants die off, as the lands become purified of their bitter acrid salts, as sea weeds rot, and sea birds deposit their dung and their waste of animal matter collected for food, so the young soil acquires capabilities for supporting land vegetables, and new orders make their appearance, some of which will be found to yield both soda and potash; but eventually the former wholly disappears, or is confined to the sea shores and saline beds. The plants are, in the first instance, characteristic of the soil, aquatic as mangroves, fucuses and cryptogamia, or otherwise grasses, saline plants, and acacias; to all of which the continuance of these peculiarities of soil is the condition under which alone they can exist without change of form or qualities.

Liebeg tells us that vegetable mould does not afford nutriment to plants,—the phenomena of nature testify otherwise. In tropical or hot latitudes, in the absence of vegetable mould, the vegetable kingdom is almost wholly confined to arborescent palms and grasses, which supplied abundantly with water attain a giant growth, but are of a spongy texture; in the absence of rains it comprises dwarf palms, gum trees, acacias, and silicious grasses, these latter yielding by the processes of increase and decay little or no vegetable earth: but the rapid increase and rapid decay of the former soon gives vegetable character to the soil; and, as this soil increases, so genera, orders and species multiply, and the vegetable earth increases. Again, elevated regions are perpetually being deprived of their vegetable remains, which deposited on the plains, in the valleys, or forming deltas, become the foundations of vast tropical forests and priaries, being adapted for the support of man and animal: in the fertile lands of the East and West, the products of vegetation, as vegetable mould and clay, cover the earth in some instances to a vast depth; but in Australia and many parts of Asia and Africa, we find an almost total absence of vegetable mould; and, as a necessary consequence, a great scarcity of timber fitting for commercial purposes. In regions where there is excess of heat and moisture, there is also an excess of vegetation and of animals; and the extended process of decomposition, renders the lowest stratum of the atmosphere inimical to the life of man and many animals.

He further observes: "it cannot be conceived that the laws of nutrition of plants are changed by culture." The laws of nutrition of plants are, philosophically speaking, affinity, force, and association of matter, governed and directed by local temperature, local association, and local influences—not unalterable, as the laws of the ancient Medes and Persians, but dependent on the maintenance of these particular conditions: thus the oak, transplanted to the soil of Bengal, becomes a miserable stunted shrub, and the giant banyan becomes in this country, the humble ornament of a garden pot. We, therefore, can conceive, that these laws do change,—with the increase of size and development, new organs of secretion in one instance, and with the decrease of size, and consequent loss of innate properties in

the other. The plant depends upon the soil for its organic character, as it does upon the atmosphere for its vital action; if disposed within an atmosphere in which carbon exists in expanded volume, it inspires the carbon with the oxygen, with which it is mechanically united, the union of these two bodies being dissolved when it enters the organic system; but the carbon received through these inspiratory duets, does not constitute the food of the plant, unless there is a deficiency of carbon in the secreting fluids, pure air and water alone being the pabulum of all plants. It takes up by the roots such gases and earth, as can be conveyed therein by the moisture, which, by capillary attraction, or the force of affinity, it abstracts from the soil, without having the power to reject earths, or metalline, or other vapours, that may prove destructive to it. The vital action is supported by the absorption of light and heat, and atmospheric air; its growth and increase depend, in a great measure, and sometimes almost wholly, upon the soil.

The calculations of M. Saussure, upon which Liebig exclusively depends for the maintenance of his position, are repugnant to common sense; it is absurd to tell us that the atmosphere contains 3306 billions of carbon; still more absurd are the means by which he professes to arrive at these calculations. Atmospheric analyses are, at best, very uncertain in their issue: but what dependence can be placed on local experiments, when they are applied to universal generalization. It is false to say, that the temperate regions contain more carbon than the tropics, the tropics more oxygen than the temperate regions, and that a mutual exchange takes place. The abundance of coal in our temperate regions, may appear to favour these, which he considers indisputable, hypotheses; but when we examine these coal beds, and the beds in which they are disposed, we find, incontrovertible evidence, that these coal-beds are almost wholly composed of animals and vegetables, which can only exist in a tropical climate, and beneath the influence of tropical heat. Liebig is utterly ignorant of the nature and extent of a tropical forest, of the rapid germination, development, and decay of tropical vegetation, of the extent of destruction and rapid regeneration. The destruction caused by animals, from the amphydes to the elephant, by ants, grasshoppers, locusts, clouds of other winged or creeping insects, birds and beasts, and by the digestive processes, by all of which the carbon is assimilated to the vegetable soil, is more than ten thousand times ten thousand to one, greater than ever takes place in temperate regions. Again, here we find forests of incredible magnitude swept into the deep, or laid prostrate to the earth in a single season. The magnificent rivers, traversing tropical countries, are the moving causes of vast kingdoms being formed at the expense of the waters, bearing away the excess of vegetation to found new empires in the deep; thus in a single season, an island has been formed at the mouth of the Ganges of more than 80 miles in diameter, and 80 or 90 feet above the surface of the sea.

Again, because coal and peat abound, "it follows, that the atmosphere is richer in oxygen at the present time than in former periods of the earth's history. This increase must be exactly proportional to the quantity of carbon and hydrogen contained in these carboniferous deposits. Thus, during the formation of 353 cubic feet of Newcastle split coal, the atmosphere must have received 643 cubic feet of oxygen, produced from the carbonic acid gas assimilated, and also 158 cubic feet of the same gas resulting from the decomposition. In former ages, therefore, the atmosphere must have contained less oxygen, but a much larger proportion of carbonic acid, than it does at the present time, a circumstance which accounts for the richness and luxuriance of earlier vegetation."

(To be continued.)

Mr. Hughes has sent us one of his new patent cravats for our opinion, requesting us to call attention to its peculiar claims on the patronage of surgeons. Readily adapting itself, by its peculiar elasticity, to the movements of the upper part of the body, it appears to us favourable to a full development of the muscles of the throat and neck, and hence may operate not disadvantageously in many of the affections to which these parts are subject. The invention is neat and ingenious, as well as useful.

ON THE CLASSIFICATION OF FISHES.

By Monsieur AGASSIZ OF NEUCHATEL. Translated for "The Medical Times," by W. Phillimore Stiff, Member of the Royal College or Surgeons and of the University of London.

The following abstract from "La Bibliotheque Univ. de Genêve" shows briefly the views of this profound icthyologist on the classification of fishes:—

The most important part of M. Agassiz's labour, in a zoological point of view, is a description, with figures of more than a thousand species of fossil fishes. Such a number of species added to the inventory of the animal kingdom, is an important addition, and a real advance in zoology, especially in a class so little known and studied as that of fishes.

So many new species could not enter into icthyological tables without causing great change, either in developing new types, or in an improved arrangement of the affinities of different groups and families. M. Agassiz has therefore not been content with establishing a multitude of species, genera, and families, but has created a classification entirely new, founded chiefly on the importance of fossil fishes.

Cuvier admits two grand divisions in this class, 1°, the osseous; 2°, the cartilaginous, fishes. Monsieur Agassiz separates, also, the osseous from the cartilaginous fishes, and of the latter, he makes his first order the "placoids;" but, in addition, he divides the osseous fishes into three other orders of the same value, so that the whole class is thus divided into four orders, namely—1°, the placoid; 2°, the ganoid; 3°, the ctenoid, and 4°, the cycloid order.

This classification is not based on the internal osseous system, (the endo-skeleton,) as was that of Cuvier, but on the nature of the external teguments or scales, (the exo-skeleton.) M. Agassiz lays down this principle, that the external teguments of fishes are a reflection of their internal organization. Setting out with this view, he examines the different families of the class with regard to their scales; and finds in the conformation of their external covering, a multitude of characters upon which he bases his classification.

A first remark on this point is, that all the osseous fishes (certain genera excepted) are provided with horny scales, whilst the skin of cartilaginous fishes is furnished with plates or spines of a peculiar form, and known as shagreen in the shark and ray families. The scales of osseous fishes are constructed on a totally different plan, and these differences are so well marked, that they appeared to M. Agassiz sufficient to serve as bases for his three orders, cycloid, ctenoid, and ganoid.

The cycloids and ctenoids, which comprise nearly all the osseous fishes of our epoch, have, each, horny scales; but they differ in this, that the ctenoids have the posterior border of the scales, toothed (hence their name, comb-like) whereas in the cycloids, the same border is entire.

The author endeavours to prove, that this distinction, though apparently insignificant, is a very natural one, since it is the expression of a feature which is disclosed in other parts of the body. It is thus, that fishes provided with dentated or pectinated scales, are in general armed with spines on the head, gill-covers, and other parts of the body, whilst the cycloids are smooth and unprovided with such defence.

M. Agassiz regards the perch family and their analogues, as the type of the ctenoid order; and the salmon family, the carps, pikes, &c., as the type of the cycloid order.

This division, then, corresponds to a certain point, with Cuvier's division of "acanthopterygii and malacopterygii;" and this coincidence would be sufficient to prove the necessity of separating the two types, since both arrived at the same result by a totally opposite induction. However, it is doubtful whether the method of Agassiz will succeed better than that of Cuvier, for already the researches of some naturalists have shown, that of fishes belonging to the same family, some have cycloid and others ctenoid scales; but we agree that in the study of fossil fishes, this distinction of scales is of more practical value than that which is founded on the structure of the rays of the dorsal fin.

The Ganoid order appears well founded:—There exist in the Nile and in the rivers of South America two fishes, which have always puzzled icthyologists; the one from the Nile, is known under the name "Bichir" (polypterus bichir); the other, from America, as the bony pike (lepidosteus), from its external resemblance to our common pike. Both these fishes are covered with scales of a peculiar form and structure. Instead of being imbricated, as in ordinary fishes, they are in simple juxtaposition, and have their surface covered with a layer of enamel forming a solid cuirass.

M. Agassiz has examined these fishes anatomically, and has found in their endo-skeleton, differences, not less remarkable than those of the scales and soft parts. It would have been hazardous to isolate completely these fishes from other great families; and, on the other hand, it would have been contrary to method to place them in the same rank with the placoids on the one hand, or the osseous fishes on the other. But that which the study of living fishes did not authorize, was fully justified by a profound examination of fossil fishes. Here, was found, an icthyological fauna which had neither the characters of cartilaginous or osseous fishes; but forcibly calling to mind in every respect, the polypterus and lepidosteus. So that, these two genera of fishes, apparently so exceptional in the actual creation, form really a distinct type, which although at present so rare, is not less the expression of a whole order of things.

In arranging, around these fishes, all the numerous fossils whose scales have the same structure, Mons. Agassiz has made a division of the ganoids, which already contains several hundred species, and daily promises to become more numerous, since it surpassed the other orders, in all the epochs anterior to the chalk formation.

M. Agassiz has recognised several distinct families in this order: the two principal, are the sauröids, which include the bichir and bony pike, and the lepidoïds, which comprise certain inoffensive and probably omnivorous fishes, resembling the present carps, but having no representative in this epoch. M. A., in his great work on fossil fishes, not only describes the particular character of an icthyolite, but adds interesting reflections on its family relations, its distribution, its associations with other fossils, and the circumstances under which it is probable the animal existed.

DR. FORBE'S MESMERISM.

To the Editor of the 'Medical Times.'

SIR,—Before quitting London (where Alexis and I have been so kindly treated) permit me to mention a few facts to shew the extent of faith that may safely be pinned to the observations on mesmerism lately published in one of your contemporaries by Dr. Forbes. Though my usual answer to verbal attacks in public are experimental proofs in private, I feel that common sense would not have half her rights, if a person, so very peculiar as Dr. Forbes, were allowed to inflict his philosophic nonsense on the public with impunity. From what I have noticed, he is one of those whose vanity would construe contemptuous silence into tacit commendation, being his only visible means, that I know of, of remaining on good terms with himself, or the public.

Dr. Forbes came to see Alexis in a meeting-room, at 71, Mortimer Street. I shall not dilate on the ill spirit and very coarse *brusqueric* which he all along exhibited; the fifty persons present, including some of the most respectable and scientific people of the country, had but one opinion on it. I do not say that the vox populi is the vox Dei; but in that assembly, I can safely assert that Dr. Forbes, both in manners and opinion, stood alone. He had eyes and spectacles too—and certainly did not see. As his spectacles were a demonstration that he could not trust his eyes, so his report, on which I am about to speak, is a demonstration that other people cannot trust them both together. In fact, I was told by one or two ingenious persons present, who boasted to me that they knew half the obscurities of London,

that he was a journalist whose only knowledge of mesmerism was, that it was a subjeet that right or wrong must be written against. I mentioned this fact to the publie present with the most salutary effeet on Dr. Forbes. He beeame tamed, then moderate, and finally (what some people would think equally marvellous with the experiments of Alexis) deeently genteel.

The company present united in thinking the experiments *most* satisfaetory. Dr. Forbes, who, luekily for human nature, is not one of the *oi polloi*, thinks them most unsatisfactory. He thus gives his eonelusions:—

"From the whole of the exhibition the following eonelusions must be admitted: 1. That the affair bore the eomplexion of triekery, *or*, at all events, that *it wanted entirely the precision requisite in scientific inquiries.*—2. That the total amount of positive failures and positive blunders greatly exceeded that of performanees having even a colour or slight degree of sueeess.—3. That the failures oeeurred in eases where the eireumstanees were sueh as to exelude collusion, and the exereise of ordinary vision.—4. That all the instanees of success oeeurred where eireumstanees allowed of collusion, or ordinary vision.—5. That in all the eases of suceess, sueh eollusion or vision was either proved, or rendered extremely probable.—6. That there was not one single *unequivocal* example of what is ealled *clairvoyance.*—7. That, consequently, this exhibition not only affords not one tittle of evidenee in favour of the existenee of this faculty in the man Alexis, but presents *extremely strong grounds* for believing that the *pretended* power in him is *feigned, and that he is consequently an impostor.*"

Now, Sir, passing over for the present the contradietory "*logic*,"—whieh I have heard you call "Seoteh philosophy,"—that appears in these propositions, I will ask a moment's attention to some of the experiments on whieh Dr. Forbes grounds his very dogmatie opinions:—

"A gentleman (I believe, Colonel Gurwood) presented to him something very loosely wrapped in paper. He felt it, and said it was a box *(boite)*. He then himself removed the paper, and laid the apparent box (a small oetagonal body, with gilt top) down on the table. He was then asked what it eontained, he said, "some eharaeters in writing." While he was saying this (or previously, I don't now reeolleet whieh), he had *perfect opportunity*, as the object lay before him, and was touehed by him, and was eonstantly looked at by him—I say, he had a perfeet opportunity of *opening the book* (for sueh it was), so that he *might* see the charaeters within it. I eannot say positively that he *did* open it; but any body, not a juggler, *might* have done so unobserved. He then announeed that it was some writing in eharaeters he did not understand. The book proved to be a eopy of the Koran, in Arabie. This experiment was elearly a failure; first, beeause, *while covered*, he deelared the *book* to be a *box;* and, seeond, when the paper was removed, there was—to say the least—no *impossibility* of seeing the eontents in the natural way."

The only question of great importanee here, is, whether there was this "perfeet opportunity." Alexis was watehed by several persons. Dr. Forbes, with his eyes, his spectaeles, and his prejudices, was watehing: the book, or box, was obvious: the youth was under every one's eyes: how, then, eould there have been a "*perfect opportunity?*" And if there eould have been a "perfeet opportunity"—how eould it have been made use of without observation? And if made use of, how happens it that neither Dr. Forbes, nor any body present, witnessed it? These are plain, eommon sense questions, and, if not answered satisfactorily, it follows that Dr. Forbes is so "*philosophic*" in his judgment about elairvoyanee, that he asks people to give up their eommon sense (he ean't give up his own) rather than believe it. But, Sir, the statement is not wholly true, as Colonel Gurwood (no worse in judgment, surely, than the Doetor) will prove. The MS., in truth, from the peeuliarity of its eovering, might strietly be said to be in a box; and Alexis, in the eyes of all, and without any opening (a thing obvious enough, if done), deelared that it was a curious kind of book —not in English or Freneh, but "ARABIC—*and in gold letters;*" and Colonel Gurwood, an old soldier, of no mean literary ability or shrewdness, deelared that the deseription was eorreet to the lotter. The book, he added, had just been presented him by the Duke of Wellington. Again—

"Another paper (it might be the same) he proceeded with in the same way, now often stating, inquiringly, the number of letters (which eonstantly varied, he sometimes saying 6, 8, 4, and so on). At last, he said it was very diffieult, *because it was folded on itself* (plié sur elle-même). He returned it to the lady, that it might be unfolded. I went and saw it opened by the lady; *it was not in the least folded.* It was a boldly-written word; either '*Londres*' or '*Angleterre*,' I forget whieh."

On this, I make but a short remark. How "another" paper *might* be the "*same*," or how a paper eould be opened, whieh was previously *not* in the least folded, I leave to his aeute philosophy to explain. The forgetfulness, I may say, *en passant*, whieh knows of no differenee between "*Londres*" and "Angleterre," extends in other parts of the eommunieation into knowing no differenee between falsehood and truth. The doetor, to speak eharitably, has a "*shocking* bad" memory, though, to own truth, bad as it is, I would prefer even that to his imagination. Again:—

"Playing at *ecarté* with the eyes bandaged, He seemed to play readily and well, winning the game. He also told the eards at times in the partner's hand; but he also repeatedly failed, and made glaring mistakes in his guesses. The whole of this experiment is vitiated by the doubt as to whether he eould see under the bandage. From earefully and most elosely watching him, I am of opinion, that he saw, or might see, from under the bandage. I partieularly remarked, that while the bandages were being plaeed, he repeatedly touehed and shifted them; and before they were removed, I observed most distinetly, that he pressed a knuekle foreibly over the bandage into the hollow of eaeh eye, *as if to close the leather that might have been removed.* I also observed, that when examining somebody presented to him, before the bandages were removed, he plaeed the body *to one side of him*, exaetly as a person would do who was trying to see through a diffieult passage. At any rate, the evident (to me) *possibility* of sight being exereised in the ordinary way, totally vitiates this eard-playing as an experiment."

Doetor Forbes is a great believer in possibilities. The only impossibility he seems to know of, is elairvoyanee, and human honesty, Alexis *once* "plaeed the body to one side of him, exaetly as a person would do who was trying to see through a diffieult passage." Yet, Dr. Forbes ean see nothing in his playing (not onee but) *games* of cards, and telling the eards in the hands of his adversary, *without* any diffieulty, or *without* attempting to look "through diffieult passages!" Surely, if one faet tells against him, the others must tell for him, and a man earefully bandaged, readily playing the eards that have been eut, mixed, and dealt him, at the instant, and *winning games*, without any attempt to look under or beside the bandage, is no sueh ordinary thing as to justify the eonclusion, that there was "a *possibility* of sight being exereised in the ordinary way," and that Alexis, "consequently, is an impostor." Exeuse me, Dr. Forbes, the true impostor, the true *fourbe* is yourself, and you earry your seientifie *fourberie* so far, that it even overreaehes yourself.

"A lady (evidently a strong believer, and very friendly to Alexis) put herself in *rapport* with him, and produeed a large box, like an over-grown book, eardcase, or a ease for holding a small prayer-(opening like a eard-ease in the middle He took it in his hands and felt it, and turned it about. He was asked what it eontained; he said, after a brief pause, something *gilded* (doré), and then said, a wateh (montre), and added, that "what was eurious, the glass was broken." The lady was surprised at this, and said it was *not* broken when she gave it him. On opening the box by drawing off the top, sure enough there was a watch on one side, *with the glass next the outside*, and the glass was broken! Nothing could be clearer than that he *might* have broken the glass through the yielding ease, or felt the broken glass, or heard or felt the wateh *tick*, and thus eome at onee to know that it was a wateh, and a wateh with a broken glass! I believe this was the faet, but, at any rate, it must be admitted that sueh a elear-seeing as this *might* have been aeeomplished by any body, and therefore the experiment goes for nothing."

Now, first, as Dr. Forbes elsewhere insinuates that this lady with others formed a band of eonfederates, I may briefly say, that she was an English lady of title, and that another lady, deelared by Dr. Forbes to be a Freneh lady, and insinuated to be another eonfederate, was equally a native of England, and perfeetly a stranger to me. The Countess, for sueh she was, presented a stout ease, like a large oetavo volume, and the wateh was *exceedingly* small—*was not going*, and was eovered with eards. It was under these eireumstanees, that first it was deelared to be gold—then, a wateh, and then to have its glass slightly eraeked (*fêlé*), not broken. To the surprise of the lady, on elosely examining the wateh that had been so earefully hidden, an almost impereeptible eraek or serateh eould be diseovered. And this, says this elairvoyant doetor, was "the elear-seeing that might have been aeeomplished by anybody!"

Not to waste your very valuable spaee, I will eonelude with one more extraet, and thus at onee give you the eream of the doetor's remarks, with materials for a judgment on his aeeuraey.

"At length, after many attempts, I sueeeeded in getting a lady (a friend of Alexis, and favored by him) to take one of my *boxes*, and put him to the test in my own way. She was put "en rapport" with him, but he would not attempt to read the word written within upon finding that *she* did not know what it was. She then went to one side of the room to examine the word, and I just arrived near her in time to see her take from the box the word, and look at it, *surrounded by many of the company. This was done openly*, and though I at onee felt that this eireumstanee was sufficient to vitiate the experiment, as it was *quite possible*, and, indeed, extremely probable, that some of Alexis's *friends* might see it wholly or partially, and make him aequainted with it. However, I begged the lady to allow me to replaee the word in sueh a manner that it eould not easily be seen, even if the top of the box (a small paper wafer-box) were removed. Well, she returned to Alexis, and gave him the box. He looked at it long, and at last said inquisitively, "un mot de *cinq* lettres!" then seven, then eight, and at last *five* again, adding "I am now sure it is five." I begged her not to tell, and partly sueeeeded, though it was obvious she was desirous of *helping* him all she eould. At last he said the word ends with the letters *ion* and tried hard to get the lady to help him out with the rest. If I had not eonstantly interfered, I saw elearly that he would have bothered or bamboozled her out of them. He then wrote on a paper *ion*, then tried several prefixes to suit, and at last seemed to settle on *motion*, or some word like this, but one eertainly ending in *tion* Two o'eloek having now arrived, I was obliged to depart before the box was opened, but I was thoroughly satisfied that some one of his *friends* had had a glimpse of my word (it was in *large print*), and had told this to him. It was, however, a word not of five, or six, or eight letters, but one of *ten*, viz. '*Discussion.*'"

The faets of the ease are these. Feeling that there was a want of sympathy between Alexis and the Doetor—a natural repulsiveness, whieh no praetieal mesmerist has not often met with—it was agreed, on both sides, that the English Countess should be plaeed *en rapport* with Alexis. If the Doetor be not a greater fool than he thinks himself, no eommunication eould, by any means, have been made to Alexis, and he eertainly watehed his eherished box with no little vigilanee; yet the youth fixed the four last letters (*sion*—not *ion*) of the word enelosed in the box—no very ordinary feat, surely. He was then going on to name the other letters, when the Doetor, having had too much of it, retreated behind the front bench of

spectators; *u, s,* followed, and now the doctor beat his retreat: the whole word "*discussion*" was then given. Now, this was the doctor's own experiment; it was most decisive; yet he had not the courage, or good will, to sit it out. I know he says, that he had an engagement that obliged him to depart at two: but the engagement was not very pressing, and was certainly not kept, for elsewhere he says, that his very long narrative was written "*immediately* after the meeting," Dr. Forbes himself writing the word "*immediately*" in *italics*!

Though not very pleased with Dr. Forbes's conduct on this occasion, I accepted an invitation to take Alexis to his house on the Saturday night following (last Saturday). I was in hopes to shew some experiments that must prove convincing to any ordinary mind. I found, however, that, instead of scientific investigators, I was among a body of persons who were determined to disbelieve Mesmerism *côute qui côute.*

Though convinced, by numerous experiments, that the presence of an ill-conditioned and distempered opposition acts upon the nervous system of both the Mesmerist and the Somnambulist, and prevents any perfect success, I did not hesitate, however, to make the experiment. On the whole, the *seance* was unsuccessful: but still phenomena presented themselves which, to a fair and impartial mind, would create respect and excite decent enquiry. Thus, in reading a book presented by Dr. Forbes, he pitched on the word "France," as directly below his finger; on turning a few pages, the word "souf-france" was visible. Again, the same thing occurred with the word "Berghmuller" (I think that was the word). When Alexis wrote this word, Dr. Forbes took the book away, and by implication denied that the word was there. On my pressing him, he admitted that it was; and on examining subsequently, myself, I found it exactly as marked. But though this was a most satisfactory proof, the sitting was a failure, from the excitement caused in Alexis by the opposition and *malviellance* of those about us. I regret that it was so; but I am, I repeat it, not surprised at the circumstance. There would, indeed, be no truth in Mesmerism, if a party, whose highly-susceptible nervous organization admitted of the high powers of Clairvoyance, were not powerfully affected by the sympathy or antagonism of those around him.

I am, Sir,
With the highest consideration and respect,
Your obedient servant,
MARCILLET.

July 23, Regent Street, London.

(We may regret the acerbity of this letter, but coming from one who had to cleanse himself of a charge of *imposture,* we have not thought it should preclude the letter admittance in our pages.)—Ed.

RECENT EXPERIMENTS WITH ALEXIS.

("To the Editor of the Medical Times.")

Sir,—Presenting myself with Mr. Marcillet's card, I was admitted to a private *seance* in a house in Eaton Square; I had never till this morning seen either M. M, or his subject, M. Alexis. My introduction, through his means, into an exalted private circle, (unfortunately I could not obtain any other) had, I soon felt, produced an unfavourable impression. Alexis was on my arrival in a state of catalepsy,—the inferior extremities, completely rigid, were stretched out and raised a foot or more from the ground. At the mesmerizer's request, I got up and stood upon the shins of the sleeper without producing any change beyond that of forcing the limbs down a little by my weight (13 stone).

The *rigidity* was removed by a few passes, when a bandage was applied over his eyes, and a pack of cards was given him; he began as for the game of ecarté, by culling out the lower cards rapidly until the pack was reduced. He made no mistake in this process; but in once throwing over a seven, and, subsequently, an ace, both of which he recalled immediately. He played a few games, in which he exhibited very great mastery, I had almost said, a perfect knowledge of the cards in his hand. He did not always take the cards in his hand, but sometimes played them from the table on which they lay, backs upwards.

He announced his having the king, proposed for cards also without disturbing them from the position in which the dealer had put them out; once or twice he was asked what cards his adversary had? On one occasion he said the adversary held four red cards; but he failed to name them correctly; but he was right as to the number of red cards. Having mentioned in the house of a gentleman where I had been spending the previous evening, that it was probable I should have an opportunity of being present next day at one of M. Alexis' mesmeric sittings, my friend left the room, and soon returned with a sealed packet, which he delivered to me, in order that I should try if he could describe its contents, and authorizing me to open it only after the description was given. He abstained from making me acquainted with its contents. I was thus prepared with an experiment of my own, which I proposed to the gentleman of the house. The proposition was at once refused, and I think properly so, as it was open to the suspicion of collusion. The lady of the mansion now placing herself near Alexis, and informing him that she had passed five or six years in the neighbourhood of Geneva, asked him to describe the house in which she had resided. This he did in the main correctly, stating that there was a garden with flowers, and another with vines, and that it was near water, not a lake, but a river falling into a lake—that she lived with two other persons, and also in another house for a shorter period. But in this description the gentleman affirmed, that there were some mistakes, and continuing to question him, the answers of Alexis did not seem to give him more satisfaction. M. Marcillet seemed a good deal chagrined at this, and declared that the gentleman's incredulity had a disturbing influence, which greatly impaired the powers of his subject.

Another gentleman now put himself *en rapport* with Alexis. He wished him to follow him in mind into Lincolnshire, and describe the house he lived in there. Alexis said, "I am with you; but this house is too large for me to describe. Let us fix on some of its rooms." He then described a library—a small room in which there was a bust—not marble, but plaster on a pedestal; and lastly, a very large room, lighted by a dome raised from the centre of the ceiling; he said there were two fire places with white marble chimney pieces, and spoke in terms of admiration of the varied colours of the light admitted into this noble apartment. All these points were assented to as correct. He then followed the questioner, and described a terrace upon which the last room opened. The gentleman of the house then put some questions as to the terrace, and the objects adjacent, the answers to which he stated were incorrect. He next tried to declare the objects contained in a bracelet handed to him by the lady—his efforts were unsatisfactory.

The sitting was now drawing to a close, and having been denied the opportunity of satisfying myself in regard to my friend's sealed packet, I asked permission of M. Marcillet to put a question as to a fact in which I was engaged early on Monday morning. I said I was aware that coming there under the auspices of the mesmerizer, and, moreover, labouring under the disadvantage of not being known to himself, I could well understand that if the answer were satisfactory, it could be so only to myself; but if it were otherwise, I should state it to be so without hesitation. Permission having been courteously granted, I took Alexis by the hand, and asked him to describe the persons, the room, and the act in which I was engaged on Monday morning. He answered, after brief musing, "you are in a room with a person, not on a bed, but a couchette; this person has suffered a great deal;—you have been doing something to his head—there is another person also—there are instruments with screws laid out on the table (*des objects mecaniques et á vis*). While speaking, he kept moving his hands over the front of his person, till he reached the lower part of the abdomen, when he exclaimed suddenly, "Tiens, vous l'operez aussi au bas ventre, vous operez pour la pierre." I was astonished at the minuteness and truthfulness of his description. I asked him if the patient was old or young? he answered, young. The truth was, that I was performing the operation of lithotrity on a gentleman—not young, but 80 years of age—at Clifton, on the morning of that day, and the room, sofa, and position of the table on which my instruments lay, were as correctly described as if he had been present. It is moreover not a little singular that the patient has an ulceration behind the ear, which his servant dresses for him. This closed the sitting. Of course the correctness of Alexis' answers to me had no influence on the mind of Mr. ——. It might, however, have puzzled him, as it has me, had I been known to him as I trust I am to the members of my own profession.

I remain, &c.
W. B. COSTELLO.

Golden Square July 24.

HOSPITAL REPORTS.

KING'S COLLEGE HOSPITAL.

Chimney Sweeper's Cancer.—John Holloway, æt. 30, coal porter, admitted into King's College Hospital, under the care of Mr. Partridge; (formerly a chimney sweeper), native of London. Of intemperate habits; had always enjoyed very good health till about nine years ago, when he perceived a small tumor, which began as a pimple on the left side of the scrotum; for this he was an in-patient in one of the London Hospitals, where the tumor was excised, and he was soon afterwards discharged as cured.

He continued to enjoy good health, and to follow his occupation as coal porter, till February last, when a similar tumor appeared on the opposite side; for this he was admitted into Bartholomew's Hospital; when it was excised, the wound soon healed, and he was discharged well. He continued well about a month, when the glands in the right groin became inflamed and suppurated; shortly it burst, leaving a very ragged deep ulcer over Poupart's ligament. In about a month, the glands, in the left groin, became affected in the same way, leaving a small ulcer. In this condition he was admitted into the Hospital, much emaciated, complexion pale; complains of no pain in the chest; sounds of the heart and lungs healthy; liver enlarged; appetite good; not thirsty. The ulcer, in the right groin, is two inches long, an inch and a half wide, oval, parallel with Poupart's ligament; its edge very thick and indurated; its surface covered with a greyish slough; complains of burning pain in the ulcer, which is increasing rapidly. The ulcer, in the left groin, remains stationary. To have full diet and a pint of porter. The ulcers, which are very painful, are to be dressed with the following solution three times a day:

℞ Opii. 3i.
Aq. ferventis lb.i. *solve.*

November 24.—The surface of the ulcer appears florid; the opiate solution has relieved the pain considerably; glands in the left groin are much the same.

December 20.—Since the last report, he has been gradually sinking; both the ulcers are increasing, burrowing beneath the integument, towards the lower margin of the saphenous opening. There has been a little bleeding from the ulcer; continue the same treatment.

January 26, 1844.—Continues to sink; appetite pretty good; ulcer increases rapidly.

April 8.—Died to day at three p. m.—There had been no material alteration in the symptoms since the last report.

Sectio cadaveris, 24 hours after death; body much emaciated; the brain and its membranes healthy; heart natural; no scirrhous deposits; lungs much congested, especially the lower lobes; no scirrhous deposits in the lungs; liver much enlarged, and in several places puckered upon its surface; it weighed 5½ lbs., containing a large quantity of fat; kidneys healthy; spleen healthy. The ulcer in front of the thigh occupied nearly the whole of Scarpa's

space, burrowing deeply towards Poupart's ligament. Its floor formed by the pectinæus muscle, femoral artery and portion of the iliacus muscle. The coats of these vessels were exposed, but no coagula formed within; there was a scirrhous tumor, about the size of a pullet's egg, lying on the inner side of the psoas muscle, an inch above Poupart's ligament; the ulcer in the left groin was quite superficial; no scirrhous deposits elsewhere.

Remarks.—This case is chiefly interesting, as illustrating the local condition, in some cases, at least, of chimney sweeper's cancer. For, here is an example of a person, (a chimney sweeper), who had this peculiar cancer, on the scrotum, from whence it was removed from two different places, where it had shewn itself, with perfect success, and without a return. The cicatrices of these operations were observable, and perfectly healthy, when the man was in the hospital. Had this person given up his occupation of chimney sweeping, before the inguinal glands were contaminated, or had those glands been removed when they were first affected, it is probable that the disease would not have re-appeared. When the patient entered King's College Hospital, the cancerous ulceration had extended too deeply and extensively, among the vessels of the thigh, to admit of its removal by the knife.

Stricture of the rectum—E. H., æt. 21. Prostitute. Admitted into King's College Hospital under the care of Mr. Partridge. Had always enjoyed very good health, till about three years ago, when she had a bubo on each groin, which suppurated, was lanced, and healed in about three months. Soon afterwards she miscarried at the fourth month, in consequence she thinks of falling down the stairs on her back. Shortly after she began to complain of bearing-down pains in the back, loins, and belly; these were relieved by rest and fomentations.

About twelve months ago, she began to complain for the first time of pain and difficulty in passing her motions, accompanied by bleeding from the bowel; leeches and fomentations were applied to the perinæum, which relieved her for a time. The symptoms returned, when the leeches and fomentations were again applied with the same effect. Ever since, she has been subject to a puriform discharge from the bowels, which has increased during the last six months. Had a leucorrhœal discharge from the vagina. Catamenia have been absent for the last six months.

At present—is in good condition; auscultation and percussion of the chest natural; no cough; appetite tolerably well; bowels confined. It appears that the evacuations, unless when the bowels are relaxed, are small in size and their passage accompanied with a good deal of pain, principally in the left inguinal region, where there is some tenderness on pressure, but where no tumour can be detected. Upon examination, per *anum*, the inner surface of the rectum felt unusually smooth and hard, as if the mucous membrane had been destroyed. About two or three inches above the anus, within the reach of the finger, a circular constriction of the rectum was felt in which the point of the fore-finger scarcely dipped. To have middle diet, and to remain in the recumbent posture. Ordered:

℞. Magnes. carbonat., ʒj.
Magnes. sulphat. ℥iss
Aq. menth. pip. ℥viij
Ft. mistura cap. coch. larg. j ter in die.

October 23.—Since the last report, the treatment has been directed to the improvement of the general health, and the regulation of the bowels. No. 2 and No. 3, soft wax rectum bougies, have been gradually passed through the stricture and allowed to remain twenty minutes. The fore-finger can be passed through the stricture as far as the first phalangial joint. The mucous membrane above the stricture seems healthy.

November 10.—No. 4 soft wax rectum bougie passed with the first phalanx of the fore-finger.

November 13.—No. 5 bougie passed.

November 20.—There is a good deal of irritability of the lower part of the rectum, indicated by pain in passing the finger, and by œdema of the fold of skin at the margin of the anus. There is a good deal of puriform discharge from the bowel, which has existed from the beginning. To omit the bougie; hot fomentations to the perinæum.

℞. Ol. Ricini ℥ss.

November 24.—Continue the hot fomentations three times a day. The pain is considerably better.

December 4.—The pain is still very distressing when the finger is introduced into the rectum.

℞. Ext. belladonnæ
Sapo. Castil. āā gr. ij.
Ext. opii. gr. j,
Ft. suppositorium hora somni intromissum.

December 11.—The pain, whilst passing the finger, is not so severe. The suppository gave her considerable relief; omit the suppository: ordered the following injection to be thrown up the rectum twice a day.

℞. Argent. nitratis gr. ½
Aq. destillat. ℥ss.—M. ft. injectio.

January 3, 1844. The injection to be discontinued. Passes her motions easier; bowels open. There is an elevated papular eruption on the neck and shoulders, preceded yesterday by head-ache and shivering. To take no medecine for the eruption.

January 10.—The eruption has disappeared spontaneously.

January 27—There are two superficial, oval, secondary ulcers on the right tonsil.

℞ Pot. iodid. gr. iij
Inf. quassiæ ℥i
M. ft. Haustus ter die sumendus.

January31.—There are several superficial, oval, secondary ulcers on the sides and back part of the pharynx, which commenced by small pustules beneath the mucous membrane. Ordered:

℞ Pot. iodidi gr. iij
Decoct. Sarsaparillæ ℥j.
M. ft. Haustus ter in die sumendus.
℞ Pil. hydr. chloridi. co. gr. v.
Alt. quaque nocte sumenda.

February 6.—The throat is better. There is an elevated papular eruption around both the ancles.

February 28.—Has been complaining lately of shortness of breath and a troublesome cough. Expectorates muco-purulent sputæ. There is slight dulness on percussion beneath the left clavicle. Has not been unwell for the last four months. The pain and the difficulty in passing her motions is much relieved, and the discharge less. Discharged:—made out-patient. Ordered:

℞ Decoct. aloes comp.
Mist ferri comp. āā lb. ss
cap. coch. larg, ij. bis die.
℞ Pil. galban. comp.
Pil. aloes comp. āā ʒj.
M. ft. pil.. xxx. cujus sumat j. bis die.

For some time after this, she attended as an out-patient, complaining principally of general debility, of occasional soreness of the chest, and slight cough, (and sinking of the stomach,) and, sometimes, of colicky pains in the abdomen. The amenorrhœa continued, but the stricture was less troublesome.

June.—This patient had discontinued her attendance at King's College Hospital, and nothing was heard of her until the beginning of this month, when her mother asked Mr. Partridge to see her: he found her in bed, much emaciated, troubled with constant cough, and expectorating pus. There were also cavities in the lungs, and great general debility. The bowels had become more regular, the motions, principally fluid, were passed without much pain. Since she had left King's College Hospital, she had had an attack of bronchitis, for which she had been received into Charing Cross Hospital, where she remained about two months. Mr. Partridge ordered her some tonics and stimulants suited to her case, but she became gradually weaker, and died on the 30th of June.

Her body was examined, at her own request, by Mr. Partridge. The upper lobe of the left lung was universally adherent to the side of the chest, and about a pint and a half of fluid was found in the remaining unadherent portion of the cavity of the pleura. Both the lungs presented much tubercular deposit and numerous suppurating cavities, some of which were of considerable size. The liver was clay-coloured and puckered upon its surface (cirrhosed). The intestines were healthy, except the rectum, which near its lower part, presented a circular ulcerated patch, whence the mucous membrane had been entirely removed, and in which there was an aperture of the size of a *pea*, that communicated with the cavity of a small abscess situated between the uterus and the rectum, and circumscribed by old adhesions from the cavity of the peritonæum. From this it is probable that the flow of matter, mentioned in the history of the case as sometimes so profuse, proceeded. Immediately below the ulceration in the rectum, just described, the mucous membrane of the bowel for an inch and a half, and from thence to the verge of the anus, in the interior of the gut, had a perfectly smooth surface, from which, however, the mucous membrane seemed to have been a long time since removed. There were no remains of the stricture, which appears to have been destroyed by the ulceration. Some shrivelled external piles were observed about the margin of the anus. There was dropsy of the right ovary, of the size of a small orange, and adhesions between the peritoneal surfaces of the second portion of the rectum, and the posterior surface of the broad ligament and the uterus; circumscribed by these was the small abscess already described. In this case there was a stricture about two inches and a half above the anus, circular and narrow; below it, the mucous membrane of the bowel had been destroyed by old ulceration; above it, the ulceration appeared more recent, and there was situated the aperture which communicated with the abscess.

What was the order of the disease? Did it commence by ulceration of the lower part of the rectum, originating in venereal discharges from the vagina, added to the irritation of piles? Were the stricture, ulceration, and abscess above it, successively consequent upon this disease, or did the complaint originate above, in ulceration of the bowel, producing abscess, and subsequently the stricture and ulceration below?

PERISCOPE OF THE WEEK.

Pericarditis.—Dr. Ferguson Branson has narrated in the *Provincial Medical Journal*, two cases of pericarditis terminating fatally. The first was that of a boy 14 years of age, who had been suffering from ill-health, and symptoms of rheumatism, for some time previous to the attack of pericarditis. He was treated by Dr. Branson by repeated leeching and blistering, and by the continued use of mercury, and he so far recovered as to become an out-patient. Within a fortnight he was readmitted with a fresh attack of pericarditis, for which he was treated as before, again with relief. A third attack supervened about three months afterwards, and the boy died somewhat suddenly a week after it commenced. He was never well in the intervals of the attacks. At the examination of the body, the pericardium was found to be unusually adherent; but some of the adhesions were more recent and less firm than the others. The heart itself was nearly double the natural size, and the walls of the left ventricle much thickened. The aortic and tricuspid valves were slightly thickened, and, behind the latter, interlaced with the columnal carneæ was a semi-organised polypous concretion, connected with the lining membrane of the heart by delicate filamentous bands of lymph. The liver was somewhat hypertrophied, and the kidneys were the seat of granular degeneration. The second case occurred in the person of a comb-maker, 45 years of age, an inveterate spirit drinker. He had for some years been the subject of palpitation, dyspnœa, and cough, and when seen by Dr. Branson before the attack of pericarditis, on listening at the heart, a remarkably loud musical murmur was found to accompany the first sound, and was heard very extensively over the chest. The pulse had a peculiar thrilling character. A month after he was first seen, he became a patient of Dr. Branson's at the Sheffield Infirmary, when there was the same remarkably loud, deep-toned and extensively heard, musical murmur, loud enough to be distinguished by the unaided ear at a distance of several inches from the chest, and superadded to this

symptom, was a friction sound heard only over the apex of the heart, and at this point only was there tenderness on pressure between the ribs. The intensity of the musical sound was found to be the greatest over the upper third of the sternum, and over the cartilages of the adjacent ribs on the right side. The musical sound could not be heard in the femoral arteries, nor in the abdominal aorta, but it was easily detected in the lower parts of the carotids. There was not any irregular pulsation. The dullness, on percussion, over the heart, extended beyond the normal limits, and the apex of the heart was felt beating an inch below, and to the outside of the left nipple. He was relieved by the treatment that was adopted, and soon left the infirmary, but again became a patient of Dr. Branson before two months had passed away. He was then much worse in every respect; a fresh attack of pericarditis soon supervened, and he died shortly after. The examination of the body shewed evidences of recent pleurisy on the right side; and the pericardium contained at least a pint of serum. Its surfaces were throughout non-adherent, and were coated with extensive patches of firm, rough, granulated lymph, friction of which produced a sound similar to that heard during life. The heart was double the natural size, from dilatation with hypertrophy; the only lesion on its right side was a somewhat friable state of the chordæ tendineæ. The pulmonary artery was also softer than natural, and easily broken through with the finger. In the aorta immediately above the valves, was a considerable atheromatous and bony deposit, the probable cause of the musical murmur; and a similar deposit was found on the aortic valves, but to a less extent. The bony deposit was confined to an inch and a half of the aorta immediately above the valves, whilst the atheromatous deposit extended along the aorta, as far as the finger could be passed into the vessel, but it was felt to diminish in quantity as the distance from the heart increased. The liver had the nutmeg character.

Medullary tumour connected with the kidney.—A traveller, 35 years of age, consulted Mr. Russell, in August, 1843, complaining of severe pain in the back and loins, coming on principally after walking, and proving exceedingly severe after exercise following a meal. A few days afterwards, a hard tumour, tender to the touch, was discovered on the left side of the abdomen, of firm consistence, and irregular surface: it passed upwards beneath the false ribs on the left side, and extended nearly as low as the navel, and in front to the median line. Four months after this, all sexual desire ceased, and no erections took place,—this, again, was followed by severe diarrhœa and œdema, together with severe pain in the testicles and penis, the latter being tender, and the corpora cavernosa, in the middle, full, hard, and knotty. This deposit increased until the organ acquired nearly the size of its erect state, and the introduction of the catheter became absolutely requisite. The poor fellow ultimately died, worn out by exhaustion and emaciation. On examination of the abdomen, the liver, spleen, and pancreas were healthy; the colon much contracted. The right kidney was fully four times the natural size, soft and flabby; its substance was extensively invaded by a deposit of white matter, mottled by numerous bloody specks, which occupied the place of a large bundle of the uriniferous tubes, leaving, however, several bundles perfectly healthy in appearance. The tumour itself appeared to consist of a hard mass, larger than a child's head, firmly attached to the muscles of the loins by an expanded base, and occupying the position of the left kidney; and of a smaller and softer portion, containing fluid, lying upon the vertebral column. This latter was found to be formed by the left kidney, which had apparently turned completely round, the lobes being directed to the left side of the body; the kidney was closely united to the tumour, but, with the exception of a scanty deposit of fat within it, its structure seemed healthy, although very flabby. The pelvis was considerably dilated, and much distended with urine. The tumour was formed of white medullary matter, tolerably firm in the centre and upper portions, but very soft in the lower and posterior part, flowing from the incision like thick cream. Towards the circumference in one or two parts, the tumour was formed of a matter having the appearance of true scirrhus, but irregularly invaded by the medullary matter in spots and in processes: it appeared to be undergoing the process of conversion into the softer material. The organs of generation were not examined, but were supposed to be implicated in the same structural disease.

Gunshot wound of the heart.—Mr. Fuge has in his museum a specimen of this injury, in which the musket-ball passed through the intercostal muscles, entered the right ventricle at the root of the pulmonary artery, passed through the membranous portion of the tricuspid valve, and fell into the right auricle, where it was found after death. The patient, a soldier wounded at Corunna, survived the wound thirteen days.

Electro-puncture in neuralgia.—Dr. Hermel has detailed several cases in the *Annales Medico-Psychologiques*, in which he has used electro-puncture in the treatment of neuralgia, and he concludes that it is suitable in cases of idiopathic or essential neuralgia; the intensity of the pain is not a contra-indication; under its influence the pain has never been increased, and palsy supervening upon essential neuralgia yields under the employment of electro-puncture.

A SURGEON CHARGED WITH MAN SLAUGHTER.

Cambridge, Monday, July 22.

(*Before Mr. Justice* Williams.)

John Garland, aged 65, was indicted for feloniously killing Mary, the wife of John Dent.

Mr. Prendergast conducted the prosecution, Mr. O'Malley the defence.

The deceased was the wife of a man living at Littleport, in the Isle of Ely, and the prisoner has for upwards of 30 years practised as a surgeon in that town. On the 22nd of May last, the deceased had by imprudently lifting or dragging a heavy sack of flour, brought on symptoms of a miscarriage, and the prisoner was sent for to attend her. He arrived as soon as possible, and proceeded to administer the treatment he thought necessary, in the course of which he moved a portion of the intestines of his patient, which had probably been displaced by the exertion which had brought on the illness which rendered it necessary to send for him. She was in great pain, and another medical man was sent for, on whose arrival it was found necessary wholly to remove the displaced portions of the intestines. She continued to get worse, and notwithstanding the judicious treatment of two or three eminent surgeons who were called in, she died at the end of 17 days. The surgeons who attended the *post mortem* examination of the body, were of opinion that she died from the effects of the prisoner's treatment, and that he had shown gross ignorance in that treatment.

Mr. Justice Williams in summing up the evidence stated, that the law as applicable to this case was very clear; and applying that law to the circumstances as they had been proved, the jury would say whether or not the prisoner was guilty of the crime of manslaughter. Every person, whether he be a regularly licensed man or not, who professes to deal with the life or health of his fellow-creatures, is bound to bring to the case with which he deals a competent degree of skill; and he is also bound to treat his patient with care and attention. If he shows gross ignorance, culpable rashness, or criminal inattention in the treatment of his patient, and death ensues in consequence, he is guilty of the crime of manslaughter. He may have no evil intention, he may indeed bring to the case the most earnest desire to effect the cure of his patient; but still, if he is guilty of criminal misconduct, arising either from gross negligence, or ignorance, or unjustifiable inattention, he is criminally responsible. One or other of these it was necessary for the prosecutor to make out, in order to constitute that criminal misconduct which renders a man responsible if death occurs. The learned Judge read the evidence *verbatim* to the jury, and desired them to consider whether in the treatment of his patient, as proved by Mrs. Banyard, the prisoner had shown a gross and culpable want of knowledge, care or attention, and that her death was caused thereby: if they were of opinion that he had, he was guilty of the crime with which he was charged; if otherwise, he was entitled to an acquittal.

The jury after some deliberation found the prisoner *Guilty*.

The learned Judge in sentencing the prisoner, who was deeply affected at his position, observed, that he should be sorry if the proceedings in this case should tend to place medical men in any danger, or induce them to abstain from the fair application of their talents in the exercise of the arduous and anxious duties of their profession. They were not to expect a favourable result in every case; medical science could never attain that. The consequences of this trial would seriously affect the prisoner's interests through life; and looking to that circumstance, the absence of everything like ill-will towards his patient, and his advanced age, when a long imprisonment must be attended by the most prejudicial effects, the Court was induced to pass on him the mitigated sentence, that he be imprisoned for one calendar month.

GOSSIP OF THE WEEK.

Medical Reform.—In the House of Commons on Friday last, Mr. P. Howard asked Sir James Graham if he intended to bring forward any measure for the regulation of the medical profession. Sir J. Graham said, he had stated some time ago that he wished, with the permission of the House, to bring in a bill for the regulation of the profession throughout the United Kingdom. If the House would give him leave, he would shortly lay the bill on the table, but he did not wish that it should go further than a second reading.

On Monday night, Colonel Fox presented a petition on the subject of the Charter, recently granted to the Surgeon's Society, on the part of the medical officers of the East India Company's service, and gave notice of his intention to move for a copy of the correspondence which had taken place between the Government, Sir William Burnett, and others, with reference to this Charter, more particularly as far as the East India Company's medical officers were concerned.

University of London.—The Senate of the University of London have recently come to the resolution of adopting academical costume for the under-graduates, and graduates, of every degree, conferred by that body. No Collegiate dress has been hitherto worn by the members of this University.

Clairvoyance on Paternity.—M. Jean Raimond, a medical writer, rather celebrated in Paris as a *fârceur*, narrates the following incident on his own very apochryphal authority. A friend, puzzled by the apparent accuracy of a somnambulist, asked what his (the interrogator's) father was then doing. In answer, he was told that his father was visible a long way off; and a number of details were given, exactly specifying how the father was engaged. "I fear you have made a slight anachronism: my father," said the triumphant disbeliever, "has been dead these twenty years." "No, Sir, no mistake: you appear to forget," replied the quiet somnambulist, "that it takes a wise child to know his own father!"

Obituary.—On the 20th inst., at his residence, in Lamb's Conduit Street, London, in the 81st year of his age, John Haslam, M.D.

Appointments.—Asst. Surg.—G. Everest, (additional) to the Victory, for service at Haslar Hospital.

12th Light Dragoons.—Asst.-Surg. Robt. Harthill, from the 9th Foot, to be asst.-surg., v. Hunter, promoted on the staff.

9th Foot.—David Anderson, M.D., to be asst.-surg., vice Harthill, appointed to the 12th Light Dragoons.

35th Foot.—Asst.-Surg. William Holme Fairbairn, M.D. from the Staff, to be asst.-surg., vice Gordon, appointed to the 53rd Foot.

53rd Foot.—Asst.-Surg. Eneas Macintosh Macpherson, from the 40th Foot, to be asst.-surg., vice Sleigh, appointed to the Staff.

Hospital Staff.—Asst.-Surg. Thomas Hunter, MD., from the 12th Light Dragoons, to be staff-surgeon of the second class, vice Stewart, appointed to the 26th Foot.—Assistant Surgeon John De Verd Leigh, M.D., from the 53d Foot, to be asst.-surg- to the Forces, vice Fairbairn, appointed to the 35th foot.

Gentlemen admitted Members of the Royal College of Surgeons, on Friday, July 19th, 1843:—W. H. Snape, W. Browne, J. S. Green, J. Lowry, H. S. Palmer, E. W. Woodcock, F. Berrington, E. B. Bowman, P. Pemell, F. I. Morgan, J. Postgate, C. M. Aldridge.

Gentlemen admitted Members of the Apothecaries' Hall, 18th July, 1844:—Thomas Mallonie Leak, Christian Henry Taylor, Benjamin Cawthorne, Thomas Ballard, Charles Manners Smith, Thomas Peat, William Coles Hunt.

No. 254. **SUMMARY.** Aug. 3.

CLINICAL LECTURES ON SOME IMPORTANT POINTS OF SURGERY, by Sir B C. BRODIE, Bart.:—
Lecture XIV.—Treatment of Stricture of the Urethra—Different kinds of Bougies, usually employed—Mode of Passing them Explained—Method in which to Judge of the Size to be employed—Various Points to be Observed in the Treatment—Frequency with which the Operation should be Performed—Necessity of guarding against Pushing the Instrument through the Walls of the Canal—Usual spot in which this occurs—Mode of Treating this Accident 359

LECTURES ON THE THEORY AND PRACTICE OF MEDICINE, by Dr. C. J. B. WILLIAMS, M.D., F.R.S.:—
Inflammation of the Intestines; Treatment—Enteritis—Its Treatment—Subacute Form of Gastritis—Chronic Gastritis—Relation of Case terminating in Death—Chronic Duodenitis—Morbid Appearances of Chronic Gastritis—Causes of the Subacute Form of these Affections—Treatment of Chronic Gastritis.. 260

ON THE MODE AND PROPER TIME FOR MAKING EXAMINATIONS PERVAGINAM IN CASES OF LABOUR, AND ON THE PREMATURE RUPTURE OF THE MEMBRANES, by C. CLAY, M.D., &c. 362

ON THE PHYSIOLOGICAL ANATOMY AND PHYSIOLOGY OF MAN, by ROBERT KNOX, Esq.:—
Article I.—Irritability of the Cellular Tissue—Serous Secretion—Development of the Cellular Tissue—Osseous Tissue—Canaliculi of the Marrow—Marrow of Bones—Periosteum—Vessels of Bones—Chemical Analysis of the Osseous Tissue—Cartilages of Ossification—Osseous Corpuscles—Calcareous Canaliculi—Earthy Deposit, combined—Development of the Osseous Tissue—Development of the Cartilages of Ossification 363

OBSERVATIONS ON A WORK ENTITLED "CHEMISTRY IN ITS APPLICATIONS TO AGRICULTURE AND PHYSIOLOGY," by PROF. LIEBIG, M.D., Ph.D... .. 365

REMARKS ON THE THEORY AND PRACTICE OF DENTAL SURGERY, by — WAITE, M.R.C.S., &c... 368

TO CORRESPONDENTS 368

LEADERS:—
REMARKS ON THE RECENT ELECTIONS TO THE SURGICAL COUNCIL 369
ANNOUNCED SALE OF A MEDICAL JOURNAL.. 369
HOSPITAL APPOINTMENTS 369
THE CIVIL LIST AND SCIENCE 369

ELECTION OF COUNCILLORS OF THE COLLEGE OF SURGEONS 369

PENCILLINGS OF EMINENT MEDICAL MEN:—
Mr. Liston, Surgeon, &c... 370

REVIEW:—
The Plagiarisms of Julius Jeffreys, F.R.S., in a Treatise on the Statics of the Human Chest. By Calvert Holland, M.D., &c. 372

PARISIAN INTELLIGENCE:—
Professor Velpeau on Diseases of the Eye.—Acute Inflammation of the Eye—Conjunctivitis Ocularis—Conjunctivitis Simplex 373
Analysis of Dr. Rognetta's Work on Ophthalmology 373
On a Case of Fungous Tumour of the Tibia, by Prof. Roux. 374
Geoffroy St. Hilaire's Bust.. 374
Proceedings of the Academy of Sciences, July 22nd. 374
Proceedings of the Academy of Medicine, July 23rd 374

THE PHYSIOLOGY OF MATERIA MEDICA, as Established by the Latest Researches in Organic Chemistry, Physiology, Pathology, &c., by Prof. T. F. SOBERNHEIM .. 375

SELECTIONS FROM GERMAN JOURNALS, by SIGISMUND SUTRO, M.D. 376

SOME SUGGESTIONS WITH REFERENCE TO THE CIRCULATION OF THE BLOOD, by Dr. M. ROSENTHAL 376

HOSPITAL REPORTS:—
St. Bartholomew's Hospital.. 377

PERISCOPE OF THE WEEK:—
Treatment of Inflammation of the Cellular Tissue by Caustic Potash 377
The Seeds of the Ricinus Communis as a Purgative.. 377
Mineral Paste to Fill Hollow Teeth 378
A New Method of giving Medicine to Infants 378
Ligature of the External Iliac Artery 378
Imperforate Vagina 378
Singular Case 378
Case of Malformation 378
Indian Hemp 378

OLD AGE AND PUBLIC COMPETENCY 373

METROPOLITAN MORTALITY TABLE 378

GOSSIP OF THE WEEK 378

A COURSE OF CLINICAL LECTURES ON SOME IMPORTANT POINTS OF SURGERY,

Delivered at St. George's Hospital, by Sir Benjamin C. Brodie, Bart.

Lecture XIV.

At the close of the last lecture, I was speaking of retention of urine occasioned by stricture; I now purpose drawing your attention to the cure of stricture, at least, so far as we are able to make a cure. But the first thing is to determine whether there is stricture or not. I have told you the symptoms it produces; but they may be very slight, or if severe, may arise from some other cause; so that mere symptoms alone will not tell you positively that there is stricture,—or if they do this, they will not tell you where it is situated. You must make an examination with some instrument, and this we do in the first instance with a plaster bougie (at least, these are commonly employed), and you should have them of various sizes. It is better to use one of tolerably large size, otherwise it will catch in one of the lacunæ, and lead you to think there is stricture, when in fact there is none; or it may pass through it, and thus lead you to believe there is no stricture when there is one, so that you may be deceived both ways. Then, on the other hand, you should not employ one so large as to stretch the part. Take care, then, always to have some of various sizes, and see that they are nicely made and rounded at the end. A bougie is straight, but the urethra is not straight, and if you employ a straight instrument you will, of course, displace the parts, and you should always avoid this: the bougie then should be slightly bent, and before introducing it you should warm it a little—not by holding it to the fire—but by drawing it through your hand; then bend it a little like a catheter, a slight curve will be sufficient, because the urethra is only a little bent. You should also make a slight mark in the bougie that you may know the exact situation of the curve. Different surgeons place the patients in different positions when they wish to pass an instrument; I generally let him stand leaning against a wall or table. Pass the bougie with the curvature towards the belly, and always bear in mind that the point of the instrument should slide along the upper surface of the canal, otherwise by catching in the lacunæ, it will be arrested when there is no stricture. If, having attended to these directions, the bougie passes readily into the bladder, you have a right to suppose there is no stricture; but if it will not, then you may conclude there is a stricture. But do not always be satisfied by trying one instrument; but, if the first does not succeed, try another. You should also provide yourself with sounds of different curvatures, made of silver; they are less irritating than bougies, and retain their shape and go wherever the hand directs them; with a common wax or plaster bougie, you cannot be quite sure where the instrument goes; but with a metal instrument you know exactly where the point is: now, bear these things always in mind, to slide the point along the upper part of the canal, and do it very gently You will never succeed if you hold it very tight,—if you hold a pen or pencil tightly you cannot draw;—the painter holds his brush, and the engraver holds his tools, very loosely, and so also you should hold the bougie or catheter loosely; for if you grasp it firmly you will not succeed. Therefore, practice passing the instrument lightly from the beginning; for it is your duty to give the patient as little pain as possible, even if he be in a workhouse. If you do not practice this while young, you will never gain the lightness of hand which is essential in private practice. When you have come down to the stricture, let the instrument (if it will) pass on into the bladder; and observe how this is to be done, not by pushing it forwards, but by lowering the handle; if you push, you merely force the urethra back; but by lowering the handle, the point of the instrument passes round the arch of the pubes, and at once enters the bladder. Remember, then, that in the use of the bougie, you do not employ too small an instrument, as it will catch in the lacunæ when a large one would not; it is better, therefore, always to choose one of a moderate size. You may, by gradually increasing the size, introduce very large instruments, but it is never advisable. When a man has a stricture, he is very anxious to have the canal dilated to its proper diameter, but this is no reason why it should be made twice its natural size. This is an error which existed in practice some years ago, and I have seen bougies for this purpose as large as my thumb. Suppose, then, you have stricture in the membranous part of the urethra (for I spoke of the other kinds in a former lecture), how is it to be cured? Before commencing any plan of treatment, see that your remedies have fair play; take care that your patient is in a proper state to favour your treatment. A gentleman, residing at Woolwich, came to me with stricture; I told him he had better come and reside in town till he was cured; this, he said, would be very inconvenient for him, and, therefore, he rode up to see me every morning, on horseback. He continued to do this for three weeks, but, instead of getting better, he was worse; sometimes I passed the instrument for him readily, at other times I could not pass it at all; at length he consented to come and live in town, and then he got well directly. If a man cannot give up his amusements, his hunting, he must continue to suffer from stricture. Again, with regard to his diet; I told you if a patient eats large dinners and drinks Champagne, his urine becoming acid will deposit sometimes a red precipitate, sometimes yellow, at other times little particles of lythic acid, looking like grains of cayenne pepper; when the urine is in this state, it is very stimulating to the urethra, and it is useless attempting to cure stricture till you have set this to rights. You must give him a lecture about his mode of life; tell him if he does not attend to the disease it will destroy him; that it is better to attend to it now than to put it off;—tell him he must dine at home and take only one or two glasses of wine daily; avoid everything which will increase the quantity of acid in his urine; and when he is willing to conform to this, begin your treatment—never before—as he will get no better, but will soon get dissatisfied with your treatment. But it is sometimes necessary to do something more in old cases; keep your patient in bed for a fortnight or so before you do anything for him; and you will frequently find, after this plan has been followed, that the instrument passes readily. Many of you will recollect cases in the hospital illustrative of this point. If you should be asked how to treat strictures, answer that there are several ways; sometimes they are to be treated one way, sometimes another. I will explain to you the different modes of treating the disease; 1st, they may be treated in the ordinary way: but it requires some discrimination to determine when one method and when another should be resorted to. 2nd, I shall explain the particular modes of treatment which have been proposed; and, lastly, I shall speak of strictures as occasionally producing fistula in perinæo. First, they may be treated by the common bougie, that is a bougie made of wax and diachylon plaster spread on linen and rolled up; or they may be made of catgut: but these are not very often useful, except in cases of retention of urine; they, however, may be employed with advantage when you cannot get plaster bougies small enough. They are also made of elastic gum and catgut; but I do not think they are good, as they are much too elastic. Besides all these things, they are made straight, and retain their straightness; but these are very apt to catch in the lacunæ, or in the angles between the membranous and straight portions of the urethra.

But you should first see the patient make water, and choose an instrument in proportion to the stream; if it is large, use a large instrument; if small, select a small one; curve it slightly, and recollect the precautions I gave you in the early part of the last lecture, when speaking of retention of urine: viz., to make a mark in the instrument that you may know exactly where the curve is; but above all, to keep the point against the upper part of the canal: this is of all others the most important to be borne in mind. Many surgeons fail from not attending to this fact. You know when it is in the bladder by its not rebounding; but if it catch anywhere, then it rebounds. Suppose, then, you have got the instrument through the stricture, it is usual to leave it there an hour or two; but I only leave it a few minutes. About two days after, you should introduce an instrument again, somewhat larger than the first, and the next time still larger, thus continuing gradually to increase its size, but taking care that your patient is very careful all the while. I have several times known a patient go on very well for some time; then he has committed some imprudence, and all the symptoms have returned. There is a great difference in the effect produced by passing an instrument, when the stricture is in the anterior, and when in the membranous portion, of the canal. In the former, you merely stretch it, and it closes again when the instrument is withdrawn; but in the latter it is permanently enlarged. I say permanently enlarged, but this must be taken in a limited sense; if it is

merely spasmodic, it is permanently dilated; but if the disease be partly spasmodic and partly permanent, the passing a bougie seems to give relief by overcoming the spasm, as the stream is always enlarged just in proportion as it has been previously diminished by the spasm. When you dilate a stricture in the anterior part of the canal, it is true the patient makes water freely at the time; but all the symptoms will return: whereas if the disease be in the membranous portion, your patient will get better daily; so that after a time, by a little instruction, he will be able to pass it himself; and as he will have his own feelings to guide him, you may depend upon his being careful; and, in fact, he will soon be able to do it better himself than you could do it for him. The next question is, how often should this operation be repeated? At first it should be done at least once a day, then once in two or three days, then once a week or a fortnight; but it ought never to be entirely omitted. The probability is that your patient will leave it off; but let him do it on his own responsibility, and never by your consent. But persons will do this, and then, in a short time, the stricture is as bad as ever; in fact, it is worse to cure than before: therefore, it is necessary you should caution your patients against such neglect, otherwise they will very justly cast the blame upon you. But it is only recent stricture that can be treated in this way; you will, therefore, be obliged to resort to some other means. Have a series of metallic sounds of various sizes, the small ones made of silver, the larger ones (for economy) of steel or pewter, plated, but let the smaller ones always be of silver. Some time ago, a man invented what he called flexible metallic sounds; but they were absurd instruments, and no one uses them now. They were so flexible that they would alter their shape in the urethra; but still they were not sufficiently hard to be employed as an inflexible, nor soft enough to be used as a flexible, instrument, and I have known them break in the bladder. I mention these facts merely that you may be aware of their worth, should you come across them. They make them now also of whalebone, and they are very nice; but I think not superior to metal. I have called them sounds; but you must not suppose them to be like the sound used in the extraction of stone from the bladder; you do not want them to be sticking two or three inches in the bladder; besides if too long, they become unmanagable, and the urethra, you know, is only from six to eight inches in length. Then again, they should not be too much curved. First ascertain what is about the size of the urethra by observing the stream; then introduce a sound somewhat larger than the stream; and, I may here observe, that you will be able to pass a larger metallic sound than you would a plaster bougie in a similar case; besides, it is advisable to avoid using small instruments, as you may run them through the sides of the urethra and puzzle yourself. Pass the instrument with the concavity towards the abdomen, and do not press it when it first comes against the stricture; but draw it back a little, and when it reaches it a second time, keep the point against the upper part of the urethra, and you will probably get it through at once by merely lowering the handle. But it is more likely not to go through; therefore be careful you do not push it through the sides of the canal into the cellular tissue; but keep up a gentle and steady pressure against the stricture, and in a few minutes it will pass on into the bladder: let this be done carefully and gently, otherwise you will bring on bleeding, which will create a delay: I know this cannot at all times be avoided; but still every care should be taken. Suppose after every trial you do not succeed, are you to try again the next day? certainly not. Perhaps your patient says time is valuable to him; tell him the more haste the worse speed; and instead of repeating it the following day, wait three or four days. The next time you employ the same instrument again, or one a very little smaller; but always avoid small instruments as much as you can, because, with all your experience and all your care, you will sometimes run the instrument through the parietes of the urethra; and if you employ one of a large size, although you may not succeed the first time, still after a few days you will get it into the bladder. This may take you three weeks or a month to do; but in the majority of cases, after the second or third time, you will succeed; but in old standing cases, you must look for great difficulties, and when you have got the instrument into the bladder, it should be allowed to remain a few minutes. Then, every time you pass the instrument, increase its size a little, and so go on, till you have brought the stricture to its proper diameter. Having done this, teach the patient to introduce it himself; but if you find the urethra irritated and inflamed by the bougie, leave it alone four or five days or even longer; if not, it may be passed every second or third day. I told you, that if you employed small instruments, there was danger of making a false opening; and this you will know by the feeling of resistance offered by the cellular membrane, and its being immovable. What is the result of such an accident? no great mischief, to be sure; but if it occurs behind the stricture, the urine will escape into the cellular membrane. Let the patient go home, and tell him to remain quiet for a week, and by that time it will be quite healed, and not more than a mere acupuncture. The above plan of treatment is most desirable where the part has become much thickened and cartilaginous, and extremely sensitive. You will find it will bear touching by a metallic instrument much better than the comparatively rough surface of a plaster bougie; it is also the best method of treating cases which have been previously bungled, that is, where some one has been attempting to pass a bougie himself, and made a false passage. If, in such a case, you attempt to introduce a plaster bougie, in all probability you will enter the false passage, not so if you employ a metallic instrument. False passages are always, or, at least, in nine cases out of ten, in one place, that is, just at the lower part of the stricture, thence travelling into the perinæum between the rectum and neck of the bladder, or between the rectum and prostate gland. If you pass the instrument into the false passage; you will know it is there by no urine flowing; and also by passing the finger into the rectum, when you will feel it distinctly, which would not be the case if it was in the bladder. False passages are very common, and if you meet with a case of stricture which has been treated unskilfully, you will be almost sure to find them; therefore, when passing an instrument in such a case, bear in mind the rules I have laid down, and if you are careful you will overcome the obstacles, and soon be enabled to pass an instrument of the full size, and by this time the false passages will have healed. No great harm ever comes of these, only they retard the cure. There is this to be observed, however; the instrument entering the false passage gives the patient intolerable pain, ten times more than when it goes into the bladder. It makes the part bleed also, and sometimes abscesses are formed; but this is not a common occurrence. The difficulty, then, when there is a wide false passage, is to get the instrument through the stricture; if you employ force with a metallic instrument, you may push it into the rectum, and this happened to me when I was not well used to it as I am now. No great harm will come of this, as it is merely like an acupuncture and soon heals; but it retards the cure, as you must not pass the instrument again for a week or ten days, and then take great care it does not enter the same hole again. It is useful to be provided with catheters which have wooden handles, and eyes. For, sometimes, you are not quite sure whether it is in the bladder or false passage; and in some of these cases you may depress the handle just as if it was entering the bladder; therefore, be provided with these instruments, and the discharge of urine will tell you whether it is or is not really in the bladder; but still I do not recommend you to employ the catheters with eyes, as a general rule.

Tic-douloureux.—Mr. Mortimer states that two grains of extract of belladonna were given by mistake in a case of tic douloureux, The patient was alarmingly ill for a week, but never suffered from the disease again, though twenty years have since elapsed.

COURSE OF LECTURES ON THE THEORY AND PRACTICE OF MEDICINE.

Delivered by C. J. B. Williams, M. D., F. R. S., Professor of the Practice of Medecine, and of Clinical Medecine, at University College.

Inflammation of the intestines.—Treatment.—Continuing the subject of inflammation of the intestines, it may be remarked that in enteritis, there is not only severe pain with obstinate vomiting and a complete suspension of the functions of the stomach, as in gastritis, but there is likewise an obstruction to the passage outwards, of the contents of the bowels; there is obstinate constipation. Enteritis is, generally, more or less attended with hepatic derangement; and, hence, it is necessary, besides antiphlogistic measures, to employ remedies to relieve the liver; besides general and local depletion, mild mercurials combined with antimonials in small doses, sedatives and saline medicines.

In enteritis, it is the business of the medical man to ascertain the causes of the disease: whether it may depend upon obstruction which surgical aid can relieve. You must remember that many of the symptoms of enteritis resemble those of strangulated hernia, and the one may be confounded with the other. Therefore, it is of great consequence to be perfectly assured whether there is hernia or not. As I before mentioned, the symptoms of hernia may arise from an accumulation of fæces causing an obstruction to the passage of the food; or they may depend on inflammation itself; or the bowels may be incapacitated for action by spasm or paralysis; or again we may trace these effects to mechanical causes. It not unfrequently happens that, after the disease has existed for some time, a sort of stricture is produced in a part of the intestine, under the influence of inflammation, without total obstruction. Internal hernia takes place from adhesions between the omentum and the intestines, or between one intestine and another. It is impossible to distinguish between these cases during life, because the existence of any such cause of obstruction must materially interfere with the restoration of the intestine to the natural condition. The treatment of enteritis must be antiphlogistic, combined with medicines calculated to ensure the opening of the bowels. Blood-letting may here be carried to a greater extent than in gastritis, as, in the early stage of enteritis, there is less prostration of strength, and less disposition to sinking. Leeching should be combined with blood-letting, and also poultices and fomentations to the abdomen. If the inflammation continues long, and the pain is excessive and unremitting, the use of calomel may be resorted to. If the disease has been but of short duration, and has lasted only a few hours, or is of a less severe form, it is better to begin with a dose of calomel, to secure the evacuation of the bowels, before the antiphlogistic measures are tried; but if the disease is of longer standing, it is better to use the antiphlogistic treatment, first, and then follow with purgatives, &c. Of all the purgatives that I could name, I do not know of any that can be put in comparison with calomel; and for this purpose, it should be given in pretty considerable doses, of from five to ten grains, combined with James' Powder, and with sedatives. Opium has been recommended to deaden the inflammation, but its effect is to interfere with the peristaltic action of the bowels, and block up the secretion from the liver. I therefore prefer using conium, which is more soothing; five grains, or even more, should be given with the calomel: belladonna answers the same purpose. The dose may be repeated in three hours, if it does not operate; and after this, injections of castor oil—three or four drachms—mixed with a little gruel or the yolk of an egg, or something of that kind, should be used to promote the action of the bowels. If the bowels are not opened by these means, more active aperients may be tried, and it may be expedient, to use a few doses of croton oil. In combination with this antiphlogistic treatment, turpentine may sometimes be used with success. Frequently it happens in these cases, that there is a great deal of spasmodic action, but whether such is the case or not, turpentine does not appear to be so injurious a medecine in intestinal inflammations, as one might

be led to expect. By some it is considered to be an antiphlogistic remedy: it is certainly remarkable how it tends, in some cases, to the dissipation of the symptoms and products of inflammation. Sometimes it is used in peritonitis, under the supposition that it is antiphlogistic. At any rate, in the form of an injection it answers well, and relaxes the spasm.

If all these measures fail, the best thing to resort to, for the purpose of exciting the action of the bowels, is the tobacco injection; no permanent relief can be obtained until this action is effected. The mode of application is, a scruple of tobacco infused in half a pint of water, and the injection to be retained for ten minutes. Some persons recommend the smoking of tobacco as being effectual; it certainly is very easy of application. The greatest exertions should be employed to open the bowels, for, when this is effected, a great part of the battle is gained; we should scrupulously look to this object, and not be content until it has been effected. The remedial measures must be repeated again and again. After the bowels have been freely opened, then comes the time for opium; it is of great efficacy and utility then, and it may be advantageously combined with mercury; or if opium cannot be borne, morphia may be given; the object being to remove the effects of the inflammation. The reason why opium is used, is that it tends to bring the intestines into a quiescent state; they are unhealthy, and are highly irritable, and this constant irritation gives them an undue action; and there is very apt to occur, after the constipation has been overcome, diarrhœa accompanied by great prostration of strength. It may, also, be necessary to use fomentations and blisters, where there is considerable pain and tenderness of the abdomen. If the parts feel raw and sore on the passage of the feculent matter, the local antiphlogistic treatment must be continued, so long as these sensations remain.

It frequently happens in enteritis, that, besides tympanitic distention and obstruction, in the early stage, there is a hardness in some parts of the abdomen, a feeling of induration communicated to the touch. Usually, however, there is great soreness and tenderness felt, more commonly in the left iliac region than elsewhere. It appears to me that this must be the result of the internal thickening of the intestine; and so long as it lasts, there is a great tendency to a recurrence of the obstruction; and it is necessary to be extremely careful to administer medicines from time to time, to keep up the regular action of the canal. The best medicines, for this purpose, are castor oil or mild salines, as sulphate of potash, and sulphur. Castor oil is the safest of all medicines. It is of very great consequence, after an attack of enteritis, to avoid exertion too early, and particularly to avoid any error of diet, and the use of any irritating medicine. The great reason of this precaution is that there is a considerably impaired state of the functions of the canal, and so long as this is the case, all irritating things tend exceedingly to produce a relapse. The diet should be as plain, mild, and simple, as possible: chiefly consisting of farinaceous articles of food.

We now come to the *subacute form of gastritis.* This form of disease of the mucous membrane is often attended by gout or erysipelas, and is manifested by pain and tenderness at the epigastrium, with nausea and sometimes vomiting. The tongue is at times red, and at others, of a dark purplish red colour, with a slight white fur in the centre. Sometimes, there is thirst, but the fever is slight, and the pain not always considerable. It is, however, increased by eating, and drinking particular kinds of liquids. There is, frequently, in connection with this state of irritation and continued constipation, a degree of hæmatemesis present. This form of the affection is slight, and if treated in time, may give way easily under moderate antiphlogistic treatment. Gastritic affections sometimes occur at the outset of eruptive fevers, and subside as the eruption comes on. It appears that, in these cases, the inflammatory action passes down the intestines, affecting the follicles or glands; but where it occurs independently of fever, this slight form readily gives way to mild mercurials, followed by castor oil, rhubarb, or some very gentle aperient. The object of the mild mercurial is to increase the action of the liver, and clear the abdominal canal. It is not necessary to give them in large doses; the milder the dose the better, given two or three times a day. In this case, too, alkalines and saline medicines are useful, especially where acid eructations are frequently complained of, with an acid taste in the mouth. Hydrocyanic acid is very useful in these cases. This treatment is to be combined with strict attention to the diet: diluents and mucilaginous drinks, with a farinaceous diet, the smallest quantity being taken at a time.

This affection, although slight in itself, sometimes tends to pass into a chronic disease, which is of a much more serious character. Sub-acute enteritis, as distinguished from the intense form, is not accompanied by obstinate constipation. It seems to be chiefly an affection of the mucous membrane, and occurs in combination with fever; but sometimes it exists independently of any febrile affection. It is very apt to occur in children, and in these cases, where it is a complication of fever, the inflammation seems to affect the glands of the intestines, the isolated as well as the grouped glands; if the disease goes on long, it leads to ulceration of the glands, and ulceration in the intestines is a very serious matter. The sub-acute form of enteritis is generally accompanied by more or less of febrile symptoms, and the system is much disturbed. In some forms of sub-acute enteritis, there is a remission in the phenomena of the fever, it being more intense at some periods of the day than at others. It may also be accompanied by pain and tenderness in the abdomen; thirst; often headache; the tongue variously disordered: it is often raw at the tip, white and furred in the centre, and the papillæ enlarged and florid, having a glazed and copper-looking appearance; the evacuations are very much disordered, and sometimes there is diarrhœa, or a considerable discharge of feculent matter of a very dark colour, or of a greenish tinge; at other times, the motions are defective in quantity, the bile varying very considerably. In some cases, where the fever rises very high, there is constipation, though not of an obstinate character: in these cases, the abdomen is apt to become tympanitic. The treatment of this affection, is a more moderate application of the same means employed in the acute form: leeching at the abdomen is generally sufficient, as a topical means, with fomentations or poultices; and what I have found to answer extremely well, after the severity of the inflammation and the pain have subsided, is the application of flannels dipped in hot water, or in some slightly irritating solution, as turpentine, vinegar and water, or water containing ammonia, and then laying over the whole an oiled silk, or a mackintosh cloth, to keep up a perpetual fomentation. The irritating fomentation may be continued for several hours without intermission. The convenience of these forms of fomentation is very great, and they have remarkable effect in relaxing the fever. The fever in these cases is generally accompanied with a degree of local heat, chiefly perceptible over the region of the abdomen; and, sometimes, if the heat in the abdomen can be subdued, the general febrile symptoms subside. You find this relief indicated by the perspiration breaking out in other parts. A warm bath is used sometimes with the same view, and it answers exceedingly well, particularly in children. Not unfrequently, after a bath, there is apt to be an accession of fever, a sort of reaction, which is relieved by perspiration; but if it is not, the fever is aggravated. The main part of the treatment, in the sub-acute inflammation of the intestines, is to alter the state of the secretions, and for this purpose, mild doses of calomel should be given, three times a day, according to the state of the patient; sometimes once a day suffices, it being carried off either by castor oil (in teaspoon-doses for children, or a dessert spoonful for adults), or else sulphate of potash and soda, or rhubarb and senna. The great indication in this form of disease, is to modify the secretions by increasing them in quantity, and augmenting the action of the liver: mild mercurials will be pretty sure to subdue the inflammatory action.

Chronic gastritis often succeeds to the sub-acute form when it is neglected. The symptoms are very much like those of the sub-acute variety, but more varied as to degree; so much so, that, frequently, I have met with cases of chronic gastritis terminating suddenly in death, by perforation of the stomach in a most unexpected manner, the patient exhibiting previously little signs of disease. I recollect a case that impressed me strongly with this fact. The patient was employed about his ordinary occupation, and had never complained of any serious affection, until, one day, he was suddenly seized with most violent pain at the epigastrium, and was brought into the hospital. The moment I saw him, I did not hesitate to say that there were in him all the symptoms of perforation of the stomach; the pain was of the most excruciating character. Besides this very severe pain, which caused the patient to assume most unnatural postures, so that, at times, he was almost bent double on himself, in his efforts to procure relief; his countenance betrayed excessive anxiety, the skin was covered with perspiration, and the breathing was extremely quick: he had a feeling of constant sickness and nausea, with inability to vomit. There was inflammation of the peritonæum, particularly in the neighbourhood of the stomach, with an effusion of serum. From whatever cause the perforation arose, it is certain it was the immediate cause of death. He had scarcely complained before of anything more than flatulence in the stomach, and so forth. There is, however, in most cases of chronic gastritis, constant tenderness and pain in the epigastrium, and sometimes beneath the left scapula, just as an affection of the liver will cause pain in the right shoulder. All these symptoms are increased after eating and drinking, particularly indigestible matters. Vomiting is not a constant sign; sometimes blood is vomited in an altered, or decomposed, state. There are various sensations connected with chronic gastritis: a gnawing and sinking, referred to the epigastrium; a bad taste in the mouth; sometimes a peculiar saltish taste, an acid taste, or a bitter taste, and thirst; these are pretty well constant symptoms. The appetite varies very much, and sometimes food may be taken to a considerable extent, without producing any inconvenience. It is amazing what quantities of food may be taken in some diseases without inconvenience: the fact is one that cannot be explained. The tongue is red in chronic gastritis; sometimes, the epithelium appears as if scraped all off, and the tongue left quite raw; sometimes, there are patches of the epithelium left on here and there, and the tongue is continually peeling and casting off its skin. There is little doubt under these circumstances, that there has been a degree of inflammation affecting the tongue itself; perhaps, induced by the acid eructations and vomitings. Sometimes, the tongue presents protuberances of a remarkable character, and, sometimes, it is cleft into fissures, and is very apt to scale and crack. All these are symptoms, generally speaking, of chronic gastritic irritation, or actual inflammation. There is occasionally, besides the pain and uneasiness in the epigastrium, a pulsation felt in that region, and not unfrequently palpitation of the heart. The urine, in all these cases, is always, more or less, disordered; generally scanty and high-coloured, abounding in lithates, and lithic acid deposits. The skin is dry, and, occasionally, there is feverishness present, more particularly an inward kind of fever; heat within the body, and the hands and surface cold. Frequently, there is headache, and restlessness, with irritability of temper. The bowels generally are costive.

Chronic Duodenitis is sometimes connected with the affection I have just been describing. Its chief distinguishing features are pain and tenderness below the right hypochondrium, with uneasy sensations, chiefly two or three hours after a meal, accompanied by nausea, and eructations of wind; also discomfort and various symptoms of feverishness and thirst, felt for some hours after eating. Sometimes these symptoms are connected with a disturbed state of the secretion from the liver, the action of that organ being interrupted, and jaun-

dice resulting: the stools at the same time being either pale, without bile, or else they will exhibit bile in an altered state, of a dark colour.

The morbid appearances of chronic gastritis are: dark patches of redness, with thickening of the stomaeh, and the colour is darker and less vivid than in the aeute form of gastritis; but what distinguishes it most is a greal change in the structure of the thickened parts, as I have already stated, in speaking of the characters of sub-acute enteritis; there may also be more or less of uleeration in these spots. Sometimes the membrane appears to be studded over with little grains, about the size of hemp seed, or even as large as small peas, in great numbers. The thickening extends from the mucous to the sub-mucous coats, sometimes to a very great extent. Ulceration is met with, too, with a soft thiekening around it; this is the difference between the ulceration occurring as the result of chronic disease and that which takes place in acute disease, whieh affects the glands. Sometimes the whole mucous membrane is ulcerated through, and the ulceration perforates the muscular or submueous coat, and is stopped only by the peritoneal coat; and in other cases, it may go through the peritoneal covering of the stomach itself, and the contents of this viscus may become extravasated into the abdominal cavity, thus producing fatal peritonitis.

The causes of the subacute form of these affections are various: irritating matters or food; habitual irregularity of diet; too stimulating or too irritating food of any kind; very often preserves, and condiments, which if taken in excess, are very apt to exeite imperfeet action in the liver, and this is the foundation of many diseases of the abdominal viscera. When the bowels act freely, we may take many things with impunity, but if their action be interrupted, we cannot take such food without producing inflammation. Sedentary occupations, and a constrained posture, are especially apt to predispose to attacks of gastritis. Stimulating food tends in an espeeial manner to impair the funetion of the liver; and the stomachs of habitual drunkards are almost always in a state of chronic inflammation; sometimes ulceration, and even cicatrices, have been found there.

The treatment of chronic gastritis must be of a mild antiphlogistie form, continued for some time. Leoches may be applied when there is any increase of pain, and tenderness, at the epigastrium; at other times, blisters answer better, or mustard poultices, which are often very useful in these cases, when applied to the pit of the stomach for a short time; they tend to draw off the excessive irritation that takes plaee during digestion. It is likewise useful to alternate the application of mustard poultiees to the pit of the stomach, with hot fomentations. With respect to the internal treatment, mild saline liquids, hydrocyanic acid, and gentle doses of hydrargyrum eum creta, combined with ipecacuanha, are useful: carried off with castor oil, or else mild doses of rhubarb and sulphur, or sulphate of potash, given occasionally, taking care to keep up a moderate action of the bowels. Drastic purgatives inerease the gastritic symptoms, and henee should be earefully avoided. The action of the lower intestines is to be promoted by injections. It very rarely happens, according to my experience, that injections act satisfactorily, without we, at the same time, assist the upper part of the canal; we may evacuate the lower part of the bowels, and promote the action very well there, but we do not increase the seeretion of the liver, which is a fundamental point with regard to the treatment of abdominal affections. The diet must be most carefully managed; the mildest farinaceous food given, taking partieular care to avoid large quantities of anything; and in severe cases it is better to take everything in the form of thick liquids. When the gastritis has been ehiefly overcome, the patient may then have a little solid food, but it must be of the lightest kind, such as fish or fowl, or the gelatinous parts of meat. After considerable improvement has taken place, nitrate of silver, or nitrate of bismuth, in small doses. may be given, to remove the remains of the inflammation. Where the seeretions are disordered, they must be especially attended to; and as the symptoms of irritation and tenderness at the epigastrium pass off, the bitter infusions may be substituted. These may be combined with mild mercurials and aperients, where necessary; taraxacum or dandelion, in small doses, is useful.

ON THE MODE AND PROPER TIME FOR MAKING EXAMINATIONS PER VAGINAM, IN CASES OF LABOUR; AND ON THE PREMATURE RUPTURE OF THE MEMBRANES.

By CHARLES CLAY, Member of the Royal College of Physicians London, Graduate of Edinburgh, Author of "Peritoneal Sections," and Lecturer on Medical Jurisprudence, &c., Manchester.

So simple do these questions appear at first sight, that one would fancy it next to impossible that contrary opinions should be expressed upon them; but such differences have existed, not only as to the mode, but also as to the time, when such investigations ought to take place, in order to secure the objects for which such enquiries are set on foot. The conducting of the investigation (simple as it is) is often the making or ruining of the prospects of a practitioner: females will not have their ideas of delicacy outraged twice by the same individual, if they can by any means avoid it. There is scarcely any point of the obstetric art that so soon detects the ability or ignorance of the party employed, as examinations per vaginam. The well informed accoucheur will conduct his enquiry with the greatest delicacy possible, and generally, at the first examination, will not only fully satisfy his own mind of the particulars of the ease, but be fully prepared to meet the exigencies, whatever they may be, by prompt measures, and at the same time gain the confidence and respect, not only of the patient, but, of those in attendance, who are at all times alive to the conduct of the aecoueheur, and whose eyes and ears are ever open to critieize; whilst no ill consequences ever arise from the investigations properly conducted. On the contrary, an ignorant practitioner is often indelicate in his proceedings, and his want of knowledge obliges him to make frequent examinations (where one ought to serve), often leaving his mind as much in the dark as before, whilst the frequency of his attacks not only irritates the patient and her attendants, but seldom fails to be productive of more or less mischief to the parts concerned in parturition.

A knowledge of the part presenting, the state of the soft parts, and the peculiar features of the pelvis, are circumstances of the highest importance at all times, for the accoucheur to be acquainted with, in his early connection with the case. It is true, that the vast number of natural and easy labours, in comparison with those where some difficulty presents itself, would lead to the supposition, at first glance of the subject, that vaginal examinations need not often be instituted; it is, however, the uncertainty that exists in all cases (even when preceded by frequent easy labours), that renders such proceedings imperatively necessary.

As my object in these, brief remarks is, simply, with the *operation itself*, I will not enter into any lengthy arguments on the cause and results of such enquiries, but first direct attention to the mode, and afterwards the time, to be selected. The objects of such investigations are too manifest to dwell upon, since upon them depend all the future management of the case, however simple! however extraordinary!!

It is not usual to make examinations, until the process of labour has considerably advanced; but it can never do harm, and may be productive of much good, to have an early acquaintance with the case, and be timely prepared with means to contend against the difficulties that are likely to take place; otherwise, circumstances might suddenly occur, which, if the party did not possess a very ready presence of mind, would confound him no little. The most suitable mode for instituting an examination, is that under which the patient feels most comfortable, and the practitioner is enabled to pursue his object with the greatest facility; and that is, most undoubtedly, when the patient is lying on her left side, with her back close to the bedside, and her knees doubled up, and brought as near the chin as may be, the accoucheur sitting at the bedside with his *right hand* to the patient; and here I have to express my surprise, that some authors, even the most modern, advise (when the patient is in the above position) the use of the *left hand*; how this can be made more convenient than the right hand, I am quite at a loss to conceive. I maintain, there are other reasons why the right hand should be the operating hand, independently of the convenience which I think must be too manifest to admit of dispute; and yet the talented Blundell and Ramsbotham advocate the left hand. The other reasons are:—1st. cleanliness; for, if the left hand is made use of, the patient cannot be confined so neatly to the limits of the bed;—2ndly. the acuteness of touch is more prominent in the right hand;—and, lastly, when strength is required, the right hand is decidedly to be preferred;—of course, *the last point has no reference to mere examinations.* To use the left hand, must be exceedingly awkward. I cannot deny, but that I have used it; but it was in consequence of an accident, some years ago, rendering me incapable (for some weeks) of using the right hand. The position of lying on the left side is, I believe, pretty generally adhered to, nevertheless. It is the custom of some countries to adopt different usages: such as the recumbent, sedentary, and, it is said, in Ireland, on hand and knees, or what is vulgarly called, *all fours.* Indeed, in this country, there are yet some antiquated practitioners, who adopt very indecent positions for their patients. It is to be hoped, however, for the credit of the art, these are but few, as the practitioner must ever feel uncomfortable where indecency is practised, and if so, how much more must the females present (particularly the one exposed to such a fate) feel. Females themselves often have strange notions of the position they prefer for labour, and will frequently state their inability to go through it in any other way: absurdities which the practitioner cannot overcome without some little firmness. In instituting examinations, some have advised one, others two fingers; some the index, others the long, or what is commonly termed, the middle finger (that is counting the thumb as one.). I am, I confess, old-fashioned enough to agree with Smellie, that one finger, and that the index finger, is not only the best, but in every way capable (as far as the touch is capable) of accomplishing all we require to know. I am also disposed to agree with the same antiquated author, in maintaining that two fingers are not only inconvenient, but unnecessary, occupying more space than there is sometimes to spare, and often giving more pain than attends the exploration with one finger only. I question, too, if the perception of touch is not more confused with two fingers, and consequently more liable to lead to error. As a question of room, one finger must be preferable; if I had to reach the ear, and found some difficulty in getting one finger between the pubes and head of the fœtus, *with two it must be still more difficult.* That two fingers, in cases of first labours, often give unnecessary pain, no one will, I imagine, deny; and, therefore, they are objectionable on that point. On the question—which finger, supposing *one only to be used*, I should say, the index is immeasurably superior to any other. It is certainly shorter than that which is termed the long finger; but that is more than compensated for by its freedom from connection on the thumb side; whereas the fingers, on either side the long finger, reduce its exploring powers infinitely below that of the index finger.

The time when examinations should be instituted, has been debated at great length; in my opinion, with a well-informed accoucheur, it matters little whether he examine during the presence or absence of a pain. If the pain be present, he knows how liable the membranes are to be ruptured prematurely, and the evil consequences thereof, which are far from trifling. If the pain be absent, he can ascertain very correctly *how far the labour has advanced.* If present, by its force, pressure, &c., he can form a good idea of the probabilities likely to occur, and when. A careless person, by examining during a pain, may not only rupture the membranes prematurely, but lay himself open to difficulties, that otherwise would never occur. First, he loses all calculation as to the pro-

bable conclusion of the case; secondly, he converts an easy into a difficult and tedious labour. It is a practice with some practitioners, to rupture the membranes very generally, when they have an opportunity, *to save their time as they suppose.* This is a most pernicious and unwarrantable mode of proceeding. I grant that, in many cases, quick delivery may follow; but taken as a whole, it loses more time than a contrary practice. I feel quite certain, that it ought not to be practised in first and second, and I very much doubt the good result in third, or even in fourth, labours. In females, who have had frequent births (*say any number above four or five*), the rupturing of the membranes, when the dilatation is sufficient, will, no doubt, expedite delivery; but I have seen cases, after eight or ten children, retarded by this practice: these certainly may be few; nevertheless, it shews that the premature rupture of the membranes is often a more serious evil than is generally supposed. I may mention, also, that I have seen two or three cases in my practice, where the membranes were so morbidly thickened, and so strong, that no efforts of nature, it is presumed, would have been able to rupture them, and even by artificial means it was not so very easy—(see *Lancet*, vol. II., 1839 and 1840.) With regard to the question of touch, two objects are to be kept in view:—1stly. *What progress has labour already made?*—2ndly. *What prospects are held out for the future management of the case?* The former can only be ascertained *in the absence* of a pain; the latter, whilst *a pain is present.* On making an examination, first, in the *absence of a pain*, the result of previous efforts may be *correctly ascertained;* afterwards, during the *presence of a pain*, its force, duration, pressure of the soft parts, and capabilities of the pelvis, will enable the practitioner to form a tolerably correct idea of what the case may be.

In first, and sometimes in second, labours, the accoucheur has to overcome the feelings of delicacy, to a certain extent, to accomplish his object. At this period, I adopt the following plan, which, from practical experience, I find to be the best:—1stly. I make my advances, for an examination, to the extent of bringing the hand in contact with the external parts *during a pain;* but I proceed *no farther until the pain is gone off*, when I ascertain what the natural efforts of labour have effected.—2ndly. *That gained*, my next intention is to measure the force, length, and pressure of the expulsive efforts, and, combining that information with the state of the parts concerned in parturition, I *judge of the future;* for which purpose, I keep my hand in perfect quiet, and without withdrawing it, *wait the return of a pain*, when all the necessary enquiries are easily made. Where the female has had many labours, there is no difficulty in proposing examinations wherever it may be required; *indeed, they rather solicit the enquiry.* In the inexperience of young females, particularly first labours, the advances will always be best made during the pain, when the true state of the case can be best made out—first, in the *absence*, and subsequently in the *presence*, of pain.

ON THE PHYSIOLOGICAL ANATOMY AND PHYSIOLOGY OF MAN.

By ROBERT KNOX, Lecturer on Anatomy and Physiology and Corresponding Member of the French Academy of Medicine,

(For the "Medical Times.")

Those physiologists who view the dartos as composed merely of cellular tissue, speak of the "*irritability* of the cellular tissue," and instance the motions of the scrotum as a proof of the correctness of this opinion. But the dartos seems to me rather a modification of the muscular fibre, and as such will be considered afterwards. The skin, or dermoid tissue, also considered by them as merely *cellular*, undergoes obvious contractions; and they ascribe to the same *irritability* the contractions of the nipple, and of the tissue of the corpus cavernosum of the penis, "by which the blood is chased from the meshes it occupied, the organ becoming harder and firmer, and the glans paler."* But the phenomena just alluded to, may, I apprehend, admit of a different explanation, and the skin is a texture of a peculiar nature, differing, in many respects, from common cellular tissue.

It may be readily admitted, however, that the general tone of the cellular tissue, as has been already mentioned, depends on, and is connected with, the nervous system generally; but it is difficult to find direct proofs of this. Guenther, quoted by Henle, attempted to establish the fact by a direct experiment. The nerves of the penis of the living horse were divided, and it was found that the organ became partially distended with blood so as to protrude from the sheath, but did not become erected; but the phenomena of the erection of the penis are of too complex a nature to be explained in this way. The experiment is a valuable one, but would require being amply verified.

Serous Secretion.

The liquid found in the interstitial cellular tissue is, probably, the plasma of the blood imbibed by, and nourishing, all the textures of the body; it has been also called the serosity of the blood, but in this country, at least, these terms have different meanings. The eyelids and scrotum become speedily much distended in general dropsies, proving, perhaps, the greater rarity of their tissues. But the situation in which the serosity is thought most to abound is the sub-arachnoid space, discovered by Cotunni, and afterwards carefully investigated by M. Magendie. The analysis of this fluid has not been made; that of the horse I give on the other side, the plan of these lectures forbidding that I should substitute comparative for human physiology.* The serosity accumulated in the ventricles of the brain, resulting from a comatose fever, contains, according to Maldat—

Water,	96.5
Chlorate of soda,	1.5
Albumen,	0.6
Mucus,	0.3
Gelatine,	0.9
Phosphate of soda and lime	traces.

Berzelius analysed the fluid collected in hydrocephalus, and found:—

Water,	988·30
Albumen,	1.66
Substance soluble in water, with lactate of soda,	2.32
Chlorates of potass and soda,	7.09
Soda,	0.28
Animal substance, soluble in alcohol,	0·26
Phosphate of lime,	0.09
	1000.00

Animal substances, found occasionally in the blood, as bile, fat, urea, are also found in the serosity of dropsies. The elasticity and laxity of the cellular tissue is well illustrated by observing its extension in the scrotum, corresponding to changes in the position of the testes, the movements of the eye-balls, the mobility of the scalp, and the low motion of those arteries whose course permits this movement being observed.

Development of the Cellular Tissue.

The researches of Schwann are now well-known to microscopic observers. They are thus described by Henle. In a gelatiniform substance (cytoblastema of the cellular tissue), cells are formed, always increasing in number, and becoming more and more opaque as they become more numerous. Schwann distinguishes three sorts of cellules: the first become afterwards the inner cellular tissue; the second become the adipose cellules; the ulterior development of the third sort is unknown. The precise way in which the cells of the first class are converted into fibrils, is not well understood. According to Valentin, tendinous fibres, which are analogous in some respects to cellular, are quite distinct in the human embryo about the third month, and, at the fourth, the interstitial cellular tissue is visible in the back, and at some other points.

Regeneration of the Cellular Tissue.

All authors are nearly agreed as to the facility with which the cellular tissue is restored, after having been destroyed. It supplies the place, occasionally, of other organs, or parts of organs, which have been lost; and parts, once distinct, degenerate, or are changed into a substance strongly resembling it. Pathologically, it is produced in great abundance, but under various forms, more or less cellular, more or less fibrous: organized false membranes are said to be composed of it; and it may increase to such an extent as to destroy the original texture of the organ which it merely at one time enclosed, as in cirrhosis of the liver and lung.

Osseous Tissue.

The solidity of the osseous tissue, its enduring character, the facility with which in some respects it may be examined, and the permanency of its vital changes, have all contributed to give to this tissue an importance with the physiologist, the surgeon, and the comparative anatomist, which has often appeared exaggerated to those ignorant of the nature of anatomical science. Observations consequently are being repeated daily on this very tissue, and experiments made on the bones of the lower animals with the same earnestness as at first; precisely as if nothing had been done, or that at the best all which had been done was doubtful, and perhaps incorrect. To these more recent observations and experiments, I now beg leave to direct your attention, although I feel that a brief outline will never do justice to the admirable memoirs of Scarpa and Mieseher, of Troja and Flourens. All such ought to have been translated when they first appeared; and so the British anatomist would have become conversant and familiar with them.

Of late, authors, on the subject of the osseous tissue, have spoken freely of the *lamellated* structure of bone, language remarkable in this, that it differs so much, as we have seen, from the ideas and views of Scarpa, and of his school. Those who use such phrases, however, admit that the spongy, and the lamellated, or compact, are convertible into each other even by healthy processes, as when "the epiphyses are united to the diaphyses, the compact tissue of the extremities of the tube is changed by degrees, (little and little) into spongy tissue, the exterior layer of the compact substance becomes thinner towards the articular surface, the bridges of osseous matter between the foramina, in the interior of the epiphyses, insensibly become thinner, and the lamellæ also diminish in thickness."

Canaliculi of the Marrow.

Narrow cylindrical canals freely communicating with each other, traverse the compact substance, and the plates of the spongy texture of bone, opening on the external surface of all bones, and on the interior of long bones where the larger medullary cavities are found. These canaliculi are generally called *medullary canals;* they are microscopic, and can be seen only after having prepared the bone for that purpose; at the same time it is admitted, that they run insensibly into the larger *medullary cells*, which may easily be seen in all bones with the naked eye. They form a net-work resembling the capillary vessels, varying in diameter from 0·005 to 0·02 of a line, the former, or smaller, being placed near the surface of the bone, giving to it that striated appearance so easily observed in certain bones; but in the neighbourhood of the medullary cavity, they are three or four times larger, opening occasionally directly into that cavity. When observed on a transverse layer of bone, these canals, thus cut across, are either perfectly round or elliptical, rarely prismatic. In the parietal bones they run generally from the protuberance towards the circumference, and their direction in other bones may be

* Henle, p. 404.

* Liquor of Cotunni in the horse: analysis by Chevreul—

Water	98·180
Osmazome	1·104
Albumen	0·035
Chloruret of Soda	0·610
Sub-carbonate of Soda	0·060
Phosphate of lime with traces of Carbonate of Lime	0·009
	99·998

judged of by the naked eye. Canals terminating in a *cul de sac* are said to be found only in the long bones in the vicinity of the articular extremities encrusted with cartilage.

Marrow of Bones.

Observers are not agreed as to the extent or nature of the membrane secreting and supporting the marrow found in the interior of bones. The presence of the membrane, and of the marrow, is obvious, as to the larger and easily seen cavities and cells of bones; but its presence in the medullary canaliculi has been doubted, and more especially the presence of the membrane. Miescher seems to admit the presence of the marrow, but not of the membrane. Although I have no direct observation enabling me to refute this idea, I should feel disposed to doubt it, knowing the excessive tenacity and transparency which some membranes possess. How suddenly they alter, when altered connections require, may, I think be illustrated by what happens to the pia mater, when, passing inwards at the margins of the convolutions of the brain and great cerebral fissure, it becomes the lining membrane of the opposing surfaces. The gelatiniform liquid of the diploe and spongy bones described also as marrow, is composed* of 75·5 parts of water, and 24·5 of solid matter, quite similar to what may be removed by washing from the muscular substance, namely albumen, colouring matter, the extract of flesh, with the ordinary salts, and merely a trace of fat, confirming the prejudice, if it be one, in favor of the more nourishing qualities of marrow, and soup made from bones, when compared with ordinary fat. It is mentioned, however, in the same work, that in the unboiled humerus of the ox, there were 96 per cent. of fat, 1 of membranes and vessels, and 3 of a liquid, differing in no respect from the washings of meat. The marrow then in this part of the ox must chiefly be composed of fat. It were extremely desirable that all future analyses of this kind, having a reference to human physiology, were made on human structures.

The medullary membrane, or, as it has been not unfrequently called, the internal periosteum, (but not I think generally by practical surgeons) can only be separated artificially from the rest of the medullary tissue. Its appearance merely as a membranous tube is, therefore, quite artificial; but the calling it a cellular tissue, rich in blood-vessels (Henle), does not essentially alter its nature; it is still a membrane, forming, and intimately united with, the medulla itself. Its general distribution and nature have been already fully described.

Periosteum.

Since the discoveries of Schwann, a layer of epithelial cellules, pavement-shaped or arranged, has been shewn, by the aid of the microscope, on the free surface of the periosteum investing the mastoid cells, and vibratile, that is, having microscopic cilia, on the surface in the cavities, or sinuses, communicating with the nose; these cellules give to the surface of such cavities the character of a mucous membrane, leading anatomists to suppose that here the periosteum and mucous membrane were so intimately united together that they could not be separated, although both were present; this, however, is doubted by Henle, who seems to think the mucous membrane here absent.

The absence of the periosteum over those surfaces of bones whereon we find the encrusted or articular cartilages has been already adverted to. It is here that the medullary canals, ending in *cul de sacs*, penetrate a short way into the bone, and, extending through the cartilage, reach the free surface.

Vessels of Bones.

The fine vessels proceeding from the periosteum penetrate, as has been already explained, into the interior of the bone, and even into the medullary canaliculi, where they form net-works; these communicate with similar net-work of the marrow in the osseous cells and medullary tube, when present, but the *nourishing arteries*, as they are called, have chiefly a reference to the marrow. In the veins of the diploe, already described, fibres have been observed, similar to those found in the sinuses and valvules, imperfect, no doubt, in the veins of other bones. Deutsch's observations in respect to the veins of bones, are not sufficiently clear; the existence of lymphatics is still doubted.

* Berzelius.

Chemical Analysis of the Osseous Tissue.

The constituent elements of this tissue have the same form throughout; they are devoid of vessels and nerves. The chemical composition, as made out by Berzelius, has been already mentioned; more lately, Denis found, that in the bones of a child 3 years old, the carbonate of lime was to the phosphate as 10·00 to 23·32; in a man of 20 years, as 6 to 53, and in an aged person of 78 years, as 12·8 to 44·9. A question has arisen as to the actual or relative quantity of organic matter in different bones; the authors of the *Encyclopedie Anatomique* quote the following analysis by Rees:—*

	Inorganic Matter.	Organic Matter.
Scapula	54·51	45·49
Sternum	56·00	44·00
First Metatarsal	56·53	43·47
Vertebra	57·42	42·58
Rib	57·49	42·51
Clavicle	57·52	42·48
Ileum	58·79	41·21
Tibia	60·01	39·99
Fibula	60·02	39·98
Ulna	60·50	39·50
Radius	60·51	39·49
Femur	62·49	37·51
Humerus	65·02	36·98
Temporal Bone	63·50	36 50
In the substance of the diploe—		
Of the Rib	53·12	46·88
Of the Head of the Femur	60·81	39·19

These analyses were made with a view to determine the difference between the spongy and the compact bones. But in the abnormal and pathological condition of bones, all this must be greatly altered; in young persons, afflicted with articular diseases, the shafts of the bones seem often to have lost their strength, weight, and force of cohesion. The medullary cavities are enlarged, and the cellular texture of the bone breaks down too readily under the fingers. Hence, perhaps, one of the advantages of amputating in the joints, whereby, generally, the fragile bone is left uninjured by the saw. But this subject followed out would lead to the pathology of the tissue, which we can only consider, in this place, in so far as it illustrates the physiology. Egyptian mummies, it is said, have been discovered, whose bones had been, more or less, rachitic; thus shewing the antiquity of the disease.

Cartilages of Ossification.

It is chiefly in this and the following sections, that modern enquiry have endeavoured, at least, to give more precision to preceding descriptions; with what success, the reader will immediately be enabled to judge. Any opinion I may have to offer, will be given towards the close of the lecture.

Modern observers, studying in the path of preceding ones, have commenced by softening the adult bone in muriatic acid; thus depriving it of its earthy salts, and reducing it to a condition resembling, at least, in certain respects, its primitive state, viz. a cartilage.

The lamellæ, thus attempted to be fully proved in a variety of ways, by direct observation, by dessication, exfoliation, calcination,—are composed of fibres of extreme delicacy, interlaced, and presumed to be of the same nature as those of the fibro-cartilages. These fibres cannot be traced for any distance, because they branch out and become obscure; moreover, it has been suspected, either that short fibres connect the plates to each other, tying the concave side of the one to the convexity of the other; or, what is more likely, that excessively short processes of the medullary canaliculi traverse them. So far, then, Gaghardi's ideas come again forward, but quite in a different sense.

* *L. and E. Phil. Journal*, 1838. August.

Osseous Corpuscles.

The cartilage, forming the basis of the bone, may, we have seen, be separated artificially into lamellæ placed over each other; now, between these lamellæ may be observed a number of peculiar spots or scattered corpuscles, clearer than the surrounding cartilage; these spots may be best studied on well polished osseous discs; examined in this way they may be described as round, though rarely so, or polygonal, or terminated in points, and more commonly elongated. In the human rib, their length was 0·004 of a line, and 0·002 of a line in breath, but they are double this size in other bones. It is considered as certain that these corpuscles contain earthy salts, (not chemically combined) but merely as a pulverulent precipitate, not only in their walls, but also in the centre. To the farther history of these corpuscles I shall return, when describing the development of the cartilage of ossification.

Calcareous Canaliculi.

One of the most remarkable circumstances observed in regard to these osseous corpuscles is the projection from their margins at various points of fibres of extreme delicacy, into which, indeed, at their extremities, the corpuscles themselves degenerate. These fibres, from different corpuscles, meet and unite, but at a certain distance from the corpuscle they run parallel to each other This course and their ascertained diameter would seem to show that these fibres are the same as those composing the lamellæ of the cartilage; that they are, in fact, identical with the canalieuli of the cartilage, and of the osseous lamellæ.

Earthy Deposit—combined.

In these corpuscles or cavities, and in the tubes proceeding from them, the earthy matter is deposited as a pulverulent precipitate. But another portion is most probably connected in a different mode with the cartilage; nevertheless, the fact of this neither having been proved nor explained, will convince the reader that some interesting points in the physiology of bone are still open for investigation.

Development of the Osseous Tissue.

We have already seen that in the embryo, solid cartilages having a similar form, take the place of bones. These cartilages, however, differ chemically from true cartilage, since, by boiling, they are reduced, not to gelatine, but to chondrin. The idea of the ancients, that bones may grow from membranes, had reference chiefly to the bones of the head. It would appear from Weber's Observations, as cited by Henle, that as ossification is taking place in these bones, the cartilage is first formed partially and successively, as required by the progress of ossification, so that the ossified portion is surrounded by a cartilaginous edge, preceding, and keeping, as it were, in advance of it.

At first, microscopically observed, there is no difference between cartilages of ossification, and permanent cartilages, so that the remarks of a previous lecture will apply here.

Development of the Cartilages of Ossification.

The first step towards ossification is the formation of cavities within the cartilage of ossification. These cavities extend, unite transversely, and are about equal in size to the medullary canaliculi, afterwards found in the bone. In the meantime, bone appears in the intermediate substance, or the interstices, and numerous vessels penetrate the cartilage everywhere, proceeding from the periosteum.

Differences of opinion exist as to the osseous corpuscles and their branches; these differences have a reference to the connection which exists between the structures of the embryonic cartilage, and the actual condition of the adult bone; in what precise mode, in fact, they are metamorphosed into each other. Neither can it be proved whether or not the cellules of the cartilage and osseous corpuscles are identical, and the same remark applies to the medullary canaliculi, and the branches of the corpuscles. So long as the cartilage of the bone represents a solid mass, it presents no lamellated appearance. This takes place only after the formation of the medullary canaliculi.

OBSERVATIONS ON A WORK ENTITLED "CHEMISTRY IN ITS APPLICATIONS TO AGRICULTURE AND PHYSIOLOGY." BY PROFESSOR LIEBIG M. D. PH. D.

(From a Correspondent.)

(Continued from page 354.)

I can scarcely bring myself to believe that such profouud ignorance of nature and of natural operations exists in the present day, or that physiological chemists with such absurd notions, should presume to dogmatize on these as on some well investigated subject. Liebeg does not appear to know that the fossil and mineral kingdoms exist, that the one and the other is continually forming by abstracting oxygenn from water and atmopheric air, as well as from organic bodies: the higher temperature and the less moisture a region enjoys, the less vegetation, the less animal matter exists, and the greater is the extent of oxydation of bodies exposed to atmospheric action. Well may the learned Bacon say, that "a science founded on opinions and dogmas requires bolstering up with opinions and logic."

Confining myself at present to carbon, it is evident that the professor has, in his ambition to found a system, lost sight of Nature altogether. It is most undeniable, that grassy plains and luxurious forests must have existed prior to the animals dependant on them for food; but it is equally undeniable, that the soil on which these grasses and trees repose, claims priority of origin, and possesses properties foreign to the surface soil, and some of which it imparts to the soil and crowning herbage. Examine the strata of Europe, the vast majority, as well as the chalk, oolite, and limestone ranges, are decidedly oceanic, and those which may not be embraced in this class, are all varying mixtures, concrete masses of animal and vegetable matters of the ocean, and of the dry earth or terra firma, united with each other as the accidents of flood and fire, of winds and waves, have determined; every region of the earth having its characteristic beds and peculiar phenomena; thus there are varieties of argillaceous, calcareous, siliceous, magnesian and carboniferous earths, rocks, stones, and metalline bodies. When we look upon a bed of vegetable earth, we know and acknowledge the causes of effects manifest; when we look upon the calcareous masses existing and rapidly increasing in tropical seas, the causes of effects are equally manifest, although not so readily acknowledged: these are the two types of animal and vegetable existence, propagation and continuous positive increase. Could we, therefore, admit the hypothesis that carbon was derived from the atmospherc, from whence are we to derive calcium, which is equally, if not more, abundant? Again, the calcareous, as well as other formations, exhibit in their composition and character, a gradual increase of carbon, and carbon is also an essential component of almost every animal as well as vegetable body: from whence, then, has the animal kingdom derived its carbon? If Liebig tells us they receive it from vegetable food; while we admit the truth in part, we are compelled to acknowledge that oceanic animals exist, independent of, and have preceded in the regular sequence of events, the vegetable kingdom of terra firma; we also know that the existence of carbon, diffused through the atmospheric or aqueous medium, is inimical to animal life; and we further feel assured, that it could never have existed in expanded volume in sufficient quantities to supply the sum of its presence in the animal, fossil, and mineral kingdoms.

Again, let the fact not be lost sight of, that animals which precede, as well as animals which follow, the appearance of terrestrial vegetable bodies, are incessantly giving forth carbon in expiration, the effects of animal organic action:—from whence comes, and whither goes, this carbon?—Here is a perpetual increase of carbon in its elastic volume, without co-existing causes of diminution. It is, therefore, evident that the physiology of animals is inseparably connected with vegetables, so far as regards *terra firma;* but both as regards the phenomena of the ocean, and those beds of *terra firma*, animals take precedence in the sequence of events denominated generation; the foundations and the greater portion of the superficial beds of the earth being oceanic, and may be said to consist of the fossilized and mineralized remains of animals and sea plants, wholly independant of terrestrial phenomena, but absolutely necessary to the production of tho latter, as being the basis on which the latter exist, and yielding up its constituents to the requirements of the latter.

The received opinions of the day point out a time when the earth was covered with an extensive and luxuriant vegetation, when the air was so adulterated with carbonic acid gas as to render animal existence an impossibility: but reality teaches us that animals take precedence of vegetables, and that animal matter, and matter supplied by the digestive processes, constitutes invariably the basis of the vegetable kingdom in the unbroken sequence of events: thus coal is ever found resting upon or within marine beds, known as limestone, ocean marl, chalk, siliceous or siderous earths. The orders of formation are various; in the Pacific, Southern, and Indian oceans the base and superstructure is calcareous; in the Atlantic, which receives the mighty rivers of America, we find regions of sand formations, immense deposits of vegetable earth, marles and ocean earths, produced by the continuous decay of sea-weed, the deposition of animal exuviæ, of vegetable matter, periodically brought down, and periodically deposited; and this brings me to the consideration of, "What is Soil?"

Soil—or that which is termed, vegetable soil—is the resolution of ascescent vegetables, blended, more or less, with animal matter. In its state of vegetable earth, or humus, it is of a blackish colour, and, deprived of water, exhibits no cohesive powers or sensible affinity of its particulars the one to the other. In the early stage of decomposition it is a powerful absorbent of atmospheric air and gaseous exhalations,—and, in these absorbing powers, its powers of vegetative generation, and its fertility, chiefly consist: it has a great affinity to oxygen, and, in union with it, acts chemically and mechanically upon all animal and vegetable substances buried within it, causing them rapidly to decay, and to pass into the earthy state, although aided by heat and moisture, as well as saline matters, it is the most productive of all soils. When exposed to high temperature, and long continuous atmospheric heat, it acquires injurious properties, generally speaking wholly destructive to vegetation; and, instead of administering to the requirements of plants and trees, it re-acts upon them, abstracting their oxygen, together with the vital juices, causing, first, the leaves to fall off, decompose, and fall into dust; in the next place, it utterly destroys the stem, branches, and trunk; and, in the continuous absence of water, in the last place, attacks the roots, and eventually destroys them.

In many tropical regions, the plains, towards the close of the dry season, present a most forlorn appearance; the earth is then destitute of grasses and small plants; the trees, deprived of a portion of their sap, become stripped of their leaves, and the trunks and branches, reeds, and giant grasses become so dry and brittle, as readily to break, or take fire,—the whole of the vegetable kingdom, faint and exhausted, sinking rapidly into dissolution, decay, and death. It is at this season of the year the natives fire the woods and prairies; and the conflagration of forests and plains of vast extent, accompanied with the fearful cries of birds and beasts, the crackling of the burning branches, the crash of falling trees, the lurid light reflected in the surrounding tropical darkness, and the flashes of lightning issuing as from a burning crater, render it one of those fearfully sublime sights which time nor circumstance can ever eradicate from the mind. Nor are these effects of continuous heat confined to tropical regions; the milder climates of Europe and America have had occasional visitations of drought and continuous heat, and the most fatal consequences have followed.

It is evident, therefore, that there are other conditions essential to the development and growth of vegetables, than the earths in which they are disposed; and that the atmosphere, so far from being the sole cause of the increase of a plant, is, during this hot weather, most decidedly inimical to it. It is at this period of the year, that the conditions of the lower atmosphere are at all times variable; and its mechanical combinations are so exceedingly changeable, as to laugh to scorn the puny efforts of analytical chemists to discover their laws of combination, or the causes of phenomena contradictory in their nature. Readily reducible into dust, it is often borne in this state, in clouds darkening the air, from the plains whereon it is produced, and carried iuto distant regions, or into seas, lakes, and rivers: thus, the fierce simoon bears the soils of provinces far away, forming hills covering extensive plains, and overwhelming all things opposing its progress.

It is at this season that the soil receives its increase, not by the living digestive process erroneously asserted to be going on at the roots, but by the general decomposition of the organic body of plants, and of the leaves and finer fibrose portions of shrubs and trees. When the atmospheric air is charged with excess of oyxgen, it ruthlessly attacks the living animal and vegetable, abstracts from them their hydrogen, and commits their carbon, in the form of a dry powder, to the soil. This process of decomposition is neither the one nor the other mentioned by Liebig: it is not putrefaction, neither is it burning: but the cementing base of the body —which, during living action, is an elastic compound—being taken away, it becomes gradually separated in its parts. Hence, then, in extensive regions of the earth, embracing the greater part of its fertile surface, we find that the vegetable body, if it receives its carbon from the atmosphere, does not return it to the atmospherc; but, as vegetation contiuues, so its products, resolved into earth, increase; and the local beds of the earth either periodically increase in extent, where the immediate organic action is manifest, or the newly-generated earths are continually conveyed away by winds and waters, to other and sometimes distant localities.

It needs no waste of words to prove that the existence of an exclusive bed of vegetable earth, in a particular locality, upon or beneath the surface of the earth, is no evidence of vegetables having there existed in the living state, for all the rivers of the earth are active agents by which these earths are changed in their disposition and qualities. The vital economy of nature is not called into action for the mere preservation of definite quantities, but, as all the phenomena testify, to *increase* the consolidated matter of the earth. During the whole period of existence of animals and vegetables, the organic body abstracts from and returns oxygen to the atmosphere, or to the waters; but the latter are both losers by this process, for, whatever may be the nature of the soil, it is elaborated by the living body, and ultimately becomes a component part of the soil. Men of science, in reality, mere smatterers in the varied branches of natural philosophy, are perpetually contending for the preservation of the balance of powers, quantities, and qualities of this planetary body; but these notions are as repugnant to nature, as they are contradictory to established facts, for every organic and inorganic body carries within itself the elements of change, of increase, of diminution, and of separation. It is true, that the body of the organic animal or vegetable is not always perpetuated or preserved in form, when it becomes one and identified with the fossil and mineral kingdoms; but it is equally true that its vital and mechanical action, and matter in action, are the efficient and co-operative causes of elements uniting in definite proportions, and thus forming results which, from their perfect mechanical and mathematical combinations, are enabled to resist the attained art of analysis: thus, the body, having defined action and defined matter, continually increases in its density of structure, and passes through the several stages of life.

When Liebeg contends that the quantity of elements received within the living system are equal to the quantities given forth in death and decomposition, he argues against a multitude of facts, and a more general acquaintance with nature than he evidently possesses would open his eyes to the fundamental error upon which he

grounds his observations. It is all very well for learned men to explain phenomena by mathematieal demonstrations, by mean averages, mean altitudes, mean degrees of heat and cold, and mean quantities; but the natural philosopher who derives all his ideas from things themselves, is compelled to confine himself to the realities of science. The quantity of carbon found in the atmosphere of the Alps and the Appennines, or the plains of France and Germany, has nothing to do with the quantity of carbon found in tropical atmospheres. This sum of carbon ever depends upon local action and not upon an uniform and invariable law of nature; and the atmosphere as one whole, is really and truly a chaos, a vast labaratory in which nature operates immense analyses, precipitations, and combinations,—a grand receiver in which all the attennated and volatile productions of torrestrial bodies are received, mingled, aggregated, combined and separated. It varies in the sum of its products in all countries and at all seasons of the year.

(To be continued.)

REMARKS ON THE THEORY AND PRACTICE OF DENTAL SURGERY.*

By —— WAITE, Esq., Member of the Royal College of Surgeons, and of the Imperial Academy of St. Petersburgh.

No operation performed on our organs can have a fortunate result, unless founded on a correct interpretation of the laws of the animal economy. The art of the dentist, in this country, was long covered with a mysterious veil, and abandoned principally to mechanics, who were employed by persons by preference as most skilled in mechanical contrivances. Thus, an empirical practice, deprived of the light of physiology, brought forward numerous operative proceedings, opposed to the indications of science. Among these, I might mention the transplantation of teeth, which has often caused fatal results; the sawing of teeth across their nerves; pivoting teeth; the adjusting metallic plates to force the teeth to take a certain direction; the sudden luxation which is employed, with the same object in view; the extraction of the euspidatæ; the use of ligatures of metallic threads, &c. It has been my endeavour to avoid these operations; and I am happy to state that, with the rapid strides with which dentistry is advaneing, they are somewhat disappearing from practice.

In the present communication I shall endeavour to condense as many useful facts as possible into a small space, and to pass in review all the points of doctrine most essential to sound practice.

The study of the teeth has occupied the attention of a great many learned men, among whom, Hunter, Home, and Sir Charles Bell hold a distinguished place. As I do not intend to occupy your time with details of elementary anatomy, I shall merely observe that the teeth receive their blood from important vessels, the carotids; that they possess vessels, absorbents, and glands; and that they are covered by the mucous membrane which lines the lungs and stomach, and, consequently that they feel the changes which take place in those organs. Their nerves arise from branches of the fifth pair, and anastomoso with branches of other nerves, elucidating the severe symptoms which often accompany toothache, and swelling of the gums.

It is scarcely necessary to remark that we every where meet with idiosyncracies in connection with climate, and these tendencies towards special affections re-act, more or less, upon the teeth. In all operations on the teeth, it must be remembered that the proceeding which may succeed perfectly with a strong man, may fail entirely with a weak woman. This fact is connected with the phenomena of sensibility; the operation which in one person may cause very little pain, in another may produce real agony; it is impossible to indicate the kind of operation to which the preference should be given. We sometimes meet in practice with cases in which, however serious the mischief may be, it becomes the duty of the practitioner to abstain from any operation for the time. It may even be said, that, among the improvements acquired by experience, that which is obtained the most slowly, is the fact that should guide him in such a case to do little or nothing at all.

The teeth were for a long time believed to be composed of two substances; but, latterly, attempts have been made to shew that a third substance, which has been called DENTINE, enters into their composition. I do not regard this point as proved, and, before I admit it, I purpose making new researches by means of the polaroscope, and shall hereafter make known the results.

Nature has adapted the teeth to the wants of man, and has shewn an analogous adaptation in animals. She has modified the form of the mouth in the graminivoræ, the carnivoræ, and the rodentia. It is the same with fish, the most voracious of which are provided with the sharpest teeth. Throughout the entire scale, the mouth is found in relation to the wants of the animal. But I pass over all these details, which are, nevertheless, as curious as they are interesting.

If we wish to examine the teeth after birth, the capsules in which they are contained must be opened. The ossification on the pulp commences gradually, and then the arteriolæ appear to traverse it. In the fœtus at the full period, we ought to find, in the jaw of each side, the external shell of five milk teeth, besides the rudiments of the first molar. The osseous shell is free upon the pulp, and will form, at a later period, the ex-

ternal lamella of the bone of the pulp. If these researches are continued, we shall find the osseous matter produced by successive layers on the vascular surface of the pulp. As this deposit of osseous matter occurs, the pulp contracts to form the neck of the tooth. By this species of strangulation of the neck, the pulp is found divided in two, and the lower portion, by elongating, gradually assumes the form and position of a root.

When the tooth has acquired the form it ought to have, a small quantity of fluid is exhaled from the internal lamella of the capsule, to form, when hardened, the enamel of the tooth. The formation of a solid enamel to cover the crown of the tooth, is a very important work of nature. I will not stop now to point out all the phenomena; it is sufficient to say, that the condition with which this proceeding is effected, is connected with that of the secretions in general, the moment it takes place.

Let us now pass to the period when the tooth begins to make way through the gums.

The first dentition frequently gives rise to serious irritations in other organs, which often require the assistance of the medical practitioner. I will give, here, some statistical details relative to this matter, derived from the Metropolitan Infirmary for Children, to which institution I was many years attached, as surgeon-dentist. At the commencement, the mortality of the children was about 1 in 45; in 1830, the mortality was only 1 in 67. So remarkable a difference may cause a desire to know what plan of treatment was adopted. When sick children were brought to the Metropolitan Infirmary, if the case was connected with dentition, the first thing that was done was to examine the gums. If the mouth felt hot, and there were febrile symptoms present, the gums were lanced. The relief experienced, from the evacuation of a few drops of blood, is very remarkable.*

When the case is more severe, or when there is congestion or convulsive fits, blood should be abstracted by the application of leeches or from the jugular vein. Bleeding from the arm is not practised until the seventh year. The medicines employed to act upon the intestinal canal are calomel with scammony or jalap; ipecacuanha, antimony, and the liquor ammoniæ acetatis, are also used to act upon the skin. I should remark that the incisions are not made across, but along the gums. Two are practised over the canine teeth: those for the molar ought to follow their summits.*

From the period when the first set of teeth make their appearance until the moment when they fall, there is but little to attract our attention. It is, nevertheless, worthy of remark, that nature not having been very liberal with the first set of teeth, often repairs her fault by supplying a more beautiful set at the second dentition. I am not an advocate for any operation on the first set until they are loosened in their sockets, unless the glands become affected in consequence of caries, and then the extraction of the painful tooth is imperative.

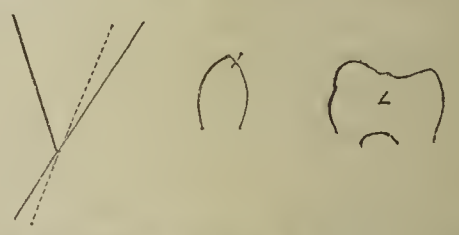
Let us now pass to the sixth year. The mouth has enjoyed an interval of repose, during which the jaws have increased in size, and the first set of teeth have evidently become too small: so that, if the secondary teeth were of the size they should be for the remainder of existence, there would not be sufficient space for them; the pain, resulting from their pressing on each other, would be insupportable, and the pressure would ultimately throw them out very irregularly.

The vascularity of the gums increases; the absorbent vessels are in full activity; the roots of the primary teeth are absorbed; and, by the close of the eighth year, there should be eight new incisor teeth.

At this period of life, the growth of the jaws is often retarded, especially in female children, whilst the development of other organs is going on. This fact must be borne in mind, whenever an attempt is made to remedy a mouth where the teeth exert considerable pressure on each other, as, otherwise, some of the teeth may be extracted, to give more room for the others, and at a later period, when the health is re-established, the appearance of the mouth will be seriously injured.

When the secondary teeth are formed in too close a line, pressing upon each other, the dentist should content himself with extracting the remaining teeth of the first set, which are the cause of their assuming an irregular position. None of the second set of teeth should, in general, be extracted before the twelfth or thirteenth year.

In those cases where the teeth of the lower jaw project beyond those of the upper, if pressure be employed in a given direction, the teeth will be forced in that direction;—thus, for example, if a plate of ivory or gold be adjusted on the lower teeth, so as to prevent the jaws from closing behind it:—if the plate has been fashioned as a diagonal:



the upper teeth, especially at this age, will be gradually brought forwards. If too much force be used, and if it be exerted on the centre, or beyond it, the teeth will take a rotatory movement.

This application of pressure requires considerable care.

If proper attention is paid to the teeth at the period of their growth, there will be very little necessity for the employment of the means to which I have just alluded, and which it must be confessed, very often weaken them, and sometimes

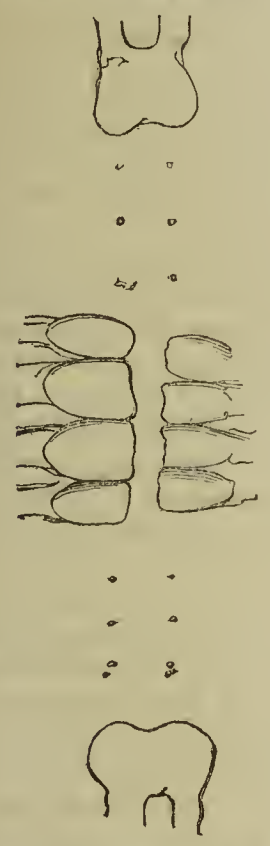
* This paper forms the substance of one read before the Imperial Academy of St. Petersburgh, whose marked commendation it received.—ED.

* In Russia, there exists a very great prejudice against lancing the gums of children; and Dr. Rogers, an English physician of high talent, assured me that he was compelled to be extremely cautious in recommending it. Sir J. Wylie, also, kindly hinted to me, that if I said much respecting this operation, it might cause an unfavourable opinion towards me.

* Dr. Tweedale is my authority for this statement.

even destroy them. It is important at the period of their growth, to pay progressive attention to these organs, with the view of aiding nature with the most natural means.

Let us now pass to the ninth year. I have ascertained that the accompanying woodcut is a tolerably correct representation.



Eight incisors. Two molar teeth in each jaw.

The thirteenth year especially requires our attention. As children were baptised at different periods after birth, some difficulty was experienced in ascertaining their age, and a question of some importance arose, as the legislature forbids giving beyond a certain proportion of work, in the factories, to children who have not yet reached that age. The more work they performed the higher wages their parents received, and as consequently no confidence could be placed in the assertion of the parents, a great number of whom were sufficiently inhuman to set very young and weakly children to full work, the commissioners felt the necessity of placing a bridle to their cupidity, and it was proposed to measure the height as an approximative means of ascertaining the age. This system being objected to, parties interested in the question applied to the principal dentists, to ascertain how far the age could be told by the appearances of the teeth. At the thirteenth year, however, I have experienced some difficulty in consequence of the uncertainty of the appearance of the canine teeth, which may be retarded by the reunion of several causes. Statistics, nevertheless, teach us that at this age the number of teeth ought to be eight and twenty.

The causes of the retardation of the teeth are proximate and remote; among the first may be classed debility, fever, confluent small-pox, hereditary predisposition, climate, &c. All practitioners connected with hospitals are aware that in cases of severe fever occurring at an early period of life, the general development is impeded.

Pursuing the process of dentition, and studying the influence which it exerts upon the constitution, I ought next to draw your attention to the manner in which it arouses the sympathy of the brain. The irritation is, in the first instance, transmitted by branches of the nervus trigeminus to the pons varolii, congestion takes place in the neighbouring vessels, and all the nerves which have their origin in that part of the brain, are affected by the increased action. Thence arise more or less serious lesions, and even paralysis of certain muscles which derive their nervous influence from these branches. At the age of thirteen, we sometimes observe an extreme pallor of countenance in females, even when the health appears to be good. I have seen this condition removed by the extraction of a tooth from a mouth in which there were too many, and partial paralysis has also equally ceased by the same treatment under analogous circumstances. The teeth which are most likely to produce these disorders, are those which are very long, hooked, and pointed.

Conjointly with my colleague, Mr. Rice, the resident apothecary at the Metropolitan Infirmary for the Diseases of Children, I have drawn up an account of more than twenty thousand cases of different diseases, a great number of which had no other origin than the irritation of dentition.

There is one condition which influences the development of the teeth more than any other, and that is the quantity of blood which is conveyed to the formative organs. It matters little that it be of superior quality; the work of formation constantly makes progress. but in this case the teeth are weak, perform their functions badly, and soon suffer from the influence of disorganising causes. Thus may be explained numerous pathological phenomena which are met with in practice. Thence arise those unfortunate cases of caries which are too often observed in the mouths of the most beautiful women who have weakly constitutions. I have very often seen in girls, rather than in boys, coxalgia and spinal disease preceded by destruction of the teeth.

Daily experience shows that whenever any fluid or solid substance of an acid nature is brought in contact with the enamel, according to its strength it destroys its texture. When the enamel is once softened, caries makes rapid progress in the osseous part of the tooth. In its early period, it is easy to obtain the preservation of the tooth, unless there is some peculiar vice in the constitution; but if the caries has made progress, and the nerve is attacked, it can very rarely be stopped, except at the expense of the vitality of the tooth itself. In such a case, nothing can be of greater importance than the most strict cleanliness; but if in spite of all, the caries continues to extend, it is then of no use waiting, it must be extirpated.

When the caries is superficial, a division may be practised by means of a file or a graver. In this country, filing the teeth has fallen rather into discredit, from the want of skill of numerous operators, who have arisen from the rude and mechanical labours of a workship, and call themselves dentists. This class of operators have not the necessary information, for the experience of our great operators is not communicated to their workmen, and very often even dies with themselves. Divisions between the teeth will have very little influence in preserving them unless they are hollowed out a little towards the tongue, so as to prevent anything lodging, and exposing the soft part to friction.

Nature has endowed the teeth with a compensating power by which, when the osseous part is broken, it becomes hardened. Nevertheless, professional men in this country have hitherto been mistaken with regard to this fact. They have believed that the tooth had a cancellated structure, and that, like every other bone, it was subject to exfoliation.

It will be observed, that I attribute caries of the teeth to the nature of their primitive formation, rather than to any other circumstance. Like unto phthisis pulmonalis, scirrhus, and some other diseases, it is not so much the local affection which makes progress, as it is the vice of the constitution which aggravates the disorder.

It often happens that we find a tendency to caries in the front teeth at an early age, which disappears of itself when the health is restored. The enamel, also, which is injured by the contact of acid substances, will not be so much affected by it, if at the period of its formation the health of the subject is sufficiently good to assure it a proper degree of solidity.

In a work which I published in 1836, I remarked that I never observed caries of the front teeth in children, without certain indications of the tongue and gums. The thinness of the bones of the teeth in children, the softness of the enamel, the accumulation of decomposing matter, generally hasten the destruction, which proceeds in a rapid manner: when the gums are diseased at this period, they furnish a viscid exudation, especially in cases where the gums dip down between the necks of the teeth. In this state, whatever may be said, according to theory, that decomposition does not take place in a living subject, the circulation in these organs is so weak and obstructed, that slow disorganization occurs; and if the substances which have exuded are submitted to analysis, they furnish, like every other animal substance, water, ammonia, carbonic acid, and sulphuretted, phosphuretted, and carburetted hydrogen gases.

What I have just said, shows how much a healthy state of the mouth in children depends on cleanliness of all kinds; whether it be as medical men, or as dentists, the state of the gums must be watched, and incisions made when there is congestion. They may be strengthened by stimulant tinctures, or demulcent and refrigerant applications used, if they are hot and irritable. If abscesses are found in the gums or in the cheeks, which are difficult to cure, and there remain fangs or carious teeth in the jaws, they must be extracted as soon as possible, for not only abscesses, but severe pains are often produced by such causes.

The eye teeth often create difficulty; they have larger and stronger fangs than the other teeth. Occasionally, they pierce very high into the jaw, and, for that reason, they should not be extracted; and, if space is wanting, one of the bicuspids should be removed. As the second of these is more subject to caries than the first, it should be sacrificed in preference. Next in order to the canine come the wisdom teeth. The appearance of these is often accompanied by more or less severe general symptoms. They may be combatted by either lancing the gums, or by the extraction of a bicuspid to afford room. Pain which accompanies the irruption of this tooth is more severe when the jaw is short, and it has to make its way through the integuments of the pharynx. This tooth has been even known to produce a momentary suspension of the intellectual faculties. The gum, which covers its upper surface, being flattened, I prefer to remove a portion of it, instead of merely laying it open, because in that manner the tooth is at once exposed. Severe cases sometimes proceed so far as to bring on tetanus, or other neuralgie and sympathetic affections.

The following case furnishes an example of this fact:—I was consulted a few years ago by a gentleman, thirty nine years of age, who was brought to me by one of our first surgeons. This patient was tormented by a succession of abscesses in the face, which opened in the interior of the mouth. These abscesses formed either near the submaxillary glands, or near the parotid, and a sinus had formed between them, by which they were united. There was loss of sensation at the chin. The jaw was very short, and there was not sufficient space for the second molar tooth. The symptoms were supposed to arise from the efforts of nature to free a wisdom-tooth obstructed from the want of space. Every endeavour to prevent the formation of the abscesses, having failed, I proposed to remove the tooth. After a lapse of time, which he employed in consulting others of my professional brethren, who declined the operation, he came back to me to submit to it. The tooth, being situated inferiorly and within the jaw, I made the incision in the soft parts in that place; there was considerable hæmorrhage. The tooth, which fortunately was very loose, was disengaged from the jaw by a curved instrument, having been previously raised by a crooked elevator. This case was brought before the Westminster Medical Society in the session of 1834.

In my opinion the affections of early age generally, and a great number of diseases, are more intimately connected than is supposed with the work of development which is taking place at that period in the jaws and in the teeth.

At the age of eighteen or twenty, the health is in some sort established, and the special diatheses are ascertained up to a certain point: now observe the solid and red gum; it indicates the absence of any latent disease; and that the circulatory and lymphatic systems work together in perfect equilibrium.

At this age the gums and teeth are not subject to any special affections, except to those to which anterior circumstances have predisposed them. If the health has been unsteady, or weakened by

violent fevers, we see even at this age the gums shrunk and leaving the roots of the teeth sensitive and devoid of protection. This is observed very often in females, and it indicates a weak constitution. Although we find the secret of this destruction of the gums among the physiological phenomena connected with the health, it is effected by constantly increasing accumulations of tartar on them and on the teeth. The cleanliness which is enforced in good society is the best remedy for these ravages. But although the anterior circumstances may have been favourable, many causes influence the general health, especially of women at this age, and thus give rise to atony of the gums, the effects of which are felt by the teeth at a later period. We see as a consequence of secretions vitiated by heat of the stomach and the fœtid condition of the breath, the osseous portion of the teeth become decomposed, lose its affinity for lime, and become softened. The teeth soon rot, lose their cohesion, and fall away in small pieces; their necks become painful, and lose their attachment to the gums, which have a greenish tint; the diseased capillary vessels are obliterated, and the nutrition of the teeth is destroyed. I have seen cases of this kind where all the teeth fell away in pieces, and that without any pain in the nerves; the diseased gum covering them, and bleeding at the slightest touch. On the other hand the pain sometimes is very severe, extending to the face, the eye, the ear, and the neck.

If previous attacks of disease have favored the predisposition, the premature loss of the teeth often takes place.

One of the affections which often demand the care of the dentist is the loose condition of the teeth. This affection is not in general well understood. If we examine loose teeth, we find upon the fangs indications of different lesions, such as tumours of the periosteum, necrosis, inflammation and thickening. We also learn by inquiring of the patient, that one of his ancestors suffered from the same complaint. It is observed more frequently, in bilious and melancholic persons. The teeth which have long and large bodies, are more exposed to it than the others.

When there is a scorbutic vice in the system, its effects are observed in the gums. These assume a blackish brown tint, bleed on the slightest touch, become fetid, and their surface furnishes the same peculiar pernicious secretion of which I have already spoken. In the commencement of this complaint, general remedies and proper diet are indicated; local bleedings, and the use of astringents, will also produce good effects.

A loose condition of the teeth may arise from several causes, as from blows, repeated inflammations, abscesses, or spongy condition of the gums, hereditary predisposition, and a moist climate. In my treatise on "Diseases of the gums," the only work on the subject in the English language, will be found extensive details upon this subject.

Although the great physiologists have paid but little attention to the diseases of the gums, the peculiar appearances which they present in individuals affected with scrophula, did not escape the observation of John Hunter. It is to be regretted however, that he contented himself with remarking that scrophula appeared to him to be the cause of certain appearances. If we compare the effects of scurvy and of scrophula on the gums, we shall find characteristic differences. In scurvy there is an increase of activity in the vessels which have the task of nourishing and repairing our organs, whilst in scrophula there is a morbid condition of the vessels to which is committed the task of eliminating the excrementitial parts of the body, or, in other words, of abstracting the molecules which have been used, whilst the circulation is carried on in the normal state. The morbid appearances which are observed in scrophulous persons, are alterations of the glandular substance, of the capillary vessels, atony, and even disorganization,—appearances which cannot be confounded with those of scurvy.

Before quitting this subject, this is perhaps the place to say a word on the morbid alterations of the gums, which result from the employment of mercury. The action of this medicine on these parts ought to be followed and watched; it is by proportioning the doses to the effects, that the misfortune of producing extensive exfoliation can be avoided.

It now remains for me only to indicate summarily the most important points of operative dentistry. Theoretical knowledge, without preliminary practice, will be of but little value to the dentist. It is requisite that his hand should be habituated to work, and that it should be quite at ease in handling all sorts of instruments; he should also have a certain firmness, as otherwise his operations will be imperfect, or accidents will arise. In cutting out caries, he will bring his judgment to his assistance, and he will only perform that operation in cases where the reparative matter is sure to be reproduced. He will take nature for his guide, and in his operations will carefully avoid leaving any angles where the food may lodge.

A perfect operator must possess more than tact; he must have genius. A set of teeth may be as much an object of beauty as a work of Cellini or of Canova, and it is a fact that the works of our celebrated dentists are not less appreciated as objects of utility than as objects of art.

Stopping the teeth is an operation that is practised when the cavity is too deep to be removed by a chisel, or by a file. The saliva has such an affinity for oxygen, that no metals can resist its action, except gold and platina; this latter however, is not soft and ductile like gold. The excellence of this operation consists in forming the cavity well to receive the metal, in rooting out all the caries, and in working the gold into so solid a lump, that moisture cannot penetrate into it. The best operations in stopping, in this country, were performed by my father, who had the distinguished honour to receive three kings in his cabinet.

If there is any inflammation present, it must be removed by leeches, and by opiates, before the tooth is stopped.

The extraction of a tooth is an operation requiring practice, and good instruments. If the forceps are preferred to the German key, the instrument should be well selected, taking care in using them to glide their points on to the fangs of the tooth. In the effort at extraction, you should draw a little outwards, moving the wrist; if the tooth does not yield in one direction, you must change it, and do not be in too great a hurry to effect the extraction; the teeth which will not come out with these instruments, should not be extracted at all.*

At the age of fifty, many persons in this country use artificial teeth, and the art of making them has arrived at a high degree of perfection. There is not any case of loss of teeth, for which artificial teeth cannot be supplied. The metallic plates, which support them, should be strong. They are applied on the principle of suction, or of atmospheric pressure. Springs should be used as little as possible, on account of their injurious effects on the neighbouring teeth. A species of artificial tooth, which has gained a high reputation, has lately been invented in this country.

Pivoting is less used at present than it was fifteen years ago; many unfortunate occurrences have resulted from this operation. As a general rule, I strongly urge professional men never to recommend pivoted teeth to persons of a strumous diathesis. Such persons are prone to malignant disorders; in them the operation is unsafe.

In a more advanced age, we observe that in proportion as the strength continues, the teeth are also preserved. A sudden loss of the teeth is often the precursor of a breaking up of the constitution. It is the same with sensibility; becoming gradually deadened by age, it happens at last that the teeth scarcely receive or transmit any impressions. If we examine the mouth at the age of seventy, we shall find the arch or vault of the palate flattened, the lower jaw changed in shape, and corresponding alterations in the gums. At that age we may find teeth; but in those only who have lived soberly, and have not been predisposed to the diseases which attack these organs.

* The Russian peasant has unusually fine teeth. The higher classes, from the peculiarities of their life, from the climate, and from great indulgence in sweetmeats, lose their teeth at an early age.

NOTICES TO CORRESPONDENTS.

A press of matter, quite unexpected, precludes our giving two or three promised papers, with the list of Heidelburgh graduates till next week, to which time much correspondence must be deferred.

THE MEDICAL TIMES.

SATURDAY, JULY 27, 1844.

Nunc est bibendum, nunc pede libero
Pulsanda tellus; nunc Saliaribus
Ornare pulvinar deorum
Tempus erat dapibus, Sodales!

WELL, we have gone through this wretched farce of an Election. We have, at length, had the three new Councillors chosen, and, thanks to the special prevision of Sir B. Brodie, heaven and earth have not come together. So far from a convulsion of nature, we have not had even a hearty convulsion of laughter. The *thing*, itself, all incongruous and despicable as it is, hits that happy point where it is too serious for a laugh, and too droll for a sigh.

Yet, in some of its circumstances, there was matter for a grave thought or two. We cannot forget that, of the three elected, one, Mr. Wellbank, is wholly unknown to fame. He may be everything that is excellent in his private life and practice, but one fact is certain, he was chosen on no public grounds. Of the other two, more is known. Mr. Cutler is a surgeon of St. George's, but he is a friend of the *present* President: Mr. Scott is a surgeon to the London Hospital, but a colleague of the *former* President. Was the election of these, more than that of Mr. Wellbank, grounded on other than private and personal considerations? None of them had condescended to lay before the Fellows the public claims he had on their support, much less their preference. No one of them made a statement of his scientific achievements, or enunciated the principles of his governmental policy. The friend of Sir B. Brodie depended wholly, we suppose, on the kindness of the Fellows whom his patron could influence: and the colleague of Mr. Andrews, as far as we know, rested as wholly on the support of his friends, and the chance support to be had from a name not unrespected. This was surely bad enough; but let us go a step farther: let us suppose that the two presidents had each introduced some thirty Fellows,—and, what is more natural?—that they mutually aided each other's candidates—and what have we? Why, the whole work becomes a mere affair of presidential nomination, and we have a reformed system degrees worse than the old Council elections!

Yes! we announce it boldly—the elections were as snug, as private, as managed, as much matters of private appointment, as if they had been the choice of as many housemaids. We say this not to the disparagement of the successful candidates. They may have merits,—we frankly own it: what we deny is, that they were chosen for them; and we lay this as an accusation, not against them, but the movers of the Charter. It was *so* pre-arranged: it was provided for in that document, which, if not Royal, we should pronounce infamous. Sir B. Brodie had ordered that he and his colleagues should have their own Fellows; that they should not exceed 300, of which the Council should form 21; appointed that absent country Fellows—men who would not, possibly, be private friends—should vote not;

and that the only three Counеillors likely to be *elected* for years, should be elected under Sir Benjamin's presideney—under his rules and regulations—and *just before* the seeond bateh of Fellows or Electors should be promoted or announeed! And, thus, the high public plaees in the Profession were placed at the command of a cabal, or an individual; and seienee, and individual desert, and just and sage poliey, were taught that they were not the sole and essential elements in a surgeon's good fortune, but depended for their reeognition and good plaeing on the patronage and approbation of this Mister or that Baronet. In other words, the election reveals the Profession as so mueh private property! Even *so*, might it not be appropriated with a little more eleverness, not to say deeeney?

But one word to the fautors of this drawing-room conspiraey. We desire them to know that the Profession will not *for ever* tolerate sueh ehild's-play and nonsense as they have been here so lavishly shewing. Our nature revolts at its insipidity, as our justiee is in insurrection against its frightful wrong. All government is bad enough without neeessity; that of folly, one step worse, breeds contempt,—but when to needless, foolish, useless government, we have added a government miserably saerificing everything, even seieuce, to petty jealousy, and low, friendly intrigues: when we have it misehievous to merit, insulting to respeetability, grossly unjust to everybody and everything it touches—its favourites as its foes—it is time to say, "we will stand this no longer." We utter, then, the emphatie word "beware!" to this small-minded Counеil, so infinitely in all aspects below the eharge they have with profane and rash hands assumed. A serious conviction is ripening against them: passion is being roused: their anuihilation is becoming a thing that good men plot, and eager souls rave about—and we bluntly tell them that if they do not soon eome out with something whose handsomeness suits very mueh more their *fears* than their *wishes*, their *prudence* than their *liking*, they will be left with an empty College over their heads. The members havo a power of self-proteetion in their hands, which they will not avail themselves off save in extremity: but, if something be not speedily done, that extremity may sooner be felt present than is expected.

——— Postquam omnis res mea, Janum
Ad medium, fracta est, aliena negotia euro,
Excussus propriis.

To gain a vietory, is one thing; to use it well, another. To urge the battle's force well, or take its brunt patiently, is to exeel as *brutes* exeel; it is the bearing to the *fallen* enemy, the mercy to the *helpless* foe, that shews the *man*.

Our readers know that we long urged, and not hesitatingly, the war with a literary rival: we have now to proelaim the fact, long sinee made less than doubtful, that we have won the triumph!

We are at the epoeh then that is to try the better part of our nature. We hope to shew ourselves not unworthy the elevation of our position! Our forbearance and eommiseration are alike under tax, for, alas! the unfortunate objeet of our opposition has suffered a defeat one degree worse than that in which Franeis lost every thing but honour! Worse still alas! he has suffered the degradation of being led like the eaptive of a Roman triumph for disgraeeful sale in the market. The *Times* of Wednesday last announees the sad fact in one of its advertisements, and that our Contemporary in his extremity may not suffer his last and worst disgrace—getting no purehaser—we give him to-day the full aid of our journal gratis.

(Copy.)

"TO CAPITALISTS and MEDICAL MEN.—A MEDICAL JOURNAL, established almost a quarter of a century, having a standing influenee with the profession, *to two of whose Associations it is sole organ*, is to be SOLD. Direct, statiug real name and address, to X. Y. Z., post-office, 116, High Holborn."

Poor eontemporary! unfortunate Associations! Howdoth the inmost fibre of our eonquering heart bleed for ye! What now shall be *said* for the British Medical *Ass*-ociation, and Dul-wich, or Dull-wizard Webster? What again shall be *done* for the Medieal Proteetion *Ass*embly, and Mr. Rugged, or Mr. Drugget Rugg? The first body we pass by in silenee, for *de mortuis nil nisi bonum*, and we have no good to say: the soeond we omit in deeeney—for we are not the Newgate Calendar. Rotten as touchwood at heart as both Societies are—but, fortunately, not so inflammable—they yet form the erutehes of our *moribund* friend, and present an appeal to our pity and curiosity, they would offer in vain to our respect. Forming clearly a part, the best part of his stock in trade, a preeious portion of his disposable eommodities, the man of business, unused to sueh merchandize, feels a very natural euriosity to know something of their market value. The *enterprising* eapitalist, therefore, venturing to purchase (he will, doubless, be one of the "Lunar Colonization Company"), will do the world some service in publishing an aecurate bill of partieulars. Severed from the coneern, and both "puir bodies" sold a bargain, we would ourselves not scruple a deeent offer. What would Messrs. Rugg and Webster say to some Pennsylvanian bonds? or a small order on Mr. Wakley's Bank of Faith? or, better still, a hot supper at the "Pig and Whistle?"

But is there no mistake (as usual) in our eontemporary's Inventory of Sale? Is the "standing influenee," spoken of, not eonsiderably better deseribed as "lying?" Is it our eontemporary that is the organ of the Associations, or the Assoeiations that are the organs of our contemporary? Would H. B., presenting Mr. Wakley with one of the "organs," grinding "the light of other days!" and Boy Rugg with the other, sounding "Jim along Josey,"—both looking round, eyes upturned very piteously for alms—be mueh—very mueh, at fault? We have our doubts. Meanwhile may our unfortunate rival do what he has failed to do the last few years—and never ean do again—sell well! "A footman out of plaee," will no doubt, as the advertisements say, "find this a eapital spee." Earnestly do we reeommend it to the consideration of his tribe.

ROYAL FREE HOSPITAL.

A ward has been liberally set apart, we have been glad to hear, in this prosperous institution, for the treatment of ealeulous diseases. The serviee has been confided to the able management of Dr. Costello, and eannot fail to prove a boon to many an unhappy sufferer. Civiale's appointment, a dozen years ago, to the Hôpital Neeker, in Paris, has proved an effieient means of diffusing the benefits of the important improvement introdueed in surgery by lithotrity. By the present appointment, a *lacune* in our public institutions will be filled up, with a similar result, as regards lithotrity, in this eountry.

It is in our recollection that an effort was made, some years baek, to establish a speeial institution for stone cases. More than £1,000 was raised by subseriptions, but the attempt ultimately failed, and the money unaecountably disappeared. It may, however, be matter of surprise that the managers of the leading eharitable institutions of the metropolis had, from the beginning, or, at least, from the moment that their euriosity had been gratified as to the practicability of lithotrity, evinced so mueh indifferenee to its admission within their walls as an aceredited operation. Such is, at all events, the fact, whether we look for the explanation of it, to mismanagement or jealousy. For many years, the eutting for the stone went on just the same, in our hospitals, as if the art of the surgeon had made no advanee, or experieneed no improvement. Some of the hospitals eonfined themselves to passive resistanee only; but one, and that, too, the latest founded—the University College Hospital—refused an applieation for a ward to be devoted to the reception of this elass of patients, although it was backed by the recommendation of Dr. Elliotson and his eolleagues, in that hospital. Earnestly *proposed* by Mr. Liston, on behalf of the eminent lithotritist whose appointment we now reeord, it was as earnestly *opposed* by Mr. Liston in eommittee,—to whieh of the two circumstances the proposition owed its rejection, we know not. We will not make any refleetions on the University College for so inconsiderate a refusal to augment the means of instruction for its surgieal pupils; but we cannot allow the opportunity to be lost of paying a eompliment to the Gray's Inn Road Hospital, and its spirited managers, for carrying off the palm. We trust this example will not be lost; but, unfortunately, there are not so many Costellos and Civiales as hospitals.

THE CIVIL LIST AND SCIENCE.

The following pensions have been granted during the last year:—The widow of Sir Charles Bell, £100; Miss Ann Drummond, as sister to Edward Drummond, assassinated by Maenaughten, £200 a year; Robert Brown, Esq., the Botanist, £200 a year; Lady Sale, £500 a year; Sir William Rowan Hamilton, the Astronomer Royal for Ireland, £200 a year. We have read this list with considerable, though not with entire, satisfaction. Though we would not underrate the services of Lady Sale, and Miss Drummond's brother, we are not quite satisfied to see those of Sir Charles Bell so mueh placed below them. If Government were to poise deserts as posterity will, they would find that the state, no less than humanity, owed more to the cultivators of science than to any other portion of its subjeets, and would not be less sparing to them of its rewards.

ELECTION OF COUNCILLORS OF THE COLLEGE OF SURGEONS.

This very important fact, on which, aeeording to Sir B. Brodie, hung the fate of the profession, eame off on Wednesday afternoon, at three o'clock. About 170 Fellows were present, several of whom were from the eountry. Sir Benjamin Brodie, who, by a portion of the legerdemain whieh eharacterized the whole eharter, arranged that its prineipal provision should come into operation at the preeise time, when he eould extend over it his august auspiees, as President of the College, was of eourse ehairman, supported by the two Vice-Presidents, Messrs. Lawrence and Cooper, and surrounded by several members of the Counеil, among whom we notieed Messrs. Andrews, Keate, South, Vineent, White, Briggs, Travers, Stanley, Calloway, Babington, Liston, Arnott, South and Morgan. Messrs. Guthrie, Copeland, and Thomas, were absent.

Sir B. Brodie stated that they were met to elect three councillors agreeably to the provisions of the

reeent Charter. and that Mr. Belfour would read the ehronologieal list of Fellows, from whom they would have the goodness to make their seleetion. The plan resolved on by the Council was, that there should be one to move, and two to seeond, the nomination of the eandidate. These three gentlemen had been declared sufficient to certify to the respectability of the Fellow proposed; i.e., they would be believed by the Council that the candidate was really not disgraeed by helping ladies in their extremities, or allowing an assistant to prepare a patient a bolus. Sir B. Brodie eondescended to express a hope that the Fellows present would behave like gentlemen, *id est*, that they would shew temper and good feeling.

Nineteen senior gentlemen who had aequired the honours of Fellowship, now reeeived from their brethren the further honour of being passed as unworthy nomination to the Counеil. Among these were, Messrs. Pennington, Hey, Carpue, Sir James Annesley. The name of Sir Stephen L. Hammiek, Bart., was then eome to, and a Fellow, more resolute than the rest, ventured to propose him; two friends followed seeonding. The name was plaeed by, for the ballot, when eighty-two faithful Israelites, with the exeeption of Mr. Gosset, whose name also was reserved, partook of the delights of the *passover:* among these were George Langstaff, Jonathan Toogood, Ridout, Blizard Lynn, North, Blagden, Gideon Mantell, T. J. Pettigrew, Crosse (of Norwieh) J. Wardrop, &e. Mr. Kingdon now interrupted the order of proeeedings on his name being announeed, and emphatieally deelined the *honour* of joining the most unpopular set of men that ever stood at the head of a profession. Sixteen more Fellows then unprofitably to themselves, ran the gauntlet of publie notiee and negative eondemnation, when Mr. Lloyd, surgeon to Bartholomew's Hospital, hearing his name proposed, rose and said, "Mr. President, I take leave to remark, that having been onee rejeeted without cause from the Council, when my proper turn for election eame, merely to gratify a *malicious* feeling on the part of eertain members of the present Couuеil, (and I have the positive proofs by me to shew this), I, therefore, waive any elaims the Fellows may be good enough to think I possess, and here publiely deeline all eonneetion with the College Council." This short address was reeeived with the marked and general applause of the meeting—not loud, but deep. Sir B. Brodie beeame pereeptibly pale, and Mr. Lawrenee blushed deeply: a smile of triumph, however, seemed to light up the eountenanees of one or two other members of the Council.

Six names were then passed over, when Mr. Maeilwain followed in the honourable steps of Messrs. Lloyd and Kingdon. He said: "Badly eonstituted as is unquestionably the present Counеil, under the New Charter, I beg to deeline having my name associated with it!"

Eleven gentlemen were then flung aside, as so mueh lumber. Mr. Ceely, for example. Mr. Wellbank, owning the next name, was now nominated, and duly seeonded and eertified; and there being now three names ready for the ballotting-boxes, and three ballotting-boxes ready for the names, the eleetion took plaee. The baronet (Hammick) was eharitably or eonsiderately saved from the burden of the offiee he ambitioned. So, also, was Mr. Gosset. Mr. Wellbank was, however, more or less lucky, and is now—unless he think better of it—a meuber of the Couneil.

The gallopade then eommeneed anew, and the names of Messrs. Cutler and Scott, the next on the list, being announeed and proposed, the majority of Fellows either liking the eandidates, or wishing to end the tiresome business—no very pleasant mode of spending a morning—the proeeedings were summarily ended by a majority of votes in their favour: thus, to the surprise of the deeper-initiated in eorporate mysteries, exeluding Aston Key. The meeting then dispersed in solemn silenee, ouly disturbed by the aetive peregrinations and eanvassings of Mr. Belfour for the fees of the sueeessful eandidates, making the aggregate sum of sixty guineas! As he was sueeessful in his quest, we are obliged to think the eleetion business a very happy *stroke of policy.* Its very substantial object—if it had an object at all—was attained. As Messrs. Wellbank, Scott, and Cutler, will have to be re-eleeted annually,—and annually pay their twenty guineas eaeh,—they must, it strikes us, have an odd notion of the distinetion they are acquiring, or still more singular opinion of the value of money. If they go on thus, meekly suffering annual elections and extortions, they deserve the well-earned appellation of the three "College milch cows."

The following were the amount of votes given:

	Ayes.	Noes.
Hammiek	39	53
Gosset	25	63
Wellbank	48	45
Seott	63	19
Cutler	47	35

PENCILLINGS OF EMINENT MEDICAL MEN.

MR. LISTON, SURGEON, &c.

This gentleman, on the not over delicate, or hesitating authority of a eontemporary equally enterprising and unfortunate, has been proclaimed wherever the "ointment" of another "professor" has been thought worth advertising—"the first surgeon of Europe." Indisputably—*as* indisputably as if our puffing brother had never said it—he *is* a great—a very great man. On the lowest calculation, he stands six feet two inches imperial measure in height, and offers no proportionate deficiency in breadth. He seems born, indeed, to uphold the theory of that ingenious eorrespondent of the *Medical Times* who affirms, that from the lungs being the generators of motor force, men are like so many vitalized steam engines. He is a splendid machine of automatie movement. We eannot survey his expansive breast without feeling that he possesses a tremendous *vis a tergo*—a steam force, which, to other men's, must be as that of a ten to a one-horse power. As long as Liston lives, or this sketeh, Liebig's partisans will have an argument for their ehemico-vital theory, and the materialists will want as mueh gratitude as every other Christian virtue, if they raise to "the first surgeon" no monument for proving how needless are souls, and how possible it is for matter to think or do the next thing to it—Listonize!

With this opinion of his importanee to seienee and posterity, we should undoubtedly have long since given him a peneilling, if our modesty did not shrink from a task which has proved so notorious a failure, even from *his* experieneed hands. Of all our London eelebrities, we know of none whose portrait has been better engraved, or worse purehased—whose orations have been better advertised, or less read—and where so mueh has been done by himself for the diffusion of what he *does*, and more marvellous, *says*, and more marvellous still, *thinks*, the less surely, was left to powers so inadequate to do him justiee as ours. Where a Liston has reaped, and in a field so naturally sterile, little, as we fear our readers will soon see, remains for gleaners fastidious as we avow ourselves.

Mr. Robert Liston is the son of a Seotch parson, of the same name, we believe, and was born in the parish of Kirkliston, some time about the year 1790, and is now, therefore, enjoying the ripe age of about 54. We are not aware of the preeoeious talents he evineed in youth, while yet the future great surgeon was enwrapped in pin or tuck-afore; but rumour represents, that they were even then so specially devoted to the mangling *line*, that his father soon abandoned the intention of edueating him that he might one day "wag his pow' in a poopit," that is, shake his head in a pulpit, (an aim which, to persons of his sphere in Seotland, forms the *summum bonum* of earthly ambition,) and allowed the young "hopeful" full seope in his innoeent pastime of breaking the legs of the neighbouring ducks, that he might afterwards set them, and cuffing the village curs, that he might display his talents in euring them. "Take your physie, Bobby, and you shall have the dog to kiek!" was the eoaxing phrase employed, according to village rumour, when Mr. Robert was particularly refraetory about the artiele of his spring purge. The potion was swallowed we are told, without a grimaee, under the temptation, of a requital so entieing, and Master Robert Liston thus early indieated the tastes which were one day to supply the village with a pork butcher, or the metropolis with its "first" surgeon. Luekily for *us*—and we had almost said, for his patients—Liston, like Mary, chose the better part, and hence the appearanee of his Herculean bust this day on this immortal column of the *Medical Times.*

Having reeeived the usual rudiments of a good rustie edueation, *Mr.* Liston was early despatched to the sanctuary of Dr. John Barclay, who was one of the most laborious anatomists of his day; and if one of the earliest aneedotes of his life be credited, the young gentleman was then remarkable for that politeness which he has seldom since evineed. In some forgotten sketeh of our hero, which we have heard of or seen, it is reeorded, that ehaneing to arrive at the house while the doetor was engaged with tea, he reeeived an invitation to participate in the exhilirating beverage, but nothing eould induee him to put the prized cup to his lips, till, amid the roars and laughter of the assembled students, he had piously proposed the health of the congregated eompany—an aet of superfluous politeness, for which he long was bantered, and which would pleasingly aeeount for an absenee of the important eommodity, if subsequently any such *hiatus* has been observable.

Mr. Liston being of a temperament not peculiarly brilliant, his progress in the more profound and intelleetual part of the profession, was slow; but his idiosynerasy eaused him to beeome a first-rate disseetor, and to this, whatever well-deserved reputation he has since attained in the profession is due. It may be doubted, however, whether his knowledge of anatomy is equal to his power of wielding the knife; at all events, it was not always so. In the outset of career, it is well known, he was on the point of tying one of the braehial nerves, instead of the subelavian artery, and was prevented only by the warning, or interposition, of Mr. Nasmyth, a dentist, standing by, who thus saved him from an error which must have been equally fatal to his patient, and his own professional prospeets.

After eompleting his medieal studies, Mr. Liston passed the usual examination, though not, we have been told, without difficulty, his knowledge of anatomy being the only thing that earried him through. On midwifery, a subjeet on which he was specially questioned, he was found to be particularly ignorant; exhibiting thus early that antipathy to this braneh of the profession, which he yet retains, we believe.

It is beyond the province of this artiele to enquire whether the praetiee that holds good in Britain, be superior to that observed in France, where the *sage femme* has attained a degree of profieieney which female praetitioners here never have attained, though the whole question, perhaps, may be summed up in the eonelusion, that what the nation loses in delieaey, it gains in judgment. But there ean be no doubt of the peculiar impropriety of stigmatising, in Mr. Liston's fashion, a body of men for following a eourse which, everywhere, exeept in one or two of the larger eities, is imposed on the general praetitioner, as a matter of neeessity; and this speeies of general abuse, bad enough at all times, proeeeds with a grace especially unbeeoming from the subjeet of this memoir, as it is to the efforts of one or two members of this braneh of the profession in the Northern eapital, that Mr. Liston is understood to be indebted for his first introduetion into praetice.

But Liston's uprise was a matter of time. It rested unfortunately on his wits, and as these were not very extraordinary, even if allowed their full play, and as in Britain it is very diffieult to give them full play when they stand by themselves, he might have stood, tall as he is, at the bottom of the surgieal ladder of Jaeob for ever, if a fortunate ineident did not turn up for him at the expenee of one whom soeiety was very glad to see paying it. This ineident was the memorable duel fought between the late Sir Alexander Boswell and the present Mr. Stuart, then of Dunearn, and now a factory commissioner. Stuart had been pointed

out as a coward in some wretched rhymes of Sir Alexander, and the latter was a shot so noted, that no surgeon of standing in the city could be found to attend a scene of certain anticipated murder. Mr. Liston readily undertook the part; the reverse of what was anticipated took place; the baronet was mortally struck down at the first shot, by a man who previously had scarcely ever fired one; and as when the seconds and surviving principal had fled, Mr. Liston alone remained to give an account of the action, he became, in this way, for a period, the lion of the day—an advantage which he did not fail to turn to account amongst the small aristocratic families to whom the circumstance introduced him.

It was about this period that Mr. Liston adopted a practice not previously in much vogue among surgeons in the Scottish capital, and which—while to fair and candid minds, only shewing the "first" surgeon's love of manly sports—from malicious, we cannot say, *envious* rivals, for they had nothing to envy, procured him the *soubriquet* of an "Accident Hunter." He became, like his rival Lizars, a very Nimrod, and as the *canny* citizens, the John Gilpins of Edinburgh are not the best horsemen in the world, it did so happen, that bruised heads and broken collar-bones, were frequent enough among them to screen Mr. Liston from the rebuke of any great imprudence, in enjoying keenly those pleasures of the chase which are known to those who can manage to be "in at the death." While we can thoroughly sympathise with him when compelled, as he was, to sacrifice these exciting pleasures, by the amazingly increased extent of his private practice, it is but just that we should own, that popular rumour gave a less pleasing, though, perhaps, more amusing explanation, of the circumstance. It is said, that on one occasion, his horse ran away with him, and the rider forseeing the necessity of a fall, just managed, with his characteristic tact, to maintain his situation till he got over a dunghill, when he quickly allowed himself to slide off, and found a very soft, if very inodorous, settling-place. The circumstance, of course, was noticed; and by his brother hunters, Liston was long remembered as "Dunghill Liston." These little circumstances in the history of great men, are very pleasing and interesting to chronicle; they make the highest think of what stuff they are made, and encourage the humble.

The grand aim of Mr. Liston's life was the acquisition of a surgeonship in the Edinburgh hospital. It is surprising, notwithstanding his dissections and lectureship, that he should have attained such well-deserved eminence as an operator, when it is considered, that he was for many years excluded from this field, and had no other opportunity for practising than that the dissecting-room afforded. Though a Tory of that *rare* thorough kind that goes bang forward without any thought of right or wrong, he was, strange to say, rigidly excluded from the Infirmary, as it is termed, of that city, until the day of Whig-rule. His irritable, captious, quarrelsome temperament, may, perhaps, in some degree, account for this; but, on the other hand, it must be admitted, that it was the tendency of the former governors to exclude anything like ability from their ranks. Yet it may be doubted whether, on the whole, Liston was a sufferer by exclusion; the dissecting room, to which he, in consequence, resorted, as a substitute, afforded a wide field for the practice of operations, though it engendered, perhaps, a species of callousness. Mr. Liston, also, in attaining the position of a lecturer, which he early got, had an important aid to forcing his merits under public notice. At that time, there really existed no lectureship of an authorized kind. The University appointments were so wretched that they virtually threw open the teaching of surgery to any man of ability and skill. Until the year 1836, we think, when Sir Charles Bell was first appointed, there was no Chair of surgery in the University. Dr. Alexander Monro *tertius*, as called, to distinguish him from the two preceding lecturers of the same name, during a course of what the superscription on his ticket intimated to be *anatomy and surgery*, drawled, or mumbled, over a few dry details, of which some such absurdities in nomenclature as, "this is my father's catheter," "that's 'my grandfather's injection," &c., could alone be remembered. As, within the gates of the edifice, nothing better was to be found, the students were constrained to seek external aid, and of the several private lecturers who had class-rooms in the neighbourhood, few could have competed with Liston, if his intellectual and oral ability had been, in any degree, commensurate with his manual power. The *mens divinior*, the *os magna sonaturum*, however, were absent. He could demonstrate the various surgical operations with considerable effect, marred, perhaps, by an excess of dexterous legerdemain, and sleight-of-hand tricks with his instruments; but when he made any approach to verbal explanation, such a series of shruggings, huggings, hawkings, coughings, spittings, winkings, stutterings, and splutterings, was, perhaps, never witnessed from a teacher. Like one of those artistic butchers who, in a second, cut, with mathematical precision, one of those beautiful legs of pork which are so wondrous pretty to the connoisseur, he knew nothing except that it was so—had never given his brain a second thought about principles—had really nothing to say, except "do like me." If the truth were known, he had a secret conviction, that operative surgery was no matter for talk or instruction. He had nothing but contempt for free speeches, and would have found the weaving of tartan plaid out of the Margate sands as easy as the manufacturing of his surgical sayings and doings into a decent consecutive lecture. With him, like the Athenian's oratory, it was all action—action—action. His power came to him by an instinct, and it was only degrading the divine thing to subject it to the empire of science, or the rules of literature. Sampson could as easily explain the true sources of his strength, as Liston of his skill. And the most provoking thing was, that while the lecturer was thus on such bad terms with the King's English, he seemed to rest in such a good understanding with himself. It was *his* style which, if bad in itself, was capital considered as *his*, and thus, Mr. Liston might be tantalizing his class by blurting out a few words with rail-road speed, and then stammering and stamping for the word remaining, to complete the sentence, until, but for his bulky appearance, the audience might suppose him to be laboring under the influence of St. Vitus's dance; yet all the while, he would be considering the effect as admirable, *piquant*, striking. If there was very little sense, there was still less nonsense in it, and his vanity built itself up on this well estimated fact. The style certainly was peculiar, something *sui generis*—a Listonian way of acting Abernethy in an original character. His naturally small mind had caught an overweening notion of his general cleverness, from his wonderful and well-recognised manual dexterity; everything he did, therefore, was to be appraised by an exaggerated standard. Hence, he did for himself what some foolish people do for our great Duke, who cannot say, "Are you hearty, my good fellow?" without our hearing, "How terse!—how to the point!—how complete!—how characteristic!—what genius!" If Liston spoke as nobody else would, he thought it unique and characteristic, and, therefore, of course, (as *he* was clever,) *very clever*, when it was only, perhaps, one phase of a very multifaced thing—absurdity. "Of all the cant that's canted in this canting world," says Sterne, "the cant of hypocrisy is most odious." Of all the conceits to which a conceited man can give vent, the affectation of conceit is assuredly the most nauseous. We can bear merit—we can tolerate even an affectation of merit, but there is no grain of patience in any corner of our souls for the affectation of a fault. Rude as Mr. Liston naturally is, we candidly give him the credit of not being so rude as he affects to be.

Mr. Liston is, nevertheless, an author. Alexander, according to Hamlet, might at last fill the bunghole of a beer-barrel, and Liston might rise to the elevation of authorship, and occupy a niche in the temple of literature. His first work, called, if we mistake not, the "Elements of Surgery," was foredoomed,

> "Dull to that mass of dullness to return,
> Where things forgot are swept to things unborn."

It is as drowsy and heavy as a homily, and might have been written by the lecturer's father; yet, still, it is arranged according to some principles of art. His second—"Operative Surgery"—is guiltless of any such homage to the bookmaking art, and betrays throughout clear evidence of its paternity. The small, bald, irregular, dry, and repulsive style, conspicuous in all the press gets from him, is to be encountered in every page of the work. In one part of the work, he "recommends young ladies to cultivate an acquaintance with the water-closet," and forms of phraseology equally classic are to be found in the course of the book.

The first of these works was published prior to, the second subsequently to, Mr. Liston's removal to London, in 1834. His practice and class had greatly fallen off in Edinburgh, consequent on causes already mentioned, and on the whole, he cannot be much displeased with the results of the change. At first, things looked gloomy. He had no fortune to fall back upon; he had to carve the year's support by the year's use of his knife; he was to do or die. The *Lancet*, too, which then possessed some power, and was never very scrupulous in its use, seemed determined to turn it against him. It was generally understood, that its honourable editor, at that time the autocrat of the profession, had disrelished the invasion of the huge Pict, and had threatened, in his imperial manner, to send "the butcher, with his blue apron" back to his old premises. Liston, however, was a good, if not a shining, diplomatist, and being one of those good hands at skittle-playing who know when to allow themselves to be beaten, succeeded, by his happy skill, in conquering the prejudices of Mr. Wakley, who prided himself, at that time, on being one of the best skittle-players in London. The *Lancet*, therefore, paid special attention to his cases; his operations were carefully laid before the public in their best guise, and if any of his slashing exercises were less lucky than daring, the editor knew no hesitation in crowning, in defeat, with fresh laurels, a man whose "brilliancy of reputation, and high operative skill, alone justified the hazard." Mr. Liston's practice thus rapidly augmented, and was for years very respectable. But latterly, waning with the power that raised and upheld it, it has, we believe, like that of some other "first-rate surgeons of Europe," considerably diminished—diminished to its shadow. Another set of causes have also had their operation. The public are beginning to think him who modestly saves a limb, a better member of society than he who brilliantly dissevers it; it is growingly felt, that operations are the reproaches of surgery, not its triumphs; the surgeon's reputation is daily built more on his constitutional, and less on his local, treatment and the shortest way, perhaps, now to escape practice, was the most rapid formerly to secure it, viz.: to get one's name well up as a mercilessly dashing operator. And are the public wrong? Under such a man, patients are never assured from a blunder, and blunders here, are blunders indeed—blunders, fatal from their heedless intensity; and then whatever the brilliancy of the experiment, the moral force of the victim is often so overawed, and done violence to, by the cool, self-possessed savageness of the display, that the vital energies are depressed to a point at which they never rally, and the moment of the operator's triumph, is that of the patient's doom.

Of the social qualities of Mr. Liston, we are happy to say, that different opinions are entertained. At Edinburgh, he had some partizans, with more enemies,—a fact partially explained by the torrents of abuse which, in the shape of lectures, he delivered to his pupils, for the benefit of successful or inimical rivals. Till he became himself a surgeon of the Edinburgh Infirmary, it was impossible to hear a worse opinion, in less courteous terms, than his, of the inefficiency of the hospital staff. With the accession of *his* skill to the establishment, however, the cause for *his* disparaging judgment, of course, disappeared, and his phillippics ceased to be thundered. Though thus inviting boldly much obloquy by his public career, it is understood, that he is a cheerful, jolly, boon companion, and that those who have seen him in his free unbending hours of unchecked

conviviality, have regretted, that one so frank in contributing to the table's "roar," should have been forced, by circumstances, to play a *role* of careful reserve and policy, apparently so alien to the better and brighter parts in his nature. We shall draw the curtain, however, over this part of our subject's biography, with the passing notice, that amid the alienation of some brethren, and direct antagonism of others, he can pillow his cares and chagrin on the confided and confiding breast of no other self. Though married to an amiable and beautiful lady, the union has not, we regret to say, been perfectly happy.

In personal appearance, we have said, Mr. Liston stands about six feet two inches high,—a stalwart figure, of broad shoulders, and arms that would fell an ox,--a Hercules, even to the low, retreating forehead the Greeks were so fond of giving to their demi-god. He is a handsome man, looking yet under his forty-fifth year, although the hair has deserted its post on his temples, and upper portion of his head. His eyes are light; his mouth good; his nose not bad, and the front-face, when the eyes are opened, gives you an idea of softened animality. Though there is roughness, and rudeness, and force, expressed in his general bearing, yet nearer observation shews, that there is with it some inequality; he must divaricate into mildness, and, perhaps, even foolish tenderness, at times. The eyes, albeit under bushy brows and low retreating brow, give some indication of intellectual fire; there is suspicion and enquiry distinctly traceable in them, and they seem everlastingly asking the Scotch question, *cui bono*? The mouth is another favourable feature; it bears being screwed into a rather winning shape; it suffers the martyrdom of a good-natured smile at times, with no very intolerable grace. With his soft voice, that mouth, and those eyes, and general figure, we could imagine him, in younger days. doing much mischief, or rather exercising high influence over the class of buxom, easy widows, or superannuated wives, with more pleasure to himself, than advantage to his practice, if we did not liberally give him credit for that hereditary puritan virtue which falsifies the hypothesis. Every Scotch practitioner acquires, from the well-known morality of his country, the right to be thought pious, till a court of justice publicly prove him the contrary, and Mr. Liston will thank us for giving him the benefit of the presumption. To dismiss him, in a few words: as a man, he is unamiable; as a gentleman, unpolished; as an author, *sine literis*; as a politician, full of tact; as a medical man, he has high merits, and huge faults: an active and obliging teacher; he is slow and careless as a student; one of the first operators; he is, beyond comparison, *the* worst lecturer in Europe; his diagnosis and treatment, the most indifferent things in the world; his use of the knife is the most wonderful and exquisite. Altogether, if we can do ill with him, we should do worse without him. He fills a gap, and with all his peculiarities, we trust he may long live to fill it, worthily, as now, and still more pleasantly to all.

REVIEWS.

The Plagiarisms of Julius Jeffreys, F. R. S., in his Treatise on the Statics of the Human Chest. By G. Calvert Holland, M.D., Physician Extraordinary to the Sheffield General Infirmary, &c.

As Mr. Jeffreys has advertised an Answer to this Pamphlet, we shall suspend our judgment for the present, and confine ourselves to an extract or two, illustrative of the charge made by Dr. Holland. The work, whose views are alleged to have been appropriated, is entitled, "An Experimental Inquiry into the Laws of Organic and Animal Life." Our quotations are given wholly in Dr. Holland's words:—

Discovery II. is, that "*the air of respiration neither enters the air-cells nor the smaller air-tubes;*" it has in fact "*no business with the blood, nor any footing in the cells of the lungs;*" nor has it any "*direct concern in the oxydation of the blood.*" The same views are distinctly stated by me:

"The air which is received by any single inspiration, does not immediately act upon the blood; its office is to supply the deficiency occasioned by the previous expiration; and after several *series* of such expirations it is then brought into *intimate* contact with this fluid, and tends to continue the successive alterations which it undergoes."

It is scarcely possible for words to explain more clearly the functions assigned to the breath or air of respiration, and yet he adduces the same doctrine as original, and regards it as demanding 'a considerable modification of our previous opinions.'

Discovery III. is, that the air breathed out, is not that "*which went in, but a mixture of that air with the upper resident air.*"

In the Introduction to my work occur these remarks:

"By taking into consideration, *that a small quantity only of the air within the lungs is at any one moment deteriorated*, and, still further, *that the left ventricle contracts* 70 or 80 *times per minute*, in order to propel the arterial blood which is transmitted by the lungs, we shall have reasons sufficiently ample to account for the possibility of these organs bearing such changes, and for the ease with which the system is supported in an equable temperature."

It is further stated:

"I have observed in Chap. I., xix. and xx. that the air inspired is not *immedialely* expelled by expiration, but that a portion is emitted—probably the whole which is deteriorated,—while a much greater quantity of air at all times exists in the lungs; and from this it is to be inferred, that the successive chemical changes are slow, and of a delicate description."

Discovery IV. is, that according to all previous views "it was necessary to suppose, *that the action on the blood must be constantly fluctuating*, being at a minimum at the end of an expiration, and increasing to a maximum during inspiration."

The leading argument throughout my work is to prove, that as it is not in our power to *diminish* the residual air in the chest, acting on the blood, the chemical changes in the latter will be proportionate to the quantity of blood exposed to it. Whether this principle be correct or otherwise, is not the question, nor is it on this occasion necessary to examine it.

My views on the important subject of animal heat are based altogether on the established fact, *that the volume of air in* IMMEDIATE *contact with the blood is not susceptible of any important modifications.* This opinion is stated in the subjoined extracts:

"As the blood is not immediately acted upon by the fresh air which is received, it follows that the alterations are to be referred *to that already existing in the pulmonary cells;* and, moreover, it is natural to suppose, if we diminish the quantity of blood, that the chemical changes will be more complete, because the air will have a less portion to oxygenate.

"This contrivance (the structure which allows a large quantity of air to exist in the lungs,) is a wise provision of Nature, as it enables an individual to speak, laugh, run, in fine, to accommodate himself to any kind of exercise where expiratory actions are required, without immediately affecting the office of the lungs, which would necessarily be implicated if the inspired air were instantaneously appropriated to those changes which are indispensable for the continuance of life."

XVIII. "The lungs, as stated, always contain a *considerable quantity of air;* and as this is that portion which *immediately* acts upon the blood, if we diminish this blood by a series of expiratory actions, it is philosophical to suppose that it will be more perfectly oxygenated, because a smaller quantity is submitted to the influence of that important agent." * * * *

The following extract from his work, illustrates very happily the tact with which he can borrow. He is attempting to show that the oxydation of the blood is according to the frequency and completeness of respiration, and as materially influenced by the *character* of the two acts of it, which is one of the chief and peculiar doctrines advocated by me in the examination of the important subject of animal heat.

"In short, the *ventilation* of the cells depends not only on the volume of the breath drawn in upon the resident air, but much also on the quickness of the inspiration. We might conceive it possible to draw the air of respiration into the chest so gently as not to disturb the resident air at all,—as not to mix even with any portion of it. If it were then breathed out with equal gentleness, it would return, having performed no duty in ventilating the chest; it would, in fact, come back as it went in, having left none of itself behind, nor received in exchange any of the resident air fraught with carbonic acid. Now, although so extreme a case as this may not be attainable in practice, owing to the mobile and miscible character of air, it serves to illustrate the fact of the commixture, and consequent ventilation of the cells, *very much depending on the force as well as volume of the inspiration.*"

In place of stating that the *oxydation* of the blood is according to the frequency of respiration, he says, "*the ventilation of the cells* depends not only on the volume of the breath drawn in upon the resident air, but much also *on the quickness of the inspiration.* The free *ventilation* of the cells is necessary to the perfect oxydation of the blood. He cannot have an increased "quickness of the inspirations" without a corresponding increased quickness of the expirations. The air can be inhaled in quick successive acts only in consequence of being sent out by previous quick expiratory acts. Such a condition is the frequent removal of the air, the better oxydation of the blood and the consequent increased generation of animal heat. He admits these effects, and reasons upon them, but he avoids the use of plain terms, which would indicate the source of his ideas. The following passages from my works, lay down the principles supposed to regulate the production of animal heat, and show in what way this is modified by respiration—a discovery to which he lays claim, and to which he attaches great importance.

"1. Animal heat is proportionate to the capacity and activity of the lungs, not understanding by *activity* the number of respirations, but the number and character of its compounded acts, inspiration and expiration."

"2. This principal (animal heat) is proportionate to the chemical changes in the lungs, and the perfection of all other functions is also in the direct ratio to these."

"XLII. If we diminish the respiratory action, we lessen the generation of animal heat."

"The function of respiration, as it affects directly the qualities of the blood, and indirectly, by means of this fluid, every part of the organized system merits the first consideration. The character and extent of the chemical changes to which it gives rise, can be ascertained only by a knowledge of its two acts, inspiration and expiration."

"To the neglect of physiologists in not investigating the influence of these two functions separately, is to be attributed much of the absurdity and incompleteness of the views generally held concerning the production of animal heat, and the manner in which the circulatory system is liable to be disturbed, as well as the origin and nature of numerous diseases. It will scarcely be doubted, that it is by means of respiration that the blood is oxygenated, and that whenever its properties are vitiated in consequence of the oxygenation not being complete, the whole system will be more or less deranged."

"If the respiration be accelerated, and the contractions of the heart increased to a hundred, all other conditions being equal, the mass will circulate through the lungs in one-fourth of the time, and the production of animal heat will be augmented in the same proportion."

Errata.—In consequence of the unavoidable absence of our head reader, three or four typographical errors crept into our last number. Thus in the letter of Mr. Marcillet, for "Dr. Forbe's," read "Dr. Forbes'"—in col. 2, p. 355, line 30, from foot, for "once," read "one;" for "malviellance," read "malveillance"—and in the leading article, in the phrase, "testibus Iamblicus et Porphyrius" the proper names were unkindly corrected for us out of the ablative cases.

PARISIAN INTELLIGENCE.

(FROM OUR OWN CORRESPONDENT.)

Paris, July 25, 1844.

On Diseases of the Eye—by Professor Velpeau. You, doubtless, remember that after enumerating the different varieties of palpebral phlegmasia, I passed to the description of cataract, owing to the number of patients affected with that disorder, then in my wards; this being done, I intend today recommencing where I left off. (Vide *Medical Times*, No. 246, p. 196.)

Acute inflammation of the eye itself is in some respects similar to that of the lids, already described. There are, in fact, certain tissues common to both, whilst others are peculiar to one or the other; thus, in the lids we have the glandulæ Meibomianæ, the follicles at the root of the lashes; and in the eye, the cornea, the sclerotica, the iris, in a word, all its component parts. But, before describing the various phlegmasiæ, I will devote a short time to the solution of this important question. Can inflammation exist in one of the tissues of the eye alone? Were such a demand to be made concerning the viscera, an affirmative would, without doubt, be the reply; yet this fact, however positive it may now appear to be, was considered, a century ago, as chimerical, and eminent practitioners have affirmed that such could never be the case. Portal, to his last hour, asserted that meningitis could not exist without cerebritis, pleuritis without pneumonia, and peritonitis without inflammation of the organ which the diseased part of the peritonæum covers; and yet who now denies that this is possible? Again, with diseases of the eye: on examining a great number, you will not fail to remark that they begin sometimes in one part, sometimes in another; thus, they may appear at first in the conjunctiva, or the cornea, or the iris, or any other part. There can be no doubt that this is not so easily ascertained in regard to the membrana hyaloidea, or the other deep seated portions; but if we apply to the latter what we observe in the former, we may naturally conclude that such is the case. An objection, which appears at first sight to be of some consequence, has been made against this manner of studying the inflammations of the eye. The tissues, composing this organ, being closely united, receiving the same arteries, veins, and nerves, evidently cannot be affected for any length of time without the neighbouring ones becoming so likewise. This objection is more specious than real; may not the peritonæum, although closely united to the muscular membrane of the intestine, be inflamed, and the latter remain in its normal condition? do we not frequently observe pleuritis without pneumonia, meningitis without cerebritis, pericarditis without carditis? Thus, it is evident that a membrane may be inflamed and the inflammation not extend to the adjoining parts, and if this can take place in the parts just mentioned, why should it not do so in the eye? This fact, proved by theory, is confirmed by daily observation. Who has not had opportunities of seeing patients affected with conjunctivitis for a week, a fortnight and more, without the cornea presenting the slightest alteration: in children, ophthalmia purulenta may last equally long, and not extend beyond the conjunctiva. A patient, now in the hospital (No. 40 men's ward), is a proof of the truth of this assertion. He had a chemosis; the conjunctiva, considerably inflamed, formed an elevated circle around the cornea, and yet this last was not affected. It will, therefore, be evident to all who study these diseases, without preconceived ideas, that inflammation may commence in one of the component parts of the eye, and never go beyond; or extend itself gradually to the neighbouring ones, in the same way as we may observe with the pleura and parenchyma pulmonaris. This takes place perhaps sooner in the eye than in the lungs, on account of the union which the various parts have with each other, but that does not prevent its commencing in any given tissue. This established, I will now proceed to describe the different phlegmasiæ of the eye, commencing with conjunctivitis.

Conjunctivitis ocularis. — It presents several varieties, which may be classed under the following heads:—conjunctivitis simplex; conjunctivitis granulosa; conjunctivitis purulenta; conjunctivitis papulosa.

Conjunctivitis simplex.—Symptoms: dark red, violet colour, which increases in intensity as it approaches the spot where the membrane is reflected on the lid; being, on the contrary, but little developed near the cornea. This redness is not uniform, but composed of arborisations or a net-work of vascular filaments, and it manifestly is seated in a membrane which is mobile. Sometimes, there is a certain degree of thickness of the conjunctiva, so as to give rise to chemosis. Cornea, in its normal state, and if vision is at all impaired, it is but very little so. Besides these symptoms, there are others peculiar to this species: thus, from the commencement, there is a sensation as if a foreign body were under the lids; an augmentation of the heat; a deposit of an unctuous fluid on the edges of the lids, which soon concretes; this fluid is at first almost limpid and colourless, but is soon changed into mucus, and finally into pus, by which the lids are made to adhere firmly to each other; photophobia does not exist; slight lachrymation; in some cases, cephalalgia, but this does not take place generally, the affection being quite local. Similar to all other inflammations, conjunctivitis offers distinctions, which formerly were known under different denominations. Thus, the first stage was called *taraxis;* the second, *lippitudo*; and the third, *chemosis;* this last term only is retained by modern authors. *Taraxis* constituted the period of the phlegmasia, in which the mucous membrane was dryer than in its normal state. It is a well-known fact that coryza, bronchitis, and other inflammations, at their commencement, are complicated with a dryness of the mucous membrane which prevents the secretion of mucus; now, the same thing takes place in conjunctivitis, and it is to this stage that the denomination of *taraxis* was given. *Lippitudo* indicated, on the contrary, the stage in which the liquids were secreted in greater abundance; and *chemosis*, the infiltration of the liquids in the diseased tissue, giving rise to a swoln state of the parts. Several cases in point have presented themselves lately to our observation; one of them, in No. 6 women's ward, offers all the characteristic signs: sensation of a foreign body under the lids; conjunctiva, the seat of arborisations of a dark red colour, deeper in the furrow formed by the union of the mucous membrane lining the lids and that covering the eye, decreasing in intensity as it approaches the cornea; no photophobia, nor epiphora; sight normal; adherence of the lids caused by a mucous secretion; in short, all the signs of this affection.

Ophthalmology—a work (*Traité philosophique et clinique d'Ophthalmologie*) from the pen of Dr. Rognetta, editor of the *Annales de Therapeutique*, may be considered as a complete monography of the diseases of the eyes. This treatise, founded on the principles of the dynamic school, is divided into four sections. *In the first*, the author, after establishing the utility of generalities, on the authority of J. Hunter, examines the causes, the lesions, the nature, and the general and local treatment of these affections, and concludes that one of the principal points in the diagnosis is to discover the pathological lesion, which in general is dynamic, but in some few cases mechanical, or mechanico-dynamic;—that there is a certain *rapport* between the diseases of the eye, whether acute or chronic, and those of the brain, the heart, the lungs, or any other part of the body;—that in examining the state of the eye, great attention must be paid to that of the *membrana choroidea*, which is frequently the seat of the congestion, and the cause of the disease: it is generally indicated by cephalalgia, a sense of fulness in the eye, which, when touched, appears harder than usual;—that the attention of the practitioner should be directed principally to the enveloping membranes when the affection is dynamic;—that, when the disease is intense, local remedies are insufficient, unless they consist of substances very soluble, and consequently easily absorbed;—that general remedies, employed after the true dynamic principles, and of sufficient energy, are in many cases enough to procure the cure of the disease: still their action may be aided by local remedies of a similar nature;—that when plethora does not exist, as in scrophulous and chlorotic patients, venesection will never effect a cure, but we must have recourse to direct hyposthenisating means;—that purgatives are useful in all the hypersthenic diseases of the eye, more as a direct hyposthenisating remedy, than as an evacuant: but as their dynamic action is of short duration, they ought to be repeated daily, and, when the disease is chronic, those must be chosen whose action lasts the longest. Their utility does not depend on the number of stools, for they produce a beneficial effect on the system only after having been absorbed; they are useless in real hyposthenic diseases;—that in very intense ophthalmia, energetic general remedies must be had recourse to, in preference to local ones: venesection, combined wth tartar emetic, belladonna, and especially the nitrate of potass, given in as large doses as can be borne;—that among the mineral collyria, there are many quite inert, and which ought consequently to be abandoned: such as calomelas, oxide of zinc, &c.;—that according to their solubility, they are more or less efficacious, and may be classed thus: nitrate of silver, corrosive sublimate, cyanuret of mercury, chloruret of zinc, sulphate and acetate of copper, sulphate and acetate of zinc, sulphate and acetate of lead; that the usual dose of the four first, is from gr. j. to grs. iv. per ℥j. of distilled water, whilst, for the others, the dose may be double, treble, and even more. When the disease is chronic, it is far more advantageous to employ a weak solution, very frequently;—that the action of ointments would be far more efficacious, and less irritating, were the salt dissolved in a small quantity of water, previous to incorporating it with the lard;—that the mode of action of all these collyria, the same in the main, and differing only in intensity, is *hyposthenisant, antiphlogistic, anticongestive*, and takes place principally after having been absorbed. Oculists are, therefore, in error when they assert that this action is merely local; for, if so, how comes it that a substance, applied externally on the lids, modifies the diseases of the eye?—or if on the conjunctiva, is useful in iritis, choroiditis, retinitis, and other affections of the deep-seated parts? And why does not alcohol, one of the most powerful astringents we possess, act beneficially?—that he collyria, whose active principle is some vegetable or animal substance, may be divided into those which act according to their degree of temperature: emollient decoctions, and such like; those which are very slightly hyposthenisating: such as rose water, the distilled waters of aniseed, camomile, elder flower, melilot, &c.; slightly hyposthenisating: distilled water of the cherry-laurel, and other substances containing its active principle, acidulated solutions, poultices of bitter almonds, combined with bread and milk, infusion of arnica, and such like; energetic hyposthenisating substances: belladonna, salts of quinine and strychnine, camphor, cantharides; stimulating collyria: alcohol, opium, distilled water and oil of cinnamon, &c. In *the second* section, are attentively studied the various diseases of the totality of the eye. In *the third*, those of the constituent parts of the eye, preceded by general remarks on the action of the different ophthalmo-dynamic remedies.—*Belladonna:* with respect to this substance, the author concludes: that it acts only after having been absorbed;—that its action is always dynamic or constitutional, and seems to affect the nerves of the ganglionary system;—that it has a powerful influence on the heart and arterial system, on account of their dependence on these nerves;—that an organ is affected in proportion to its vascularity: thus, the brain, the lungs, the eye, are chiefly so;—that it is hyposthenisating, weakening, antiphlogistic, and may be compared to venesection, digitalis, tartar emetic, and even the poison of the viper, though less active;—that death takes place by hyposthenia, and is similar to that produced by inanition or hæmorrhage;—that the best antidotes are stimulants, (æther, alcohol, cinnamon, opium, theriaca, &c.);—that of the preparations of belladonna, the recent powder of the leaves is the best: dose from gr. ss. to grs. x.,

grs. xij., grs. xv., or ℈j., mixed with grs. v. of sugar, daily. It must not be forgotten, however, that when old, the powder is not so active, and that plants collected on a dry soil are more energetic ;—that a *cold* (hot water deprives the plant of its active principle) infusion may be employed in enemas, vaginal injections, lotions, &c., dose ℈j. of the leaves, in a tumbler or two of water, during twelve hours: a teaspoonful, or more, of the infusion in an enema;—that the extract may be given internally, at the same dose as the powder, and employed externally in frictions or lotions (equal parts of extract and lard or water): to render absorption more active, an emollient poultice may be applied to the part, or by mixing it with saliva, or another natural secretion (Giastalla of Trieste). It may likewise be employed advantageously in a general bath (℥j. to ℥ij.), or in a pediluvium (℥j to ℥ij.);—that the tincture or wine is less certain in its action, being neutralised to a certain extent by the alcohol;—that belladonna ought never to be combined with opium, as they counteract each other ;—that it is useful in all inflammatory diseases, the dose being according to the influence it exercises;—that its action on the eye is dynamic, and affects principally the arterial system of this organ, and may be compared to what is observed in amaurosis senilis ;—that among the constituent parts of the eye, the iris, the ciliary circles, and the choroides are chiefly acted upon, on account of their vascularity; the dilatation of the pupil takes place on account of the diminution in the erethism of the ciliary arteries, permitting the elastic tissue of the iris to retract. A similar result occurs with other hyposthenisating remedies: such as, hyosciamus niger, nicotiana tabacum, datura stramonium, secale cornutum; *that belladonna may, therefore, be considered as a powerful auxiliary to venesection.—Strychnine,* as the preceding, acts only after having been absorbed; but as it may remain latent sometime in the economy, and then on a sudden act very energetically, its administration must be watched over with great care. The best compound is the acetate, and which must be administered as follows: dissolve gr. j. in some distilled water, and then make it up into pills, or give it in a potion, so divided as to make the patient take-from 1-24th to ½ of a grain at a time. It may likewise be employed in frictions, or by dropping it on the conjunctiva. in enemas in children, in fomentations, on cauteries, and on blisters.—*Mercurial preparations:* in acute ophthalmia, calomel, grs. ij. to ℈j or ℈ij. per diem ; or corrosive sublimate, dose gr. 1-5th to gr. j. per diem.—*Antimonials*: tartar emetic on the Rasorian principle.—*Nitrate of potass :* dose from ℈j. to ℥ss. or ℥j. per diem, in divided doses, mixed with honey or dissolved in lemonade.—*Cicuta*: *intus* and *extra*, under the form of extract, powder, or poultice: of the first, a pill containing gr. ij. combined with gr. j. of carbonate of iron, and grain j. of sulphate of quinine, to be given : at first one only to be administered, and every 5th day another to be added, until the patient takes ten per diem; this, however, being regulated by the influence it exercises on the system.—*Digitalis:* dose of the powder from gr. j. to grs. v. and even ℈j. per diem, combined with sugar. As to digitaline, it is four times as powerful, and, consequently, must be administered with care.—*Nicotiana tabacum:* smoking is useful in chronic iritis, with or without hypopion, choroiditis, pannus; it may be replaced by an enema containtaing gr. v. or gr. vj. in infusion. This substance is injurious in amaurosis senilis, amaurosis saturnina, &c.; snuff is of use after the cure of the tumour or fistula lachrymalis.—*Coffee:* (the ideas of the author have already been given in the *Medical Times*).—*Secale cornutum:* dose from grs. iij. to ℈j. or more, per diem, in powder, infusion, or decoction.—*Terebinthina*: useful in chronic ophthalmiæ, with or without photophobia : dose grs. x to ℈j. or more, daily, in pills, emulsion, or enema. Dupuytren administered in pills, at the same doses, the *terebinthina veneta. Camphora:* dose, internally, grs. iij. or grs. iv. in a potion or enema; externally, as follows: ℞ camphor. ℥ss ad ℥ij. alcohol q. s. misce et adde unguent. hydragyr. fort. ℥ss. fiat unguentum; in iritis, hypopion, keratitis, &c. add: extract. belladonnæ ℥ss. to ℥ij.—*Quinine :* may be combined with cicuta, carbonas ferri, &c., in pills, at the dose of from grs. j. to grs. ij., daily, or in solution, gr. j. in ℥ss. of water.—*Mineral waters.—Purgatives*: among these, are preferable: gambogia, scammonium, oleum croton. tiglii, aloes, jalapa; after these, are colocynthis, senna, rheum ; and, finally, oleum ricini, tamarindus, cassia, manna. In *the fourth division*, are included the diseases of the orbit, the lachrymal organs, and the lids. This work, as may be seen, contains not only ideas peculiar to the author (of which what precedes is an abstract), but likewise the opinions of ancient and modern, foreign and national, writers on this subject; and may, therefore, be consulted with advantage by those who have made diseases of the eye their peculiar study, as well as by the profession in general.

On a Case of Fungous Tumour of the Tibia : by Professor Roux.—M—, ætat 30, carter, lymphatic temperament, entered my wards at the Hotel Dieu, on account of a tumour, situated on the outer side of the left knee, which commenced about eighteen months ago ; he mentioned that it was produced by an effort he had made to raise a heavy weight, and was preceded by a noise, as if something had burst in the part, and had since then increased in size. It is now about as large as an adult fist; occupies the superior and external portion of the tibia, about four fingers breadth from the patella ; hard, elastic ; not easily depressed ; the seat of pulsations, which disappear when pressure is exercised on the femoral artery, and which are isochronous with the throbbing of the heart; skin covering it is distended, shining, and offering a few vessels which appear more voluminous than usual ; leg swollen to about two inches below the tumour; femoro-tibial articulation sound; its movements in the normal condition; condyles of the tibia seemed to be free from disease, this being limited to the external portion of the part which supports the head of the bone, and which may be called the neck; deep seated pains radiating over the whole leg; general health good. On due consideration, I became convinced, that the only chance of cure was the ligature of the femoral artery, though this, perhaps, will not prevent its re-appearing at some future period. I am well aware of the danger attendant on the operation ; but that which may result from the disorder, namely, aneurismal tumour of the tibia, is still greater, and, therefore, justifies my performing it: the more so, as the capillary vessels surrounding the tumour are considerably dilated and aneurismal, and as death will inevitably follow if nothing is done. The danger to which the ligature of the femoral artery in this affection gives rise, is produced by peculiar causes. Thus, when the crural artery is tied for ordinary aneurism, the collateral vessels are somewhat dilated, in order to keep up the circulation, interrupted by the diminution or obliteration of the principal artery. It, therefore, follows that the ligature then performed has greater chances of success ; whereas, in a tumour such as the present, the circulation not having been interrupted, the collateral branches retain their normal size, and replace with difficulty the principal artery when tied. Such unfortunately is the position in which the patient is placed; on the other hand, a tumour affecting the osseous system re-appears with greater difficulty when once stopped, than when it is in the artery itself: this, however, may happen. The tumour here appears to be benign, without any complication ; it is possible, however, that the bone is more or less affected: for these species of fungous tumours are often accompanied with other lesions of the osseous tissues, which are so various, and so little known, that it is sometimes impossible to form a precise diagnosis. I have repeatedly seen cases of these diseases, without being able to form a positive opinion as to the exact nature of some of them ; consequently, it may happen, that the operation is performed under the impression of the disease being benign, whereas, after some time, a relapse takes place, followed by death. The following fact is, among the numerous others which I could quote, a proof how fallacious these cures are : a patient, affected with a fungous tumour of the inferior portion of the humerus, consulted me; the swelling appeared to be quite local, and, the general health being good, I tied the brachial artery superiorly; for some time, I entertained hopes of a complete cure; unfortunately, the disease, after remaining sometime stationary, began to increase again, so much so, as to necessitate amputation, and the patient died soon after. It may, therefore, happen, that the operation I am about to perform will not prevent the patient undergoing amputation of the thigh ; indeed this last, even at the present moment, would, perhaps, be the most certain means for obtaining a radical cure; but who would propose so serious an operation for such a disease ? No one ; it is, therefore, more rational to commence by tying the vessel, and should it become necessary to amputate at a future period, then to do so. But could not any topical remedies be employed in order to obtain its resolution ? In some cases this may be tried ; but in the present, it would be dangerous, on account of the numerous large vessels and nerves in the neighbourhood. After hesitating some days, the patient at length consented, and I performed the operation, as recommended by Scarpa, by tying the artery in the middle of the thigh (an operation which I consider preferable to all others in such cases.) Two ligatures were applied, and the pulsations of the tumour ceased instantly; the wound was then united superiorly, and kept open inferiorly by a pledget of lint. No consecutive accidents occurred; the ligatures fell on the 34th day ; the general health remained good ; the tumour at first decreased gradually in size, and afterwards remained stationary ; the cicatrization was complete in about two months and a half; and three months and-a-half after the operation, the patient left the hospital; at this period, though the tumour still exists, I think it is caused by the increased size of the bone, and, therefore, may not relapse; such, however, I will not assert will be the result.

Geoffroy Saint Hilaire's bust.—The Minister of the interior has decided, that the bust of this eminent naturalist shall be placed in the Institute of which he was so long a distinguished member.

Academy of Sciences.—Sitting of the 22nd July. Baron Ch. Dupin in the chair. Books received. "Edinburgh New Philosophical Journal," by Professor Jameson, April to July 1844; "Electrical Magazine," by Mr. Charles Walker; "Proceedings of the Chemical Society," part 8; "Suggestions of New Theories to the Scientific," by A. Girard: "Essay on Natural Philosophy and Astronomy," by the same.

New Comet.—M. Arago mentioned that the comet discovered by M. Victor Mauvais, M.A.S., is now visible without a telescope, and will become daily more and more so, as it approaches the sun.

On Indigenous tea.—M. Lecoq, gardener of the Luxembourg nursery grounds, addressed a letter with a sample of his tea, and a pamphlet ; in this last he states: that the plant might be cultivated in the South of France and Africa with advantage; —that in order to restore to it the aroma lost in drying, the leaves must be kept four or five days from the air, in a well corked bottle;—finally, that the infusion has all the flavour of tea, imported from China.

Extraction of the handle of a spoon from the bladder of a woman.—Case communicated by Dr. Leroy d'Etiolles. The handle, of wood, placed crossways in the bladder, was broken in two, and extracted by an instrument invented by the author.

On Acute Glanders.—Dr. A. Philippe, chief surgeon of the Hotel Dieu, Reims, addressed a pamphlet containing the description of an acute case of this disease, communicated to a groom by a horse affected with chronic glanders. According to the author, the causes which produce spontaneous glanders in the horse, are : 1° The too great number of animals in the same stable. 2° Non-ventilation, obscurity, and humidity of the locality. 3° Insufficient or unwholesome food. 4° Over-work. 5° Operations performed on the animals. He further concludes, from his observations, that the virus of the glanders is of a specific nature, and that it is a disease, *totius substantiæ*, a general infection produced by a poison.

Academy of Medicine. Sitting of the 23rd July,

M. Ferrus in the chair.—After tho reading of the *procés verbal* of the former sitting, Professor Breschet said that, in the first place, he considered it too long, as in his opinion it ought to be a simple analysis; and, secondly, that he thought the secretary was wrong in inserting the expressions he made use of, concerning a colleague.—Dr. Dubois d'Amiens, in reply, said that in all probability, Professor B. was not present at the sitting, otherwise he would have known that the expression was not his, but that of the member whose discourse he had analysed.—Professor Velpeau stated, that this opinion, emitted by him, was in nowise meant as a personality, but merely in a scientific point of view.—After some further remarks from Dr. Nacquart and M. Chevalier, the procès verbal was adopted.

On Liquor Arsenicalis.—M. Bally remarked, that an erroneous opinion had been given, in a late trial, where it was asserted that a drop of the liquor arsenicalis is sufficient to poison five or six persons; were this the case, he would have destroyed more than one unfortunate patient, since he gave it at the dose of gtt. vj. gtt. viij. gtt. xij. and even gtt. xx. daily. Indeed, the formula itself is sufficient to prove the error: the liquor arsenicalis being composed of arsenious acid ʒss, carbonate of soda ʒss, distilled water lb. ss; boil until the arsenic is dissolved; when cold, add spirit of lavender ℥v, and a sufficient quantity of water to make a pint. —Dr. Dubois d'Amiens: probably M. Bally read this case in a daily paper, and the account of the trial was, as has justly been remarked by the Gazette des Hopitaux, given by a person unacquainted with the substance.—M. Guibourt: I think the liquor arsenicalis stronger than asserted by M. Bally; as it contains, if I remember right, 1-140th of its weight of arsenious acid: consequently, 25 drops, gr 1-6th;* Pearson's solution is weaker, since it contains 1-567th of arsenious acid.—Dr. Londe: the dose, according to the different formularies lately published, is said to be from gtt. v. to gtt. x.

On the juice of the Urtica Urens as a hæmostatic. M. Merat read a report on a memoir of M. Genestet of Castelsarrazin. This memoir contains: 1°, three cases of uterine hemorrhage, which were put a stop to by the administration of ʒiv. of the juice; 2° two of hæmatemesis; should this dose be insufficient, it may be carried to ʒvj.; when dried, the plant loses its anti-hæmorrhagic properties. Conclusions: thanks to the author, and publication of an abstract of the memoir.—Dr. Londe: The juice of the urtica urens can only be employed at certain seasons of the year, and therefore cannot be generally made use of; of late. I have employed a substance prescribed ordinarily, as an emmenagogue: the powder of the juniperus sabina, grs. xxx. in three doses, in uterine hæmorrhage and with success.—Dr. Gerardin: numerous remedies have been recommended in menorrhagia, but they could not support the test of experience, and, I fear greatly, it will be the same in the present instance. In my opinion, the observations contained in the memoir are not conclusive, and more facts ought to be collected, ere the Academy can give a decided opinion.—M. Merat: it is precisely because the commission is desirous of having new facts, that it proposed publishing a part of the memoir; the juice being easily obtained, it can be tested by other practitioners.—Professor Cloquet gave some details on the component parts of the urtica urens; according to the learned academician, the stinging pain is caused, not by a liquid, but by the species of down which remains in the part.—M. Merat replied, that from the researches of de Jussieu, it is certain that this down (*poils*) contains a liquid in its interior.—Professor Velpeau: I coincide in opinion with M. Gerardin, in considering the observations far from conclusive: as to the remedy itself, it is not at all new, but as it is not dangerous, I see no inconvenience in repeating M. Genestet's experiments.—Professor Moreau thinks that it may be tried, but with certain restrictions, however; for instance, he considers it would be dangerous in some cases of hæmorrhage, to neglect other means far more efficacious for one so doubtful as the present. (Conclusions adopted.)

On the Bite of a Viper.—Professor Dumeril made a verbal report on the case of a patient bitten by a viper, and cured by enlarging the wound, and cauterizing with the nitrate acid of mercury. In conclusion, the reporter stated, that he was not convinced that the wound was really produced by a viper, as there was only one puncture.—M. Bally stated. that Dr. Rome had cured five patients, by keeping the part near an ardent fire, until rubefaction was produced.—Dr. Prus considers that too much stress has been laid on the remedies employed; in one case, of a countrywoman, who had been bitten by a viper, he gave ammonia, and the patient recovered, though very dangerous symptoms had already occurred: for instance, a swoln state of the whole body. As to cauterizations, he thinks they are useful only before absorption takes place, and, therefore, are efficacious, if employed directly, which, unfortunately, is seldom the case, the medical men being called in generally several hours after the accident.—M. Dupuy: the venom of the viper coagulates the blood; and, as ammonia has the property of liquefying that fluid, it may, therefore, be useful.

The same reporter mentioned several other cases:—1° one of a tumour on the forehead, which, when opened, allowed two tæniæ to escape; 2° an abscess, containing several ascarides lumbricoïdes; 3° a calculus, which had developed itself in the gums; 4° urine, containing a tænia and ascarides lumbricoïdes.—Dr. Nacquart related the case of a patient, whom he had attended with Dr. Lugol, for cerebral symptoms, which resisted all the remedies employed, and disappeared on the man's voiding with his urine fifteen ascarides.—Professor Velpeau, without denying the possibility of the fact just related, still thinks that it was, perhaps, the fibrin of the blood which was taken for worms, as he often has witnessed similar cases.—After some further remarks from Messrs. Martin Solon, Moreau, and Segalas, the discussion was closed.

On fracture of the Neck of the Femur, with penetration of the lower fragment into the spongy portion of the trochanter major.—Dr. Robert terminated his memoir on this subject. According to the author, the pathognomic symptoms of this lesion are: pain on pressing the trochanter; limb shorter; foot turned outwards. Several plates, illustrative of the state of the bone, were shown to the assembly.

GARLAND DE BEAUMONT, D.M.P, B.L., & S., &c
Honorary Physician to the Spanish Embassy.

* According to the formulæ of the London and Edinburgh pharmacopæias, the proportions are even stronger, as ʒj. contains gr. ss. of arsenious acid, or gtt. xx contain gr. 1-6th. The dose there recommended is gtt. x.

THE PHYSIOLOGY OF MATERIA MEDICA.

AS ESTABLISHED BY THE LATEST RESEARCHES IN ORGANIC CHEMISTRY, PHYSIOLOGY, PATHOLOGY, &c.

By the celebrated Professor T. F. SOBERNHEIM.

Translated for the 'Medical Times,' by SIGISMUND SUTRO, M.D

(Continued from page 345.)

Alcohol, ether, and ethereal oils are partly received without any change, and secreted through the lungs and kidneys, also, partly evaporated in consequence of the heat of the stomach, and absorbed in this form. Concentrated alcohol, according to Wasman and Pappenheim, precipitates pepsine, and the precipitate is dissolved in dilute hydrochloric acid.* The *halogenic* bodies, as chlorine, bromine, and iodine, operate as hydrochloric, hydrobromic, and hydriodic acids; and sulphur, as hydrosulphuric acid (sulphuretted hydrogen). The sulphurets, probably, also undergo a decomposition, by which they are transformed into salts of sulphur, with disengagement of sulphuretted hydrogen. Phosphorus is partly transformed into phosphoric acid. The combinations of vegetable acids with potash are, according to Wöhler, so decomposed, as to appear in the urine in the form of carbonates; the pure alcaloids form lactates, with the lactic acid of the gastric juice. Metallic iron is partly oxydated by the digestive process, and forms, with the lactic acid, lactate of protoxide of iron.* Most of the metallic salts combine in a direct way, without suffering decomposition, with the organic constituents of the gastric secretion, particularly with pepsine, forming peculiar chemical combinations, the so-called *pepsinates*,† partly soluble and partly insoluble. Precipitates of pepsine, soluble in dilute hydrochloric acid, are, according to Pappenheim, thrown down by the following salts:—Sulphates of zinc, copper, alumina; alum; the hydrochlorates of mercury, iron, lime, and platina (their alcoholic solution); the acetate of lead; the nitrates of lead, of protoxide of mercury, and of oxide of copper. But the combinations of pepsine with nitrate and sulphate of silver, sulphate of protoxide of iron, and chloride of tin, are still uncertain.

The pepsinates, soluble in the free acid of the gastric secretion, are absorbed, and then display their peculiar effects. The metallic oxides form, like the metallic salts, with the albumine of the gastric contents, peculiar combinations, called *albuminates*. Lassaigne was the first to direct attention to these combinations, and particularly to that of chloride of mercury with albumine. Rose followed in his footsteps. C. G. Mitscherlich examined several of these combinations, particularly those of sulphate of copper, sulphate of peroxide of iron, and of acetate of lead—with albumine, and other organic substances. According to Mülder, the following are minutely-investigated albuminates:—The albuminate of oxide of lead *(albuminas plumbi)* consisting of 12.305 of oxide of lead, and of 87.695 of albumine; the albuminate of copper *(albuminas cupri)*, consisting of 4.44 of oxide of copper, and of 95.56 of albumine; the albuminate of oxide of silver *(albuminas argenti)* of 2.36 of oxide of silver, and of 97.64 of albumine; the albuminate of oxide of mercury *(albuminas hydrargyri)*, one of the most important albuminates as regards toxicology, inasmuch as

* Since, according to Pappenheim, excess of alcohol destroys the digestive power of pepsine, it is easily explained why drunkards suffer through bad digestion.

* Gelis and Conte have made a report to the Academy of Medicine, Paris, on the lactate of iron. With Bouillaud, Fouquier, Bailly, Rayer, Menat, and Beau, they have administered this preparation of iron to chlorotic and anæmic patients with the greatest success. Bouillaud, particularly, considers the lactate of protoxide of iron as one of the best preparations of this metal. Buchner and Louradour have described the manner in which this salt ought to be prepared. The following is the method of the latter chemist, and which furnishes a preparation perfectly devoid of oxide:—Lactic acid is obtained, pure enough for the preparation of this salt, by treating fermented whey and cow's milk with oxalic acid, filtering, and evaporating the clear liquid to the consistence of syrup, mixing with alcohol and then distilling the alcohol off. Digest the thick lactic acid, thus obtained, for seven hours, with iron filings, in the sand-bath, heated to the boiling point; filter while hot, and then allow it to crystallize. The crystals are to be quickly washed with alcohol, dried, and preserved in well-closed vessels. The salt forms white crystalline layers, displays acid reaction, has a slightly astringent taste, and is very soluble in water.

† Pappenheim observes, with regard to these pepsinates: that most—perhaps all—of the precipitates are separated, by prolonged washing, into a soluble precipitate containing pepsine, and into an insoluble one, containing the inorganic substances. As, according to Wasman, several metallic precipitates (as that of the acetate of lead, of sulphate of copper, of sulphate of protoxide and of oxide of iron, of chloride of mercury, &c.), appear to possess digestive powers, the supposition gains ground, that pepsine is held in solution by the metallic combination, but not chemically combined with it. T. F. Simon agrees so far with Pappenheim, as to consider it probable, that the combinations of pepsine with metallic salts (considering its great affinity for albumine) if sufficiently edulcorated, are ultimately so decomposed that the pure oxides remain combined with th pepsine.

Orfila had already recommended albumen as the surest antidote against poisoning by corrosive sublimate. According to Lassaigne, who was the first to analyse this albuminate, it is composed of chloride of mercury and albumine, in the proportion of one atom of sublimate to ten atoms of albumine; but, according to Rose, Geogehan, Mülder, Marchand, and Elsner, the combination consists of oxide of mercury and albumine, in the proportion of 10.278 or 11.192 of oxide, to 89.722 or 88.808 of albumine. The combinations of albumine with metallic salts have been investigated by C. G. Mitscherlich. The combination of the neutral sulphate of oxide of copper with albumine, consists of 5.8 to 6.8 of neutral sulphate of copper, and 94.4 to 93.3 of albumine; that of the subsulphate of copper consists of 3.73 of salt of copper, and of 96.27 of albumine. The results of Mülder disagree somewhat with the foregoing, as, according to him, the precipitate formed by the sulphate of copper is a pure albuminate of copper (oxide of copper and albumine); no sulphate of copper is found in it, but phosphate of lime, and a small quantity of sulphate of lime. The combination of sulphate of silver with albumine, consists, according to C. G. Mitscherlich, of 8.79 of neutral sulphate of oxide of silver, and of 91.21 of albumine. The combination of sulphate of iron with albumine, of 6.9 of neutral sulphate of iron, and of 93.1 of albumine. Lefortier has proved, by his experiments on dogs, that acetate, nitrate, and sulphate of oxide of copper, are quickly decomposed in the stomach, in such a manner as to form partly insoluble combinations with albumine, and also with the substance of the wounded part. When vomiting had been prevented, and death produced by suffocation, only a little copper was found in the filtrated and diluted contents of the stomach; but a large quantity in the solid parts, and in the membranes of the stomach (through incineration). This decomposition was most rapid with the acetate of the oxide of copper, and, here, a great part of the copper was found in the globules of fat and albumen secreted within the liquid contents of the stomach. According to known facts, we may, then, conclude, that most metallic oxides and salts, as also the alcalies and earths, and their salts, form such combinations with the albumine of the gastric secretion, as to be capable of dissolution in this organic form by the digestive juices, and of being partly conducted into the stream of the blood, and are then decomposed, either in the blood itself, or in the secretory organs—particularly in the kidneys—and subsequently eliminated under the form of other combinations. Those compounds which are not dissolved by the digestive juices, are not absorbed, but evacuated through the alimentary canal. But it must be remarked, that the chloride of mercury forms an exception, inasmuch as it displays such extraordinary effects on the digestive fluids. It is, however, shewn, by the experiments of Mialhe, that chloride of mercury is transformed, through the hydrochloric acid and the alcaline chlorides contained in the stomach and the alimentary canal, into bichloride of mercury (corrosive sublimate), and metallic quicksilver. To support this theory, Mialhe mentions a case of poisoning, which occurred to a child, after taking for several times a powder composed of five grains of chloride of ammonium (sal-ammoniac), half-a-grain of chloride of mercury (calomel), and five grains of sugar. Death ensued, with all the symptoms of poisoning by corrosive sublimate (bichloride of mercury), and the apothecary was arraigned on the charge of having administered this poison instead of calomel. But it was proved, through the experiments of Petenkofer, that at least a part of the calomel had been transformed into bichloride of mercury by means of the sal-ammoniac. To be convinced of the truth of this assertion, nothing more is required than to keep chloride of mercury a few minutes in the mouth, when an intense mercurial odour will soon be developed, in consequence of a mutual reaction between the chloride of mercury and the alcaline chlorides contained in the saliva. Mialhe also explains the salivation, following the use of calomel, by this transformation of calomel into corrosive sublimate and metallic mercury. The latest experiments made by Mialhe, and communicated to the Academy of Medicine, Paris, shew that mercury—in whatever preparation it may be administered—enters the blood only in the form of bichloride (sublimate); even metallic mercury not excepted.

(To be continued.)

SELECTIONS FROM GERMAN JOURNALS,

By SIGISMUND SUTRO, M.D.

Experiments on the Co-operation of the Heart, as regards the Production of Caloric.—To determine this point, it was necessary to ascertain whether the blood of the pulmonary veins possessed a different degree of heat from that of the left ventricle. For this purpose, the pericardium of a hen was opened, the heart perforated, and small thermometers introduced, which were provided with conical extremities instead of bulbs, and previously heated to 30° R. The result of the experiment was, that the temperature of the left ventricle was found to be higher than that of the left auricle, by 0.59°, or about 3-5°. The blood of the left ventricle is warmer than that of the right by 0.8523°. It is proved by J. Davy's experiments on recently killed animals, that the higher temperature of the left ventricle does not proceed from a more active change of matter in the muscular substance of the left ventricle, communicated from thence to the blood. This supposition is likewise disproved by the author's experiments, who killed the animals immediately after opening the thorax and pericardium, and introducing the thermometer into each ventricle, when he always found the temperature of the left ventricle higher by one degree than that of the right. The temperature gradually sank in both ventricles in a similar proportion.—*Nasse from Schmidts Jahrbucher.*

Report on the Use of Walnut-Leaves (Juglans Regia) against Scrofula, in the Clinical Hospital of Bonn, by Nasse.—117 children of both sexes, from 3 to 6 years of age, were treated for some time with the above remedy, 99 of whom were under the author's controul and management. In 66, the disease was combined with increased constitutional irritability; in 50, with a torpid condition. Either the infusion or the extract of walnut-leaves was administered for several months; 40 were completely cured, and of these 27 were affected with the irritable form, and 13 with the torpid, both combined with local complaints. The cure was always effected slowly and without *crises*. Of the 62, whose health was considerably improved, 36 had the irritable, 26 the torpid, character, (also combined with local complaints.) Of 15 children, treated without any effect, only 4 displayed the irritable temperament: with 2 of these the treatment was interrupted, on account of some other disease. The 2 others suffered from great constitutional weakness. 10 of those uncured suffered from other especial diseases: 1 from rickets; 1 from favus; 2 from impetigo capitis; 1 from ophthalmia; 1 from rickets and tinea combined; 1 from impetigo accompanied by ophthalmia; 2 from inflammation of the eye-lids, &c. 2 improved subsequently by taking the cod-liver oil, but did not recover completely. Cod-liver oil was administered twice by mistake, instead of the walnut-leaves, and the scrophulous symptoms got materially worse. Only one child died, of Whytt's disease.—*Ibid.*

Calomel as a Remedy in Diseases of the Eye.—On the recommendation of Dr. Major, of Lausanne, Dr. Fricke frequently employs calomel, in the form of powder, with surprising success, where other remedies have failed to produce any effect. The diseases in which he uses it are chiefly: scrophulous, rheumatic, and catarrhal ophthalmia, particularly when combined with great structural alteration of the conjunctiva and iris, or with effusion into the anterior chamber, and deposition on the cornea. Violent inflammation arose from its use in but two patients, who had formerly taken iodide of potassium for some syphilitic affection. The calomel turned of a yellowish green colour in these cases, and this led Dr. Fricke to believe that the iodide of potassium, contained in the lachrymal secretion, combined with the mercury, so as to form a violent stimulant. The author used calomel in all the cases recommended by Dr. Fricke, and never observed any other than good effects. He generally blows the powder into the eye, by means of a quill, and considers this method less irritating to the organ than the usual manner. He generally takes equal parts of calomel and fine sugar. As to the question, whether its action is mechanical or dynamic—we must certainly decide in favour of the latter; otherwise, every indifferent powder would have the same effect.—*Dr. Neuber: ibid.*

On the Use of Hyoscyamine for Dilating the Pupil.—Many remedies of this kind have disagreeable secondary effects, and many are very slow in their operation. Dr. Ign. Gulz, however, obtains the best effects by administering *hyoscyamine*, which operates quickly, safely, and without any secondary action. He dissolves from two to three grains in a drachm of distilled water, and pours a few drops of the solution into the eye. Less liable to spoil than the extract of hyoscyamus, it may be preserved for a longer time, without losing its remedial power.—*Dr. Gulz; ibid.*

Coniine against Scrophulous Ophthalmia.—Coniine possesses the active remedial power of conium, without sharing its uncertainty. It operates both as a sedative and dissolvent, and is therefore peculiarly suitable in the irritable form of scrofula, and particularly in scrofulous ophthalmia, when combined with spasm of the palpebræ, lachrymation, acute pain, &c. In these cases, the author employed it with decided success, though he certainly combined its use with fomentations and topical remedies. He dissolves from three to four drops of coniine in gtt. xx. of spirits of wine and five drachms of distilled water, and administers from 15 to 30 drops three times a day. He never observed any bad effects, excepting occasionally a little head-ache and vertigo in some patients, who had continued with the remedy for several months. The author also thinks coniine useful in hooping-cough, but he has as yet had too few opportunities of testing it in that disease, to recommend it with certainty.—*Dr. Fronmüller; ibid.*

SOME SUGGESTIONS WITH REFERENCE TO THE CIRCULATION OF THE BLOOD.

By Dr. M. ROSENTHAL.
To the Editor of the 'Medical Times.'

Two years ago, in Paris, a vivisection was performed in my presence. The Professor opened an abdominal artery, and applied a ligature to the larynx, wholly preventing breathing; the blood, which before the application of the ligature was of a florid red, now suddenly changed to a dark venous hue. On removing the ligature, the blood resumed its former florid-red appearance.

The Professor accounted for this phenomenon by the known fact, that oxygen, when mixed with blood, renders its colour florid, and that by alternately applying and removing the ligature, he now allowed, and now prevented, the air having access to the lungs. And this change having been almost instantaneously produced, he considered the rapidity of the change as another proof of the extreme celerity with which the blood circulates in the animal body.

But, on witnessing this extremely rapid change, it seemed to me improbable, that the oxygen could within so short a time pass through the lungs, heart, and vessels, and produce the coloration. The results of my endeavours to explain this phenomenon more satisfactorily to myself, I will now briefly detail.

Electricity serves as a means both for decomposing water into its elements, and for re-forming this liquid—the elements constituting it being given.

Fibrine is endowed with the property of decomposing water; but, in the blood fibrine and water are to be met. May not fibrine, therefore, decompose the water in the living animal? The animal body may act *instar* of an electrical battery; of this assertion many proofs may be adduced. A striking one is this: if a copper wire is, at one of its extremities, put into contact with a wound inflicted on a living animal, and at the other extremity communicates by means of a little cup, containing

mercury, with a galvanometer, the *astatic* needle is made to deviate; and this effect not taking place if the wounded animal be dead, it clearly shews that living animals can produce galvanic effects.

Hence, in the living body, there being fibrine under the influence of the galvanic forces, we have the conditions given for decomposing water, and for re-forming it again.

The living animal is constantly in contact with solids and liquids, partaken as food, and with air; part of these substances, after having been converted into the matter of the body, remain there for a longer time, and passing through a series of metamorphoses, are finally eliminated. By far the larger portion, however, do not enter into the intimate animal structure, and are quickly excreted. The structure of some organs being very compact does not allow solids or even liquids to penetrate it; hence, they must necessarily, in the first place, be transformed into gas. But the formation of gas causes an expansion, which again can take place only in organs calculated to yield to any force of pressure; and such are vessels. I hence conclude, that, in the vessels, gases are disengaged, and especially oxygen and hydrogen.

To return to the experiments made in Paris. I suppose that the force, producing the electrical effects in the animal body, is governed by the lungs; and that these organs, on coming into contact with the atmospheric air, are excited, and cause the electrical force to decompose water in the organs under its influence; the oxygen, on becoming free, by that action imparts to the blood the florid colour; but as the oxygen soon combines with substances standing in its way, constituting, with the carbon, carbonic acid, &c., the consequence of this latter effect would be that the arterial blood would take the dark venous hue; if not, a continued fresh disengagement of oxygen would prevent this from taking place.

By the ligature, however, of the larynx, the air being kept from the lungs, these organs are deprived of their stimulus, and cease to excite the electrical forces hence the oxygen being absorbed, and none set free in the blood-vessels, the blood offers no florid appearance till the ligature is removed again, which being done, the effect is produced with the suddenness proper to all electrical phenomena.

Thus far, with reference to my views on the original question! but many other suggestions, with regard to several other important physiological topics, have pressed upon my mind; not having, however, had sufficient opportunities practically to examine them, I hesitate to bring them before the public, unless under the shape of questions.

I ask, 1. Is not blushing and turning pale the effect of a sudden change in the electrical conditions?

2. Is not the phonomenon of the pulse the effect of an alternate disengagement and absorption of gases?

3. Cannot the gases disengaged, expand the arteries, and assist the blood in rushing from the arterial trunks into the smaller branches? If this is true, we need not ascribe to the heart an almost incredibly enormous propelling power; and we can account for the moving power of the juices in plants which have no heart; and, also why, in inflamed parts of the animal body, though remote from the heart, the circulation is more rapid.

HOSPITAL REPORTS.

St. Bartholomew's Hospital.

Acute Peripneumonia.—John Cartey, ætat 23, a robust, strongly built man, of fair complexion, was admitted into Matthew's ward, under Dr. Roupell, May 8th, 1844. The face was highly flushed and extremely anxious: respiration much hurried, accompanied with urgent, distressing cough. He complained of severe pain in the chest and left side, great difficulty of breathing, thirst, heat of skin, though at the same time perspiring profusely; intense headache and a feeling of great debility. The pulse was full and bounding: skin moist, tongue furred. The following is the account he gave of his illness:—is a single man and a free drinker; but had generally enjoyed good health, excepting a cough, to which he had been subject for several years. Four days ago, it being Saturday night, he got intoxicated, and was out in the streets of London all night, sleeping part of the time on the pavement. On the Sunday morning, while in bed, he was seized with a sharp cutting pain in the left side of the chest, which was increased by a full inspiration; his breathing became difficult and hurried, and he had severe headache and thirst, which he attributed to intoxication. He continued in bed, all the symptoms gradually increasing in severity, accompanied with profuse perspirations, till the Wednesday evening, when he applied to the hospital, where he was immediately admitted, and bled from the arm to ℥xx, from which he appeared much relieved, all the symptoms being mitigated; the pain in the chest and difficulty of breathing returning during the night, he was again bled to ℥xij.

May 9th. Says that the pain in the chest is much relieved, headache entirely gone; the respiration is still greatly hurried, cough urgent, sputa tenacious and rusty coloured: pulse 100 and full, tongue furred, skin moist. On examining the chest this morning, the left side of it appeared to the eye more prominent and larger than the right, and upon measuring, it was found to be so by about an inch. Extreme dulness existed on the left side, as high as the spine of the scapula, posteriorly, extending round towards the sternum, with œgophony; in the infra-clavicular region of the same side, slight crepitation was heard with some bronchial murmur; respiration was quite inaudible over the surface where dulness existed. He was ordered to take antim. potass. tart. gr. 1. every four hours, in haust. ammon. acet.

10th—Passed a restless night; the difficulty of breathing and cough remain the same. Inspirations this morning, forty per minute; the face is flushed, pulse 120 full, but soft; skin not so hot, tongue cleaner:—to be cupped to ℥xij. from the chest.

11th—Better; has had no pain in the chest since he was cupped yesterday, but respiration still remains hurried, inspirations being thirty-two per minute; the sputa are extremely viscid, tenacious, and rusty coloured, allowing the cup into which they are received to be turned upside down without their being detached; the pulse is 108 and full, though readily compressible. Tongue moist, skin warm, bowels open, sounds on auscultation and percussion the same; v. s. ad. ℥xvi. The pulse rose in frequency from the bleeding, no faintness being occasioned by it, though bled in an upright posture; the blood drawn highly buffed and cupped;—to have the following pill:—

℞. Hydrarg. chlorid. gr. ij.
Pulveris opii gr. ¼.
Misce fiat pilula 4 tis horis sumenda.

12th.—Expresses himself as much better this morning; all his symptoms appear much ameliorated: respiration much easier, inspirations being only 28 per minute; cough easier, expectoration less viscid, and of a lighter colour; pulse 120, soft and compressible; tongue cleaner.—To have a blister to the chest—continue the pill.

13th.—Did not sleep so well last night, in consequence of the blister troubling him; but he appears much the same as yesterday; the tongue is covered with a white fur; pulse 96, and with little power in it; skin cool; bowels costive; inspirations 20; sputa the same in quantity and appearance.—To have the effervescing draught three times a-day, and to take a sixth of a grain of opium with each pill, instead of a fourth.

14th.—Complains of his bowels being much relaxed: the tongue is furred; pulse 78; respiration natural; respiration is still inaudible at the inferior part of the left lung; œgophony still existing the same as at first.

16th.—Appears going on favorably, but the bowels still continue much relaxed.—To omit the mercury for a day or so, and to take the following:—

℞. Haust. ammon. acet. ℥iss.
Vin. antim. potass.-tart. ʒss.
Pulv. ipecac. comp. gr. v.
M. fiat haustus ter die sumendus.

18th.—Feels himself much better; bowels quiet.—To rub in ung. hydrarg. ʒss., every night and morning.

20th.—Going on favourably: has now very little cough; sputa thin and bronchial-looking; pulse 90, rather jerking, but compressible; respiration natural; his appetite is good, and he sleeps well at night. There is still great dulness on percussion at the posterior part of the left side, as high up as the spine of the scapula: over the infra-clavicular region it is tolerably resonant on percussion, tho respiratory murmur in this situation being heard freely, though faint; œgophony less distinct.—He was ordered broth diet, and the mouth being slightly sore, to rub in the ointment every night only.

22nd.—Mouth very sore: to rub in every other night.

24th.—Is still unable to lie upon the left side, and complains of pain in the situation of the two lower ribs; tho circumference of the left side of the chest is still greater than the right: he says he feels himself pretty well, excepting weakness, and has very little cough.—To rub. in ung. antim potassio-tart. ʒss. every night, where he feels pain, and continue the mercurial inunction every other night.

28th.—Has appeared much the same the last few days, but complains now of his gums feeling extremely sore: there is now distinct crepitation at the inferior part of the left lung, heard as low as tho angle of the scapula.—To continue remedies.

June 1st.—Still complains of pain in the side; in other respects continues the same.—To have a blister to the left side.

4th.—The pain in the side is not entirely gone, though much lessened: very little felt of it, except upon coughing: says that he "feels himself as well as ever, excepting weakness."

12th.—Has been going on favourably during the last week: the left side of the chest is now three-quarters of an inch less in circumference than the right, and to the eye appears flatter.

30th.—The crepitation heard in the left lung gradually changed to vesicular respiration, and he left the hospital to-day, feeling himself perfectly well.

PERISCOPE OF THE WEEK.

Treatment of inflammation of the cellular tissue by caustic potash.—Dr. Chabrely in the treatment of these cases, even in the most acute period of the disorder, before suppuration has set in, prescribes the use of caustic pot ash. He has a small piece of this substance placed on the summit of the tumour, and when the caustic is entirely melted, the affected surface is covered with a rice poultice made with poppy water. This topical application is continued till the slough has come away, after which the wound is dressed with basilicon ointment. By the aid of this ointment he has succeeding in diminishing, by one half, the ordinary time employed in resolving phlegmonous tumours. The violent pain caused by the caustic ceases as soon as it has disorganised the part on which it was applied. Dr. Chabrely classes buboes among tumours developed in the cellular tissue, and does not hesitate to attempt their treatment by caustic potash at every period. It is, however, most successful when applied in an early stage. The caustic then acts as in the malignant pustule, or as in the case of the bite of a venomous animal; it destroys locally all the septic principle, before the latter has been absorbed into the circulating fluid, and contaminated the whole system. He thinks the application of potash on an incipient bubo neither dangerous nor painful. The pain lasts only about two hours, and is not very severe; the scar of the wound is scarcely visible, a very small piece of the caustic being sufficient to produce the desired effect. There is no danger to be dreaded when the surgeon applies the caustic with the necessary precautions in such cases, the inflammation extending but very little beyond the circumference of the wound.

The seeds of the ricinus communis as a

PURGATIVE.—Castor oil, says M. Soubeiran, is less purgative than the seeds which furnish it, the reason being that the oil which flows from the press contains less resinous matter than the residuum. M. Mialhe relates, in the *Bulletin Général de Therapeutique*, several therapeutic results obtained by the aid of an emulsion, prepared with the fresh seeds of the ricinus, which support this opinion. When it was prepared with a large quantity of the seeds, the effect was emeto-cathartic to a high degree; in a weaker form, it constitutes, in his opinion, an agreeable purgative. Although this has not been proved by clinical observation, it is probably true; for it is nearly certain that the active principle of the ricinus is analogous to, if not identical with, that of the oil of croton tiglium. Now we know that this latter oil, simply purgative in the dose of one drop, becomes emetic and cathartic if this dose be at all exceeded.

MINERAL PASTE TO FILL HOLLOW TEETH.—Forty-eight grains of anhydrous phosphoric acid, and fifty-two grains of pure caustic lime, finely pulverised, and mixed rapidly in a mortar. The powder soon becomes moist; it must, therefore, be placed as quickly as possible in the cavity of the tooth, previously cleaned and dried; it should be well pressed into the cavity, smoothed off, and moistened on its surface.

A NEW METHOD OF GIVING MEDICINE TO INFANTS.—Dr. Nelson, in the *Montreal Medical Gazette*, recommends the following plan, which he has employed for giving physic to obstreperous children, also to persons affected with tonic spasms, which prevent their opening their mouths. He introduces the medicine through the nasal passage by means of a spoon, the sides of which have previously been bent upwards and inwards. Dr. Nelson states he has never failed, and that no unpleasant results followed its employment.

LIGATURE OF THE EXTERNAL ILIAC ARTERY.—M. Malgaigne communicated to the Royal Academy of Sciences, at Paris, the particulars of a recent example of an operation, which, to this day, has counted only four successful issues, in Paris, viz., the ligature of the external iliac artery. He tied this artery on the 11th of February last, in a young barrister, for a very voluminous aneurism, which occupied the left groin, and extended to the spine of the os ilium. A single ligature was applied; it came away on the morning of the sixteenth day. At the end of five weeks the wound was nearly healed, when, on the 37th day, the aneurismal sac burst close to the wound, and destroyed all the work of cicatrisation. This accident, however, had no serious consequences, and, on the 11th of May, three months after the operation, the patient resumed his legal avocations. There still remained a small suppurating surface, but it soon completely cicatrised. His general health, at present, is perfect; the left limb is nearly as large, warm, and as strong as the other, although no pulsation is felt in any artery. The incision was made nearly vertically, inclining a little toward the umbilicus. Up to the present time there is no indication of hernia.

IMPERFORATE VAGINA FROM INJURY DURING LABOR.—Mr. Square, surgeon to the Plymouth Hospital, relates in the Provincial Medical Journal, the case of a married woman, 34 years of age, who was delivered of her first child by the forceps about three months prior to her coming under his care, after a very protracted and painful labor. It was followed by considerable purulent discharge from the vagina, but no injury was suspected until an attempt at connection was made by the husband. On examination, the vagina was found to be quite closed by firm cicatrization at about an inch from its orifice, the centre of the obstruction having a dimple or depression in it. A track of induration in the vagina could not be discovered by the finger when passed into the rectum. In the belief therefore that the canal was not obstructed throughout, Mr. Square pushed a blunt probe through the dimple, and found the septum to be about half or three quarters of an inch in thickness. He afterwards endeavoured to dilate the opening by bougies and sponge tents, but the proceeding was so painful, he was obliged to abandon it, and perform the following operation. The patient was tied, as for lithotomy. The fore-finger of the left hand was introduced within the rectum, so as to depress it towards the sacrum. A straight *bistoire caché*, set at an inch, was passed through the opening in the cicatrized vagina, and the blade being directed as in the lateral operation of lithotomy, was sprung and withdrawn. An immense gush of dark grumous fluid followed this proceeding. The finger now discovered the upper part of the vagina dilated into a large oval sac, with a healthy os uteri at its upper part. The cicatrix was then divided at the right side in the same direction by a probe pointed knife, after which a large cylinder of oiled lint was introduced within the vagina. Some febrile disturbance followed, which was readily removed. A wooden plug was afterwards substituted for the oiled lint. No contraction of the canal took place, and the patient ultimately did well.

SINGULAR CASE.—At a recent meeting of the Bath and Bristol Medical and Surgical Association, Dr. Morgan introduced a married female 24 years of age, in whom about two years since the subcutaneous tissue of the hands and feet became dense, resisting, cold, contracted, and in appearance like wax; the fingers flexed, without the possibility of being extended; the integuments of the whole body being tense, cold, and discolored; and the muscles and tendons much contracted. The disease remained stationary in spite of four months' active treatment. Its occurrence was contemporary with distress of mind.

NAPHTHA IN PHTHISIS.—Mr. Caleb Rose adds, his name to the long list of those members of the profession, who have found this vaunted remedy useless in the treatment of phthisis.

CASE OF MALFORMATION.—At a recent meeting of the Bath and Bristol Medical and Surgical Association, reported in the Provincial Medical Journal, Mr. Smith, house-surgeon to the Bath United Hospital, read the following case of diverticulum; a child seventeen weeks old, was brought to the hospital on the 26th of last month, from whose umbilicus protruded a tumour, appearing like a portion of prolapsed intestine, much congested. It was about an inch long, coated with a florid mucous membrane, traversed by a canal, through which a probe passed for its whole length downwards towards the right iliac fossa. Though this canal fœcal matter passed upwards, as well as by the anus. Mr. Gore, under whose care the case was admitted, thought it was one of those rare instances in which the duct of the umbilical vesicle, in its normal state visible only during the first three weeks of fœtal life, has remained pervious, and being abundantly developed, has assumed all the characters of the intestine with which it was connected. The treatment proposed was the removal of the tumour by ligature.

INDIAN HEMP.—Dr. Clendinning says that the only cases in which he has found the Indian hemp (cannabis Indica) not to act as a competent substitute for opium, is in the intestinal fluxes, such as the diarrhœas of phthisis and of low fever in advanced stages, of old ulcerations of the bowels, &c., and in dysenteric affections. In such cases opium is the great controlling remedy of the narcotic class, and admits of no deputy. And in such cases happily, opium produces in judicious hands none of its inconvenient effects, and may usually be safely and freely employed.

OLD AGE AND PUBLIC COMPETENCY.

Sir,—In your sensible and very clever remarks on the operation of the new Charter, I generally agree; but I except your complaint that the Charter forbids men to be on the Council who are not in actual practice. You illustrate your point by remarking that the clause will exclude Mr. Carpue from the Council. Now, Sir, permit me to ask what better instance could you select to prove that a man too old for practice is too old also for government? I do not deny the past merits or talents of Mr. Carpue, and the slight of them by the College was wholly indefensible. But who can see the old gentleman now, and not regret that yet superfluous he "lags upon the stage?" His whole judgment seems to depend on old recollections, and bye-gone circumstances, and like the courtier's monkey, (except that he is less select in his society) he is at the command, or rather mercy, of any designing man, in whose hands he happens to be.

> Solve senes centem mature sanus equum, ne
> Peccet ad extremum ridendus et ilia ducat.

Now, Sir, what is true of Mr. Carpue, is it not also true of other men of his age? And, if so, would it be wise that when all agree that children should be excluded from public affairs, an exception should be made for the most foolish of all childhoods—that of senility?

Pardon me for our little difference, where there exists such general agreement, and believe me,

Your obedient, obliged servant,

SCIPIO.

GOSSIP OF THE WEEK.

GENTLEMEN ADMITTED MEMBERS OF THE ROYAL COLLEGE OF SURGEONS, on Friday, July 26th, 1844.—Messrs. W. Monsoll, J. W. Grylls, J. J. Littlewood, G. W. Lillies, R. K. Pierce, R. Millar, J. Sole, G. Williams, H. C. Lucas, H. Edmonds.

GENTLEMEN ADMITTED MEMBERS OF THE APOTHECARIES HALL, 25th July, 1844.—George William Lillies, Henry Dixon, Oscar Hanger Fox, Benjamin Edward Holwell, Amos Beardsley, George Chamberlin Hill, Henry William Boxall, John Wilson Littler, Joseph Godden.

PROMOTIONS, &c. — Assist.-Surgeon William Harvey, from the 9th Foot to be Surgeon, vice Young appointed to the 28th Foot.—9th Foot, Peter Mackay, M.D., Assistant-Surgeon, vice Harvey promoted in the 2d Foot.—28th Foot, Surgeon William Henry Young, from the 2d Foot, to be Surgeon, vice Campbell, who retires upon half-pay.

OBITUARY.—We regret to learn the sudden death of the celebrated chymist and philosopher, the venerable Dr. Dalton of Manchester, whose decease took place at an early hour on Saturday (27th ult.) He had been in comparatively good health a few minutes previously. Dr. Dalton was in the 78th year of his age.

DR. RICE has been elected Medical Officer to the Workhouse of the Listowel Union.

MR. GUTHRIE'S PETITION.—Mr. Guthrie has had presented for him, by Colonel Fox, to the House of Commons, a petition, to be heard by himself or counsel, against the confirmation of the recent Charter. He alleges that several of its provisions are *illiberal*, *exclusive*, and *unjust*—that it prevents the *poor* man obtaining surgical places of honour, offers unnecessary advantages to the rich man—that it presses with peculiar severity on the officers of the public service, whom it deprives of privileges conceded to surgeons of equal standing in civil life, and excludes from all future posts of distinction in the College. It reminds the House that a gentleman in the service of the Sovereign should not forfeit any rights enjoyed as an ordinary citizen, and mentioning that the petitioner had been solicited by many surgeons in the public service, to exert himself in their defence, proceeds to shew that the Charter postponed the claims of veteran surgeons who had received public thanks for the services they had rendered the country—to young men in civil life, who had yet a reputation to make. The petitioner adds, that the evil has been unintentional, and may be remedied by a Supplementary Charter.

Metropolitan Mortality for the Week ending Saturday, July 27.

Causes of Death.	Total.	Average of 5 Springs.	Average of 5 Years.
ALL CAUSES	1066	900	946
Zymotic, or Epidemic, Endemic, and Contagious Diseases	289	191	178
SPORADIC DISEASES—			
Dropsy, Cancer, and other Diseases of uncertain or variable Seat	108	106	111
Diseases of the Brain, Spinal Marrow, Nerves, and Senses.	207	159	157
Diseases of the Lungs, and of the other Organs of Respiration	225	233	286
Diseases of the Heart, and Blood-vessels	30	19	21
Diseases of the Stomach, Liver, and other Organs of Digestion	107	88	69
Diseases of the Kidneys, &c.	8	5	5
Childbirth, Diseases of the Uterus, &c.	10	9	10
Rheumatism, Diseases of the Bones, Joints, &c.	4	5	6
Diseases of the Skin, Cellular Tissues, &c.	0	1	1
Old Age	53	56	71
Violence, Privation, Cold, and Intemperance	23	25	26

No. 255. **SUMMARY.** Aug. 10.

CLINICAL LECTURES ON MEDICINE; Delivered at the Great Charity Hospital, at Berlin, by Dr. SCHONLEIN, first Physician to the King of Prussia:—
LECTURE XVI.—Hæmatemesis originating from an Affection of the Liver—Intestinal Evacuations of a Black Colour, containing Decomposed Blood—Pain in the Shoulder from Affection of the Liver—Pulsus Frequens ex Inanitione—Recovery.. 379

ON THE USE OF EXTENSION IN INJURIES OF THE SPINE, by E. W. TUSON, F.R.S., F.L.S., Surgeon to the Middlesex Hospital 381

ACTION OF AMMONIA UPON THE PROTOCHLORIDE OF PLATINUM, by Dr. MICHAEL PEYRONE, of Turin, late of the Giessen Laboratory 382

OBSERVATIONS ON A WORK ENTITLED "CHEMISTRY IN ITS APPLICATIONS TO AGRICULTURE AND PHYSIOLOGY," by PROF. LIEBIG, M.D., PH.D... .. 382

PARISIAN INTELLIGENCE:—
On Pleuritis with Effusion, by Pofessor Chomel—Symptoms—Treatment 383
Rupture of the Uterus 384
Popliteal Aneurism; Ligature of the Femoral Artery, by Dr. Jobert de Lamballe 385
Proceedings of the Academy of Sciences, July 30th 385
Operation of Enterotomia, &c., by Dr. Amussat 385
M. Dufrenoy on the Genito-Urinary Organs of Reptiles .. 385
M. Millon on the Oxydation of Organic Matter by Iodic Acid 385
Powder for Purifying Common Sewers.. 385
Proceedings of the Academy of Medicine, July 30th 385
M. Dupre on the Employment of Metallic Capsules instead of Tar 385
Dr. Jobert de Lamballe on Cancerous tumour of the Sigmoid Flexure, &c 385
Pathology of the Spinal Cord 386

HOSPITAL REPORTS:—
King's College Hospital.. 387

TO CORRESPONDENTS 381

LEADERS:—
THE GOVERNMENT BILL OF MEDICAL REFORM 388
THE MEDICAL TIMES AND THE STAMP RETURNS 389

SIR JAMES GRAHAM'S NEW MEDICAL BILL.. 389
Seat of Gonorrhœa in the Female 391
THE HEIDELBERG DIPLOMA 391
APPEAL TO THE PROFESSION BY A POOR LAW MARTYR 392
PETITION OF THE MEDICAL OFFICERS OF THE HORSE AND FOOT GUARDS 393
RISE AND FALL OF THE AGE OF WAKLEYISM 393
WHAT IS IT THAT PROPELS A GALLON OF ALE THROUGH THE LIVER INTO THE HEART? 393
BOHEMIAN REMEDY FOR HYDROPHOBIA 394
BIBLIOGRAPHICAL RECORD 394

PERISCOPE OF THE WEEK:—
Theory of Acids 394
The Periods Regulating the Recurrence of Vital Phenomena .. 395
Congenital Fissure of the Iris.. 395
Ovarian Disease.. 395
A Regulated Warm and Moist Atmosphere in the Sick Room .. 395
The Atmosphere for Tetanus and Hydrophobia.. 895
Pleuritis and Peritonitis 395
Injury to the Thigh 395
Case of Cyst occupying the Position of a Psoas Abscess 395
Uterine Polypus.. 395
Abscess of the Septum Nasi 396
Abscess of the Heart.. 396
Albuminuria.. 396
Spontaneous Expulsion of the Fœtus 396
Rare Disease of the Heart 397
Supposed Poisoning by Arsenic 397

A SELECT PRACTICAL FORMULARY 397

GOSSIP OF THE WEEK:—
Official Notice by the College of Surgeons 398
Gentlemen Admitted to the Royal College of Surgeons .. 398
Ditto ditto Apothecaries' Hall 398
Mr. Mackenzie and Dr. Munro 398

METROPOLITAN MORTALITY TABLE 398

CLINICAL LECTURES ON MEDICINE;

Delivered at the GREAT CHARITY HOSPITAL, Berlin, by Dr. SCHONLEIN, first Physician to the King of Prussia, founder of the Natural System of Medicine in Germany, and Professor of Pathology and Therapeutics in the University of Berlin.
Prepared from the German expressly for "The Medical Times."

LECTURE XVI.

Hæmatemesis originating from an affection of the Liver.—Intestinal evacuations of a black colour, containing decomposed blood.—Pain in the shoulder as a symptom af affection of the Liver.—Pulsus frequens ex inanitione.—Recovery.

November 24th, 1840. Johanna Streitmüller, 25 years old, servant girl. The previous history of the patient gives us no clue to anything that might have acted as the originating cause of her present affection. The patient had had a nervous fever three years ago. The only thing to be remarked is the circumstance that her menstruation has always been very scanty; it had certainly taken place regularly every fortnight, but it was but slight in quantity. In consequence of a violent fit of anger, the patient experienced, about three weeks ago, an oppressive sensation in the right side of the chest extending itself towards the lower ribs, without any derangement, however, taking place in the function of the lungs or of the intestines. The patient, shortly afterwards, complained of giddiness, and two days ago was attacked with a fit of fainting, subsequent to which she complained of a sensation as if something was rising in the throat; a tolerably large quantity of coagulated, perfectly black, blood was thrown up by vomiting, attended by a sweetish taste of blood in the mouth. The inclination to vomiting again exhibited itself yesterday, but the matter vomited was rather of a bitter, green character; the stools were of a dark, blackish appearance, similar to what are commonly called "bilious stools."

To-day we observe symptoms of anæmia, such as: pale colour of the skin, bloodless lips, tongue covered with a fur, but pale at the edges, the pulse small and accelerated, with increased temperature of the skin. The abdomen is soft and free from pain, nowhere exhibiting any symptom of distension; the sound on percussion everywhere normal. The giddiness continues, and a feeling of nausea is again created on the patient raising her head. The disease, here, may be readily recognized; it is a case of *hæmatemesis* complicated with *melæna*. But this is only a name for one set of phenomena; the question is, what is the internal cause of this state? what organs are here affected? It is evident that this phenomenon proceeds from some abdominal organ; the only circumstance which would favour the conjecture of hæmoptysis, consists in the oppression which the patient experienced in the right half of the chest, previous to the ejection of the blood; but the absence of cough, the appearance of the blood, the mode of its evacuation, and the nature of the stools, are all against this conjecture.

We find no circumstance of any note, as far as we have been able to trace the history of the patient, which could explain to us the cause of the *hæmatemesis*; no disease which could have been connected with derangement of the liver or spleen, as, for instance, intermittent fever. The only thing, which could bear on the present disease, is the scanty menstruation; the circumstance, however, of this having already existed so long, and of its even being present at the time of the reception of the patient into the hospital, is against connecting it with the present malady. It is manifest, from all the phenomena, that we must search for the seat of the disease towards the right side of the abdomen, in the liver, and not in the spleen, from which latter organ *hæmatemesis* so commonly takes its origin, that some have regarded it as an invariable symptom of acute or chronic splenitis. (*Marcus*). We have the following reasons for our conjecture of an affection of the liver: 1stly, the influence of a violent mental disturbance in the patient, a violent fit of anger; 2ndly, the pressure felt in the right side of the thorax, towards the seat of the liver; 3rdly, the circumstance that no acid taste is perceived, as in affection of the spleen, but rather a bitter taste, which was very marked with the two last vomitings; 4thly, the burning heat of the skin, the genuine *calor mordax*, which even the ancients have designated as a symptom of disease of the liver. There are no characteristic features in the urine.

Prescription.—Saline mixture, with Sugar-water for beverage.

November 25th. The irritation and congestion of the liver were somewhat lessened in consequence of the free discharge of blood that took place; but the subsequent anæmic state of the patient on the one hand, and the persistence of the abdominal symptoms on the other, caused us to fear lest she might fall into a low kind of bilious fever, or be attacked with inflammation of the blood-vessels of the portal system.

The febrile exacerbation was considerable last night; the headache, and oppression in the region of the forehead, were more violent; the frequency of the pulse increased to 120 per minute; the skin was excessively hot; she had no sleep all night. This morning we find a considerable remission in the symptoms; the appearance of the patient does not exhibit that bloodless character which we noticed yesterday; the colour of the skin is no longer so yellow; the tongue is covered with a white fur; the taste still deranged; no more inclination to vomiting; the intestinal evacuations are no longer bloody, but begin to be fæculent; the skin is moist and perspiring; the pulse small, weak, moderately frequent. We observed yesterday, that the stools exhibited a rather blackish appearance, and were calculated to create a doubt whether they did not really contain blood. We therefore instituted a more minute examination with the microscope, and though we certainly did not detect any blood globules in them, yet the chemical analysis has proved the presence of *hæmatin*; they consequently contained decomposed blood. Continue the medicine, with the addition of phosphoric acid.

November 26th. Three series of symptoms are to be distinguished in the patient: those caused by irritation of the liver; those arising from deficiency of blood; and phenomena of general reaction.

1stly.—With regard to the hepatic phenomena: the sensation of pressure on the right of the chest has disappeared; the patient, however, complains of a pain in the right shoulder. This symptom is always worthy of notice, especially if other phenomena of affection of the liver are combined with it; it indicates the chronic form of inflammation; and if a portion of the liver is affected which is not accessible to the touch, it constitutes frequently a valuable guide in the diagnosis. The headache in the frontal region continues; the thirst is increased; the taste is no longer bitter; tongue as yesterday; three more fæculent stools took place since the last visit, in which several small blackish little lumps, of the size of a pea, and consisting of decomposed blood, exhibited themselves.

2ndly.—The phenomena of re-action: the fever has a remittent character, the exacerbation taking place towards evening; last night's exacerbation, however, was not so considerable as the one on the previous evening. The skin is now moderately warm, moist, perspiring readily.

3rdly.—The anæmic symptoms, as, for instance, the paleness of the face, the small, empty pulse, are nearly the same as they were before.

Prescription.—Embrocation of ungt. hydrarg. ciner. in the region of the liver; continue the saline and the phosphoric acid.

November 27th.—The state of things has evidently improved: last night's exacerbation was slighter than the former ones; the skin no longer so hot, and rather moist. The repose of the night was better than previously; the patient enjoyed some hours of calm sleep. The phenomena today are as follow:—1stly, hepatic phenomena: the oppression in the region of the liver has disappeared; there is still some pain experienced, however, in the right shoulder; the violent headache has subsided; the tongue is getting clean; the appetite has returned; two rather bilious stools took place within the last 24 hours. 2ndly, symptoms of re-action: skin moist, not so burningly hot as formerly; urine clouded; pulse has an abnormal frequency (96 per minute), but this frequency does not arise from the fever, but is only a *pulsus frequens ex debilitate*.

When symptoms of fever appear in an individual who has lost much blood, it will always be difficult to determine how far the phenomena of the pulse belong to the fever, and how far to the inanition; the other febrile symptoms form some sort of criterion: temperature, secretion of the skin, urine, thirst, &c. The frequency of the pulse alone does not constitute the fever; it is but a symptom. In this instance, we find the temperature of the skin moderate; the urine commencing to be normal; the thirst very trifling; and we, therefore, must presume, that the abnormal frequency of the pulse arises from the previous loss of blood. The remark made just now appears to me to be of the greatest practical importance

For instance, in inflammations, an increased frequency of the pulse may be artificially produced by the treatment; and the frequency of the pulse, subsequent to bleeding, instead of diminishing, is not uncommonly found to be considerably increased, which might lead to the error, that the fever had also augmented. During the period that the antiphlogistic method of cure was so much in vogue, the frequent pulse was considered as an invariable symptom of fever, and according to the then prevailing notion, wherever there was febrile action, there was also inflammation, which was always to be treated by venesection! It was thought necessary to bleed in every disease, and where death took place, if the patient had been bled ten times, the fatal result used to be attributed to the omission of the eleventh bleeding. I have myself seen the vein opened in chlorotic and anæmic girls, on account of an abnormal frequency of the pulse. Such unhappy individuals died through inanition. I well recollect the case of a celebrated physician, who had been treated according to antiphlogistic principles, and whose corpse exhibited, afterwards, traces of a deficiency of blood, instead of those of inflammation.

November 28th.—The favorable state in which we found the patient yesterday, has made a still more decided progress; last night's exacerbation was scarcely worth mentioning, and was followed by a calm, and refreshing sleep, from which the patient awoke quite free from headache; a slight giddiness only is experienced on sitting up, but not of the same nature as that which preceded the hæmatemesis; it seems to be a mere consequence of exhaustion; the tongue is becoming clean; the taste no longer vitiated; a commencing appetite; the region of the liver is free from pain, as also is the right shoulder; the stools natural during the last 36 hours. The vascular irritation, which still exists, does not depend on the fever, but is clearly a consequence of the loss of blood; the pulse is small, soft, and compressible; the skin moist; the urine forming a copious red sediment. We may now altogether dispense with medicines, and, instead of them, prescribe strengthening broths made of meat, boiled fruit, good wine, &c.

December 1st.—The patient may be considered as convalescent; the affection of the liver has disappeared; all the functions are in a normal state; some slight anæmic symptoms only are still existing, which, however, we have no doubt, will soon disappear.

The patient regained her strength rapidly, by adhering to a nourishing diet, and was enabled to leave the hospital in the middle of December.

ON THE USE OF EXTENSION IN INJURIES OF THE SPINE.

By E. W. TUSON, F.R.S., F.L.S., Surgeon to the Middlesex Hospital.

The vertebral column is frequently the seat of external violence, either to a small or considerable extent, causing more or less injury, according to the nature of the accident producing it; which may be followed by immediate consequences, or these may appear even days, weeks, or months afterwards. Paralysis, loss of motion, or sensation, or both, may be directly produced by a fracture, displacement, or dislocation of any one bone of the spine; or may follow from extravasation, inflammation, or disease afterwards appearing in the bones. To the first division of such accidents let us devote our attention: to the other class, another opportunity may be taken for their consideration.

In the reduction of fractures, extension is necessary to overcome the contraction of the muscles, so as to bring the bones into their proper situation. Extension is employed to a considerable degree in the reduction of dislocations; and if we look back to our olden works on surgery, we see that extension was indiscriminately recommended in injuries of the spinal column, and the patients subjected to much violence in those days, which no doubt has been the cause of this plan being discontinued in our modern practice, and little being done to restore the displaced parts. It is true, the precise nature of the accident is difficult to ascertain, on account of the injury being frequently situated in the bodies of the vertebræ, which lie deep-seated, covered by the viscera in front, and numerous muscles laterally,—still, if extension be necessary in the reduction of fractures of the extremities, which cannot be doubted, why should patients, who unfortunately meet with injuries of the spine, be left without any means being employed to restore the displaced parts to their proper position. It is true, the spinal marrow may be lacerated by the accident; in which case, surgery can do little; but still there may be displacement of one of the bones of the spine, either from fracture or dislocation, without the spinal marrow being so injured, when the displaced bone, by its pressure, may produce the loss of motion or sensation; and should no means be used in such cases to restore the parts to their proper situation, those evils must still exist, and the patient ultimately sink. It has long been my determination to have recourse to some means to endeavour to replace the displaced parts in their proper position, in such injuries; and in my book, "On the Treatment of Curvature of the Spine," a strong recommendation* of the use of extension will be found. Let us now notice under what circumstances its use is likely to be advantageous, and where its employment may be productive of a beneficial effect. In fractures, and displacement of any bone entering into the formation of the vertebral column, producing, by its pressure on the spinal marrow, paralysis, following immediately the injury (to be distinguished by some irregularity, above, or in a line, with the parts paralysed), extension may be of much service in removing the pressure, and restoring the loss of power and sensation, but not if used when the paralysis comes on some time afterwards, as it may then be occasioned by extravasation, inflammation, or disease of the bones, which might be increased, and fresh mischief result from the same means being employed. The following cases will exemplify the result produced by this mode of treatment:—

Thomas Hickson, æt. 42, admitted into the Middlesex Hospital, under Mr. Tuson's care, Dec. 27, 1842. Had been drinking, and fell out of the back part of a cart, an hour and a half before admission; he was picked up, put into the cart, and rode a mile, which shook him very much; he felt something crack at the back part of the neck, and when he attempted to get out of the cart, he found he had no use of his legs; he could neither stand, nor even feel when they were touched. Upon examining the spinous processes of the seventh cervical and first dorsal vertebræ, where he says the injury exists, there is some irregularity and displacement to be felt; he had no power or sensation of the legs or abdominal muscles: priapism: pulse 50. Upon extension being steadily used, by the head being fixed, and the legs gradually and progressively pulled, complete power of motion and sensation all at once returned as usual; he said he was quite right, and pulled up both his legs, and kicked them about in every direction. Priapism soon ceased. He was placed quite flat on the bed, upon his back, and directed to lie perfectly quiet. In the evening he had more heat of skin, and the pulse became quicker. He was ordered saline draughts, with 30 drops of sol. of tartar emetic every six hours; finding he had passed no water, it was drawn off by a catheter.

28th.—Motion and sensation remain. He complained of pain at the back of his neck; bowels not open: 20 grains of compound jalap powder immediately, and three grains of blue pill every night; required catheter night and morning.

31st.—Motion and sensation perfect: less pain at the back of the neck; has made water for the first time, no peculiarity about the urine. Bowels have acted freely.

July 4th.—Improved since last report. No recurrence of symptoms; required catheter to be passed night and morning: bowels acted daily, but not without pain.—Compound aloes pill every other night; milk diet.

7th.—Sat up in his bed, supported by a bed chair, without any paralysis; complains of pain in the back of the neck, and all down the back.

9th.—Sat up for four hours this morning, supported by the chair. No bad symptoms; pain less at the back of the neck; appetite good; urine flows freely: has perfect command over all the bladder and rectum.—Meat diet.

13th.—Had been sitting up each day for some hours, and out of bed, by the fire; complained of the back of his neck, and pain down the back; with numbness down each arm, particularly the right one, running to the little finger. He was desired to be careful of what exertion he took. Four grains of blue pill every night.

17th.—Had been improving, but still the numbness in the arms continued sometimes so severe, that, if holding anything, he let it fall. He moved about the ward with the aid of a stick, having the same walk as a patient recovering from paralysis.

20th.—Continued much about the same. Had felt pain and numbness in the right leg: the same sensations remain in the arms, being sometimes more severe than at others. A liniment was ordered for the arms and legs. Compound camphor liniment with tincture of cantharides. Continue blue pill.

24th.—The arms had less power, and the numbness had increased; the leg about the same. He was requested to keep the recumbent position for some hours each day, and not to move so freely about the ward.—Continue blue pill, and use the liniment to the arms and legs.

27th.—The uneasy sensations had been less severe, but still he had not gained strength in the arms; the leg is stronger. Bowels act freely; appetite good; tongue clean; pulse 70.

31st.—The symptoms had improved. From this time he gradually gained strength, with some little variation in the symptoms; occasionally pain and numbness in the arm, and want of power in the two smaller fingers of the right hand; but, by degrees, he gained the power over the arms and legs, and he left the hospital on the 21st February, feeling quite well, but weak. Was made an out-patient; and, a month afterwards, was quite cured.

Remarks.—In this case some change in the position of the last cervical or first dorsal vertebræ must have taken place from the accident. Either fracture or dislocation, producing pressure upon the spinal marrow; the symptoms appearing afterwards would warrant us to come to that conclusion. Doubts were entertained by some who saw the patient, in respect to the complete paralysis, but none in my mind, for pins were introduced beneath the toe-nails by one of the pupils, and he could not feel them. The effect produced by the extension was most striking, it being instantaneous. The delight of the man when all at once he felt he had recovered the use of his legs, could move them in all direction, holding them up to look at them, was also remarkable. The extension must have restored the displaced portion of bone to its proper situation, must have removed the pressure from the spinal marrow, so as to restore both motion and sensation. It would have been more satisfactory in this case to have allowed the man to have got up immediately, to have observed the result; but still it would not have been warrantable, in case the bone might have been again displaced, and we unable to restore it to its proper situation. In regard to fractures of the arches of the vertebræ. When one is broken and depressed, why should not the same treatment be followed as under similar circumstances in injuries of the head? Why should not the depressed portion of bone be removed, and nature have a chance of repairing the mischief? The late Mr. Chine and Mr. Tyrrell treated those accidents in the same way as injuries of the head, and it must be considered that such a plan is most praiseworthy, and ought to be followed, and I most strongly recommend it in such accidents. We should have recourse to surgical means, and not rely alone on medicinal agents. In regard to the extent of the employment of extension, to what degree it may be carried with safety, and the best means of using it. I consider when the accident occurs

* Page 250.

either in the cervical or upper dorsal vertebræ, that the manner it was used in the last case would be sufficient, but that when the injury is lower, about the last dorsal or lumbar vertebræ, that it may be necessary to carry it to a greater extent, the body may then be fixed, and a belt may be buckled round the pelvis, and extension used by the aid of a small windlass attached to the lower part of the bed, or the patient placed upon the couch which I have contrived for spinal curvature. It has just occurred to me that a great advocate for the use of extension, in such cases, used to relate a tale, that, as he was one day walking down Holborn Hill, a gentleman, on horseback, met with an accident; his horse slipped, and he fell upon the back of his neck, and remained in an insensible state upon the spot where he fell: my friend examined him, and immediately distinguished that he had dislocated one of the cervical vertebræ; he, therefore, sat upon the curb-stone, placed both feet upon the gentleman's shoulders, took hold of the head, with both his hands, using extension, and reduced the dislocation, but I will not vouch for the truth of this statement.

It is my fixed determination to carry the remarks already made into practice at a fitting opportunity, and I shall use the utmost caution to do no mischief; if the means are productive of no beneficial effects, at all events I shall have a conscious conviction of doing my best, so as to allow nature to repair the injury resulting from the accident; for should the paralysis be relieved, and motion and sensation restored, the reparative power may go on and the patient be cured; whereas while the paralysis remains in the numerous cases, which I have previously seen, where patients have lingered many months, no signs of ANY UNION of a fracture of the vertebra or laceration of the ligaments have been noticed after death; to exemplify this there is a preparation in the museum of the Middlesex Hospital, of fracture of the eleventh dorsal vertebra, the patient lived upwards of a month; and by a careful examination, no signs of union can be seen; there is no appearance of nature having set up any action to restore the part, either by union or any other means.

Henry Blades, æt. 29, admitted into the Middlesex Hospital, under Mr. Tuson's care, April 25th, 1843.—He was carried into the ward in an insensible state; pupils dilated; no sense of feeling, apparently, except on touching the upper part of the back close to the occiput: on pressing the cervical vertebræ with the hand, he moved his feet, and, on using pressure upon any of the dorsal vertebræ, the same motion took place, a movement and twitching of both legs and arms (a convulsive spasmodic action) which might have been expected from the effects of a galvanic spark passed along the spine. Upon pressing against any of the lumbar vertebræ, the same effect was not produced. Upon turning him round, and examining the spinous processes carefully, a depression was discovered in the situation of one of the cervical vertebræ, with some slight sensation of crepitus; but neither very satisfactory. It appeared to me, should any displacement of any one bone of the spine exist, that its situation would be benefitted by the use of extension, so as to endeavour to restore it to its proper place; at all events, no bad result was likely to take place from a trial of this plan. The pillows were removed, the head placed flat upon the bed, which was fixed by a hand placed on either side; an assistant now made gradual extension, by taking hold of each leg, and pulling steadily and progressively, which was continued for between two and three minutes; a change took place immediately in the respiration; he breathed hard, and with apparent difficulty, before, but now with perfect ease; so much so, that some doubts were entertained as to that function being carried on. The extension was directed to be gradually discontinued, when it was found that the patient breathed with great freedom: pulse 48, hard and full; 14 ounces of blood were taken from his arm: and this patient was left lying upon his back, with a small pillow beneath the cervical vertebræ, and other cases attended; the loss of blood had an evident effect upon the pulse. Whilst examining a case two beds distant, a moan was heard from the bed of this patient with injury of the spine, and, upon looking towards him, it was seen that he had turned round upon his right side. Upon examining him now, it was found that he could move his legs and arms in any way when told to do so, but had no feeling in any part, he could not tell whether the arm or leg were pinched on either side. He stated that he had been working since half-past three o'clock—that he had had nothing to drink, except a small glass of gin, and at nine he had fallen from the top of the van. He complains of pain at the upper part of the neck, and kept his hand to that part; when touched, in this situation, he draws up his legs and arms involuntarily. When visited, three hours after, at 12 o'clock, the sensation of the legs and arms had returned; he could first feel anything touching his arms, and, afterwards, his legs; he could now feel if any part of the skin was slightly touched. He is perfectly sensible, and answers questions very readily. He stated that he was on the top of the van, unloading it, when he fell, the back part of his neck struck against the shaft, and, afterwards, he fell to the ground upon the back part of his head and neck: pulse 60. He complains of pain and uneasiness at the upper part of his neck; but he moves freely in any position; he was ordered to take five grains of calomel immediately. During the time he was insensible, the face was flushed and red, and the left eyelid moved frequently, as if spasmodically.

26th.—The pain at the back part of the neck had left; he slept well during the night; bowels have acted three or four times: pulse 65. Can move in any way, and has been out of bed several times.

27th.—Said he was quite well, only rather weak; up and dressed, and would go out of the hospital to his business as carman, although strongly recommended not to do so.

James Sullivan, a labourer, æt. 35, was admitted into the Middlesex Hospital at half-past 12 o'clock, under Mr. Tuson's care, April 24, 1843; having fallen from a ladder, a height of about 30 feet, on a stone court, half an hour previously. He was sensible on admission, with a perfect recollection of all the circumstances of the accident: pupils natural; pulse 48. The power of motion was much impaired in his arms, the sensation was considerably dimished; but his legs, and the lower part of his body, up to about a level with the mammæ, were in a state of perfect paralysis; extremities cold, and respiration performed by the diaphragm, the abdominal muscles being quite passive, and the ribs motionless: complained only of pain in his neck, and there was great sensibility on touching, or pressing, however slightly, over the upper dorsal and lower cervical vertebræ. At half-past 3 o'clock, P.M., sensation seemed partially to have returned in his legs; he said he could feel when his left foot was touched; but this again disappeared in two or three hours afterwards, and in the evening was absent. The carotid arteries seemed pulsating rather tumultuously. Extension was tried in this case for a minute or two, by fixing the head, and then using gradual extension from the legs, but without any sensible effect upon the paralysis. He was ordered ten grains of calomel. 11 o'clock, P.M., was much in the same state; had made no water; it was drawn off by the introduction of a catheter; pulse 60; breathing more natural. It should have been stated, the abdominal muscles began to resume their share in the function of respiration, though very feebly, about one hour after admission. Two grains of calomel, and a quarter of a grain of tartarized antimony, every six hours. An enema, with an ounce of spirit of turpentine immediately.

25th.—10 o'clock, A.M. Has slept very little, only for short periods at a time; paralysis in the legs, perfect, and less power over his arms, especially the right, which he can move very imperfectly. The injection had acted upon the bowels two or three times, but unconsciously to himself; no water passed: pulse 58.

11 o'clock, P.M.: much about the same; pulse 56; water drawn off.

26th.—Remained in the same state as yesterday; water drawn off, which was of a dark colour; complained of pain in the lower part of the abdomen, and of a sensation in the spine at the small of the back, as of pins and needles, when he swallows; pulse 56; skin warm, and had slept tolerably well.

11 P.M: condition the same in every respect; on passing a catheter, no urine followed, only a little blood; abdomen distended.

27th.—Has slept since three in the morning; pulse 80. Another attempt at drawing off his water, produced the same results as last night; abdomen more distended. A tube was recommended to be passed into the rectum, so as to remove the flatus; its use was of no avail: omit calomel and antimony; take three grains of mercury with chalk, twice a-day.

11 P.M. Pulse 86. Tension of abdomen increased: bowels had not acted since the previous night. No water passed when the catheter was introduced; complains of much pain in the region of the bladder. A common enema to be given.

28th—About a pint of water passed by the introduction of the catheter this morning; the catheter was left in. He can move his right arm a little better; he appeared to breathe with more difficulty; pulse 80, bowels were relieved by the enema.

11 p.m.—The water has been running through the catheter all day. He appeared evidently weaker, face flushed, and complained much of his breath going; had not strength to expectorate the mucus in his throat, which teased him. He was ordered five grains of carbonate of ammonia with half a drachm of sulphuric æther in camphor mixture.

29th—Pulse weaker, skin warm, water has been running all night, wished much to lie on his side, and was turned.

11 o'clock, p.m.—Had a little sleep, breathes with more difficulty, evidently sinking, pulse small.

30th, 9 o'clock—Still alive, pulse very small, breathed with great difficulty. Died at twelve o'clock. *Post-mortem* examination. Upon looking at the vertebral column, a dislocation was discovered between the sixth and seventh cervical vertebræ; the sixth being pressed forwards on the spinal marrow, which had been lacerated by it, to more than half its extent at its posterior surface; it was not quite so much torn on the left side, but at the same time this was not so very evident.

Remarks.—From the laceration of the spinal marrow in this case, the use of extension could not have been of any service, supposing it had been used to such an extent so as to have brought the displaced vertebra in its proper situation; at the same time the nature of the accident exemplified the utility of the attempt being made to replace the bone again in its situation so as to remove the pressure it produced against the spinal marrow, for had not the laceration existed, and had the bone been replaced, and the pressure removed, it is fair to believe that the paralysis would have ceased, and the sensation been restored and a chance given to nature to repair the injury. Thus far in this accident as in displacement of any other bone, the counter-action, the contraction of the muscles should be overcome, so as to cause the displaced part to regain its normal position.

ACTION OF AMMONIA UPON THE PROTOCHLORIDE OF PLATINUM.

By D^r. MICH. PEYRONE, of Turin, late of the Giessen Laboratory.

Translated at the Author's request for the "Medical Times," By Dr. SHERIDAN MUSPRATT.

Professor Magnus, of Berlin, first undertook a series of investigations upon the behaviour of protochloride of platinum with ammonia. This excellent chemist obtained a body, which is well known in chemistry, under the name of the "green salt of Magnus." The interest which the discovery of this compound excited was greatly heightened by M. Gros, who studied its action towards nitric acid, and M. Reiset, the different metamorphoses which it undergoes when treated further with ammonia.

These two chemists procured, in their researches, two new classes of bodies of as remarkable, as unexpected, constitution: bodies which may be considered as supports to the theory of compound

radicals, and, therefore, must involve great interest for the scientific world.

M. Gros ascertained, during his beautiful investigations, that the salt of Magnus, by the action of nitric acid, is converted in the heat into a white crystalline powder, which dissolves readily in water, leaving behind pure metallic platinum; and that the solution deposits, on evaporation and cooling, small shining prisms, which, by repeated crystallizations, become almost colourless.

The analysis of these crystals led to the empyrical formula:

$$Pt\ Cl\ N_3\ H_6\ O_6$$

which induced M. Gros to consider them as a nitrate of a base of the annexed constitution:

$$Pt\ Cl\ N_2\ H_6\ O.$$

In fact, he obtained, by submitting his salt to the action of sulphuric acid, of oxalic acid, and of hydrochloric acid, a type of compounds whose composition is, according to his analyses, expressed by the subjoined formulæ:—

Nitrate .... $Pt\ cl\ N_2\ H_6\ O + NO_5$
Sulphate.... $Pt\ cl\ N_2\ H_6\ O + SO_3$
Oxalate .... $Pt\ cl\ N_2\ H_6\ O + C_2\ O_3$
Chloride.... $Pt\ cl\ N_2\ H_6 + Cl$

M. Gros also remarks, that when his nitrate is brought in contact with a phosphated alkali, double decomposition ensues—a nitrate of the alkali being formed, and a phosphated salt of the platinum base; and lastly, he says that his base, when combined with tartaric acid, citric acid, and malic acid, affords fine crystallized salts.

M. Reiset, on the other hand, has occupied himself with the action of ammonia upon the same green salt which was the starting point in M. Gros's researches.

He found with this body, when boiled in a concentrated solution of ammonia, and the menstruum treated repeatedly, as soon as the volatile alkali was expelled with more of this re-agent, the whole was perfectly dissolved, and that, by slow evaporation, the liquid deposited small crystals, which dissolved in water and were re-precipitated by alcohol. M. Reiset arrived at the following formula for these crystals:—

$$Pt\ cl\ N_2\ H_6$$

And, on pursuing the subject, he found that they were, by the action of chlorine and of nitric acid, resolved into two bodies possessing the same constitution as the chloride and nitrate of Gros; he, therefore, supposed that the substance, $Pt\ el\ N_2\ H_6$ was the radical of the salts described by the latter—named chemist.

In perusing the following pages, the reader will observe what value is to be attributed to this hypothesis. In my opinion, the importance of M. Reiset's discovery does not lie in the real or supposed existence of his radical, but in the new series of salts which he has given us. Taken up with the existence of his radical, it escaped M. Reiset that it might be obtained free of chlorine by much simpler means than those which he adopted. He employed for this purpose silver salts, and, with the aid of these powerful dechlorifying agents, obtained a new class of salts containing none of this element.

In treating his radical with nitrate or sulphate of silver, he observed a very simple decomposition; there is formed insoluble chloride of silver on the one hand, and on the other a new nitrate or sulphate, which remains in solution. These decompositions are represented in the two appended equations:—

$$\left\{\begin{array}{l} Pt\ cl\ N_2\ H_6 + Ag\ O, NO_5 \\ = \\ Ag\ cl + Pt\ N_2\ H_6\ O, NO_5 \end{array}\right\}$$

$$\left\{\begin{array}{l} Pt\ cl\ N_2\ H_6 + Ag\ O, SO_3 \\ = \\ Ag\ cl + Pt\ N_2\ H_6\ O, SO_3 \end{array}\right\}$$

By treating the sulphated salt with barytes water, M. Reiset obtained:—

$$Pt\ N_2\ H_6\ O,—$$

the base of his new salts. This base, he remarked, retained one equivalent of water above 212° Fahr. It is soluble in water, crystallizable, and possesses caustic properties in a very high degree; so much so, that it might readily be confounded with potash or soda. It absorbs carbonic acid with great avidity from the air; therefore, all the precautions required in decarbonizing potash or soda, will be found of great service when preparing it.

The possibility of isolating the base of Gros became in a high degree probable, from the investigations of Reiset. This idea was the starting point of my researches, but the observations which I made in the course of my experiments—as often happens—led me soon out of my original direction, and brought me upon facts which, in point of importance, cannot be overestimated.

It was my ardent desire to extend further this investigation, but unforseen circumstances induced me to defer my labours till the next winter. I found, however, that it would be convenient to publish a part of them, intending to recur as soon as possible to the numerous facts which I have cursorily mentioned in different parts of the present treatise. I am determined to pursue this subject with all my energies, without having regard for the difficulties to be encountered at every step in so expensive and delicate a research. After having tried in vain all the methods imaginable for the preparation of protochloride of platinum, in order to avoid the endless and tedious operations recommended in works on chemistry, I adopted the one proposed by Professor Liebig, and followed out by Böekmann, Gros, Litton, and Sehnederman, in the formation of their salts.

According to this method, a stream of sulphurous acid gas is passed into a solution of the perchloride of platinum until the menstruum becomes colourless, and by this indirect way the protochloride of platinum is obtained with great readiness. When this solution is treated with carbonate of soda, a double salt of sulphite of soda and protoxide of platinum deposits, which has been described by Litton and Schnederman; and, by the simple action of hydrochloric acid upon this compound, the protochloride of platinum is obtained. In this treatment, a large quantity of chloride of sodium must necessarily form, as the above-mentioned double salt is composed of one equivalent sulphite of protoxide of platinum, and three equivalents sulphite of soda: a constitution which my analyses confirmed. The presence of chloride of sodium appeared to me to be in nowise disadvantageous for the purposes for which I had obtained the protochloride of platinum, for, when the liquid is evaporated, the chloride of sodium crystallizes out, and a solution of protochloride of platinum is obtained, containing scarcely an appreciable quantity of this salt.

I added a great excess of ammonia to protochloride of platinum, procured by this process, and obtained in a few moments a precipitate, the appearance of which indicated the presence of two substances. The salt of Magnus is insoluble in hydrochlorie acid; I therefore boiled the mixture in this menstruum and filtered, in order to effect, if possible, a separation. The filtrate, as soon as it touched the sides of the recipient, deposited a yellow powder, and, on cooling, the same substance precipitated in small crystals, very much resembling the lichens seen on the trunks of different trees. After perfect refrigeration, I decanted off the liquid, which was of a slight yellow colour, collected the yellow body upon a filter, and edulcorated. I then dissolved it twice more and thought it perfectly fit for analysis.

Before entering upon the details of my analysis, I must remark that all the hydrogen determinations, in this paper, were made with chromate of lead, and all the platinum determinations—with the exception of a few cases, upon which I shall treat in the description of the qualities of the single bodies—by heating in porcelain capsules. The chlorine determinations are exceedingly troublesome, for, when a platiniferous substance is heated with lime, or an alkali, a particular platinum compound is formed, which dissolves in nitric acid and precipitates on the addition of nitrate of silver. I was, therefore, obliged, when determining the chlorine in my platinum salts, to introduce the substance to be analysed into a small glass tube, which I placed at the end of the combustion tube, and prevented immediate contact with the lime by interposing a layer of pounded glass. By this method, the loss of platinum, and the closely corresponding excess of chlorine, is avoided, which is always observed in the determinations with carbonate of soda.

Analysis of my substance dried at 212° F.:—

0·477 grm. substance gave 0·0944 grm, water=2·19 p. c. hydrogen.

0·6793 grm. substance gave 0·1382 grm. water =2·26 p. c. hydrogen.

0·3992 grm substance gave 0·0777 grm. water =2·16 p. c. hydrogen.

0·6646 grm. substance, when heated, gave 0·4315 grm.=64·94 p. e. platinum.

0·4966 grm. substance gave, according to the method of Varrentrapp and Will, 0·7048 grm. chloride of platinum and ammonium=9·0 p. e. nitrogen.

These numbers express the formula:

$$Pt.\ Cl.\ N\ H_3$$

which I append in per cents., along with my own results:

		Theory.		Found.
1 Equiv.	Platinum	1233·16 ..	65·23 ..	64·94
1 "	Chlorine	442·65 ..	23·42 ..	*
1 "	Nitrogen	177·06 ..	9·37 ..	9·00
3 "	Hydrogen. ..	37·50 ..	1·98 ..	2·19 .. 2·26 .. 2·16
		1890·47	100·00	

(To be continued.)

OBSERVATIONS ON A WORK ENTITLED "CHEMISTRY IN ITS APPLICATIONS TO AGRICULTURE AND PHYSIOLOGY." BY PROFESSOR LIEBIG M. D. PH. D.

(*From a Correspondent.*)

(Continued from page 366.)

"From whence," says Liebig, "do vegetables derive their carbon? and in what form is carbon contained in the atmosphere? These two questions involve the consideration of two most remarkable phenomena, which, by their reciprocal and uninterrupted influence maintain the life of individual animals and vegetables, and the continuance of both kingdoms of organic nature. One of these is connected with the invariable condition of the air with respect to oxygen. 100 volumes of air have been found at every period, and in every climate, to contain twenty-one volumes of oxygen, with such small deviations that they must be ascribed to errors of observation. Although the absolute quantity of oxygen contained in the air appears very great, when represented by numbers, yet it is not inexhaustible. One man *consumes* by respiration 25 cubic feet of oxygen in 24 hours. 10 cwt. of charcoal consume 36,066 cubic feet of oxygen during its combustion, so that a single iron furnace consumes annually hundreds of millions of cubic feet; and a small town in Giessen, (containing about 7,000 inhabitants) extracts yearly from the air by the wood employed in the fuel, more than 551,000,000 of cubic feet of this gas."

Carbon is contained in the atmosphere in a variety of forms. It is given forth by respiration of animals in union with vapour, that is to say as a triple, and not as a quadruple compound. It is given forth by combustion as a triple compound, the carbon being united with oxygen and hydrogen in varying proportions; all vegetable bodies yield it in abundance, and both animals and vegetables yield it by the vital and destructive processes, but *always* in union with hydrogen; in the processes of decomposition from corrupting waters, marshes, pools, and ditches, and by many chemical processes going on in the mineral kingdom, as carburetted hydrogen. The experiments of Lavoisier, Morveau, M. Tennant, Pelletier, Scheele, Mackenzie, and a host of succeeding chemists, demon-

* 1·0763 grm. substance gave, when heated with carbonate of soda, 0·6943 grm.=64·50 p. e. platinum, and 1·0445 grm. chloride of silver=23·94 p. e. chlorine; 64·50+23·94=88·44, the sum of the found platinum and chlorine per cent., which corresponds very closely with 88·64, the calculated quantity. This example, as well as numerous others, which I might name, are sufficient to show that the method which I adopted for the determination of the chlorine, is decidedly the most accurate.

strate the existence of carbonic acid gas, but they also prove that its elements combine in varying proportions, that charcoal even long after ignition tenaciously contains hydrogen, and although its further presence after long burning be not detected, we may still reasonably doubt, as in the case of silicia, whether hydrogen is not one of the essential elements. It can be made to combine with oxygen in varying proportions by mere mechanical action. Its acidifying powers rather tend to confirm than to disprove the presence of hydrogen in carbonic acid gas. The experiments of M. Cruikshanks, and others, palpably demonstrate the presence of hydrogen in oxide of carbon, although in less quantities than in carbonic acid gas.

As carbonic acid gas, its existence in the atmosphere must of necessity be very uncertain: it is the heaviest of all gases, except the sulphureous; its weight to common air being as 3 to 2, and on this account cannot ascend to any height in the atmosphere, unless mechanically acted upon by aërial currents; thus it forms a stratum of two or three feet in depth in tropical countries, where there is rank vegetation, or excess of decomposition of animal and vegetable matters; when elaborated by manual processes, it is still more dense in volume, uniting with sulphuretted hydrogen and carburetted hydrogen, and by this means is rapidly precipitated in the immediate neighbourhood of the mine, and when in excessive quantities blighting the vegetable productions of the earth, and by uniting with the soils rendering them barren and unproductive. By all mining, and many manufacturing processes, the lower atmosphere becomes vitiated with carbonic acid gas, but the mixture is merely mechanical, and the waters and the earth rapidly abstract it from the atmosphere. On the other hand, when evolved as carburetted hydrogen, which is not half the weight of atmospheric air, it mounts upwards to that medium in which it finds an equilibrium, and there uniting with sulphuretted hydrogen, or other vapourous exhalations, produces the phenomena of clouds, in which chemical and mechanical changes of elements take place, productive of rain, hail, snow, and other phenomena. Even M. Saussure, on whose authority Liebig appears solely to rely, found the greater quantity of carbonic acid gas in the higher elevations.

The experiments of chemists exhibit two elastic gases mutually diffused through each other, and in definite proportions, and that these bodies, thus united, are capable of producing certain phenomena; but they do not prove that any permanent combination is found in the atmosphere, but quite the contrary; the tendency of carbon is always to contract, or concentrate its volumes; uniting with oxygen or with atmospheric air, it has still this tendency, so much so, as to confine the atmospheric volumes or the oxygen within a more circumscribed space; but the tendency of hydrogen is to expand, and when evolved by the power of heat, to pass through the scarcely resisting medium, carrying away such bodies as are united with it by the power of affinity or cohesion. Charcoal cannot by any chemical means be rendered absolutely pure, and there are weighty reasons for supposing diamond to be a compound, such as its laminated structure, its varieties of colour, structure, &c.

It is an extravagantly ridiculous supposition, that the atmosphere always contains a mean average of 0 000,415 volumes of carbon, when we consider the stupendous processes by which this element is perpetually given to and abstracted from it. Every region of the earth is to be considered a vast laboratory; again divisible into countless parts, in which these processes are variously carried on; and every portion of the oxygenic atmosphere and of the waters has phenomena peculiar to that portion, floating or diffusing in each uniform medium. Of the quantity of oxygen consumed by an iron furnace, all that is lost is the portion permanently uniting with the oxydating earth or metals, the remainder is returned to the atmosphere with the carbon, and the carbon carried off is again precipitated or absorbed by the earth. Even Liebig, to bear out his theory, tells us that "this equilibrium of elements could not always have been; that there was a time when carbon was in great excess in the atmosphere—in such excess, in fact, as to demonstrate that no other than lizards and other creatures of amphibious nature could have existed." True, he is not father to this thought, but the notion is no less absurd on that account, and it completely overturns his own theory, for if the carbonic acid gas in the atmosphere has thus diminished in quantity since those distant epochs, have we not a just right to infer, as the causes of effects thus manifest are still in operation, that the carbonic acid gas, that is to say, the supplies of the vegetable creation, are constantly diminishing, and that the requirements of a rapidly populating earth and the spread of cultivation will soon absorb the insignificant quantity now remaining, unless the one half of the world be destroyed to supply the other half: these are the absurdities of science.

Again, physiological chemists speak of oxygen being consumed, so as to convey ideas to common minds, that the oxygen is actually devoured and permanently lost to the atmosphere; the fire consumes vital air, but the act of combustion is merely the act of change of combination of gaseous bodies, the oxygen received is immediately given forth, and in the combustion of some bodies additional quantities are obtained by depuration by fire; but such is not the case in the fossil and mineral kingdoms, which are formed by abstracting oxygen from the atmosphere, as well as carbon, and permanently fixing it therein, by which, and other chemical and mechanical processes, the varied phenomena are produced. And here, indeed, are opened other and more comprehensive views of nature. The organisations, during life, having performed the labours assigned to them, such as elaborating gaseous, aqueous and consolidated bodies, have now another part to perform. The deposited remains of creatures of the deep and the material elaborated by the animal and vegetable digestive processes, instead of diminishing and giving up their elements for the support and maintenance of succeeding generations, form united masses or beds and perpetually increase in their quantities, so long as the causes of effects continue, not only by additional remains, but also by perpetually drawing upon the elements of the air and water, for one or more of their constituents, or for matters held by them in suspension or in solution. Thus the calcareous animals preserve their earths and elementary constituents, but vary in their changes as influenced by local action and local association: they become marl, calcareous matter, or portions of limestone rock, or they are converted into sands or larger siliceous aggregates in which their outer configuration is preserved; even fishes enter into the siliceous state. And what is Silica? an undecompounded, but not a simple body; it is an earthy base oxydated, and in which carbon is one of the chief constituents; this is demonstrated by observation, but chemistry has not strictly confirmed it, if we except the experiments of Sir Humphrey Davy and Berzelius, which go far in confirming these original views. Here, then, we find that physiological chemists are profoundly ignorant of one of the most common operations of nature, manifest in every region of the earth, and yet, forsooth, chemistry is to take the lead, not only of physiology, but also of natural philosophy—experiment is to precede observation. Whether silica is an acid, an alkaline, or a neutral body, is not yet definitively settled, because its phenomena are found varying and contradictory. I would say, after Bichat, that if men had cultivated physiology before analytical chemistry, they would have discovered numerous applications of the former to the latter.

Before proceeding further in this subject, I would examine the very foundations on which Liebig builds his system of chemistry, animal and vegetable organic action: let us set out with a determination to take nothing for granted, to examine as anatomists rather than as analytical chemists, to test rather than to destroy. Life is so intimately interwoven in its qualities, capacities, and powers, in the duties it has to perform, and in the share it has in the complicated phenomena following in the wake of, and preceding it, that we can only consider it as one and indivisible.

(To be continued.)

PARISIAN INTELLIGENCE.

(FROM OU OWN CORRESPONDENT.)

Paris, July 25, 1844.

On Pleuritis with Effusion, by Professor Chomel.—At No. 2, St. Agnes Ward, is a man, ætat 28, of a tolerably good constitution, who, about six weeks ago, without any known cause, was seized with a pain in the side, followed by insomnia, anorexia, dry cough, dyspnœa on going up stairs. The affection presented some peculiarities in its mode of development; for the pain experienced was very like that of pleurodynia, or rheumatismus, and yet, three weeks after its appearance, having consulted a physician, the patient was found to be affected with a pleuritic effusion. Very often, a disease which commences by rheumatismal pains, considered by the generality of practitioners as of no moment, is followed by very serious lesions. When seated on the walls of the thorax, these pains ought never to be neglected, and severe pleurodynia ought always to be treated as if pleuritis existed, the more so, as the latter almost always becomes complicated with it. Therefore, even when auscultation and percussion indicate no abnormal lesion, the disease must be vigorously combatted, by general and local bleeding, and other appropriate remedies; on no account ought you to permit a pain, of whatever nature it may be, to become permanently fixed on the thoracic parietes, as it may soon give rise to an affection of the pleura.

The symptoms presented by the patient at his entry, were: pulse 96, rather strong; facies natural; dull sound of the inferior four-fifths of the left side. These signs are sufficient to enable you to form your diagnosis; not that I mean to say, that you ought to content yourself with them, and neglect others which are exceedingly useful, inasmuch as they confirm the opinion you had previously formed. In general, when you observe a dull sound on one side of the chest, with a calm and natural expression of the features, you may diagnosticate with certainty: *pleuritis with effusion.* But, is it a sanguineous effusion? No, unless a traumatic cause exist. Is it induration of the parenchyma pulmonaris? No, for were such the case, the facies would not be so natural: there would be dyspnœa, orthopnœa, fever, &c. It is true, that, in some few cases, an alteration of the facies accompanies pleuritis, but this may be considered as an exception to the general rule; and you may safely assert, when a patient offers a dull sound on percussion, slight fever and dyspnœa, and general health apparently good, that he is suffering from a pleuritic effusion. Avenbrugger long ago pointed out this important fact, but without explaining it; auscultation had not then been discovered:—that valuable guide by which we are enabled to give the reason, and point out positively the existence, of the disorder. On auscultating the patient, I discovered: *anteriorly*, respiration feeble on the parts in which percussion gave a clear sound; this diminution of the respiratory murmur always exists in the portion of the lungs not covered by the liquid, and is not, as many authors have asserted, puerile; the explanation is easily given:—the lung is compressed, and reduced in volume, consequently, it cannot dilate. When this phenomenon is remarked, it is on the sound side; whilst, on the diseased one, the respiratory murmur decreases instead of augmenting, on account of the pressure exercised by the liquid. *Posteriorly*, œgophony, principally on a level with the inferior angle of the scapula; slight bronchophony, especially when we placed the patient on all fours. When these two symptoms do not exist simultaneously,—which, in my opinion, is often the case—it is the former that you will hear. Why so? I confess I am quite ignorant; perhaps it is, because it is louder; this is the only plausible reason I can give, and it is rational to suppose, that the *bruit*, which is the more intense, will mask completely the weaker one. In the present instance, in a sitting position, œgophony alone is heard, and it is only, as I before said, when the patient is placed on all fours, that bronchophony likewise is perceived. In this position, probably, the lung, from its specific gravity, rises to the surface of the liquid, and is applied immediately

to the walls of the chest, thus permitting the sound of the voice in the bronchi to be heard. The cough was dry, similar to that called nervous, because no sputa are thrown up: no cerebral symptoms; voice normal; in short, every sign seemed to indicate the presence of a disorder not very serious, notwithstanding the matity of one side of the chest. The only remedies employed were: temporary blisters, slight diaphoretic tisannes, and mild purgatives. I did not have recourse to the lancet, because the disease had existed three weeks before he came to the hospital, and also because the patient was of a lymphatic temperament. In general, blood-letting is not indicated, when pleuritis has reached the second stage, and when liquid is effused; in this case, all your efforts should tend to favour the reabsorption of the effusion. To-day (three weeks since his admission), his position is considerably ameliorated; the œgophony has disappeared posteriorly; the respiratory murmur is now heard superiorly, still absent in the inferior and posterior two-thirds. I have not heard, though I auscultated the chest every day, with great care, the *secondary ægophony* (*égophonie de retour*), and this circumstance is not at all extraordinary; as, during the absorption of pleuritic effusion, it seldom occurs, except when liquid is, in five or six days, effused in sufficient quantity to fill up all the cavity of the pleura, and when absorption takes place promptly; in these cases, at their maximum of intensity, œgophony cannot be heard, but it appears as the liquid diminishes in quantity; whereas, if a fortnight or three weeks elapse between the moment when the effusion is at its maximum, and that in which absorption commences, you will not hear secondary œgophony. This difference is owing to the following cause: a lung which has been compressed during three weeks, is not in the same state as if this had taken place five or six days only; it has lost its permeability, its elasticity, its anatomical conditions; it is no longer the same; and it is, therefore, natural not to hear the secondary œgophony in cases similar to that under consideration. But to return to our subject: towards the inferior portion of the lungs, where bronchophony was not heard, and where the respiratory murmur was feeble, auscultation has at length indicated a normal sound, and the only part, where œgophony is still heard, is on the point corresponding to the insertion of the latissimus dorsi. The chest being examined attentively, in order to discover whether the friction-sound existed, I could not find it in the upper third; but, between the sternum and the nipple, I heard a sort of humid crackling noise, somewhat analogous to that produced by the rupture of false membranes. This could not be attributed to the presence of mucus in the bronchi, for, when a limited, bronchial, mucous *râle* exists, it is never heard anteriorly, but posteriorly. The friction-sound is heard when, by making the patient change his position, the liquid, obeying the attraction of gravitation, accumulates inferiorly, leaving a thin layer between the pseudo-membranes covering the pulmonary and costal pleura. There are two other important circumstances to be examined, when a certain quantity of liquid is effused, viz.: mensuration of the thorax, and the comparison between the circumference and the diameters in the normal, and in the diseased, state. In many cases, although the pleura contains a liquid, still no change takes place in the dimensions of the thorax, because the lungs, yielding to the pressure exercised on them, establish, as it were, a sort of compensation; but this is no longer sufficient, when the effusion is considerable, and it is then that the cavity of the thorax increases, as may be proved by mensuration. I have more than once stated, how important it is to ascertain precisely the antero-posterior diameter, because, the more the thorax assumes a globular form, the greater its capacity, even if the circumference be normal; its capacity is even still greater, should it assume the cylindrical form, and yet mensuration would teach us nothing. You must, therefore, have recourse to both methods, in order to form an accurate judgment, notwithstanding the difficulties attendant on the operation. In private practice, it is not of general use, especially as its knowledge is available, more in a scientific, than a curative, point of view, the physician being able to overcome the disease without it. In performing it, the patient must be erect, the arms elevated, and the hands clasped on the summit of the head. One extremity of a bit of tape must then be placed on a point of the sternum, previously marked, and the other on the spinous processes of the vertebræ, passing over the nipple in men, and under the breast in women: this must be done first on the diseased side, and then on the sound one, the difference indicating the increase of the circumference. Mensuration of the diameter is obtained by means of a large compass, one point being placed on the nipple in man, and under the breast in women, the other on the inferior angle of the scapula; this is highly important, for, as I before stated, the more the thorax becomes cylindrical, the greater its capacity. In the present instance, circular mensuration gave 1.1-6th inch more on the diseased than the sound side, and the diameter from about 2 to $2\frac{1}{3}$ inches. But a peculiarity here exists, which must not be overlooked; the patient is a little rachitic; both sides of the chest are not of equal size; it is, therefore, barely probable that the increased antero-posterior diameter is owing to the pleuritic effusion, but much more so to the rachitis, as his body is not symmetrical. Certain circumstances render this method not of general use: the individual must be naked from the waist upwards; now, in private practice, patients, especially females, are averse to this, and in the hospital, during winter, it cannot always be employed, for fear of the patient taking cold; nevertheless, I consider it of great use, from the curious signs which result from the comparison of both sides. In the commencement of pleuritis, mensuration indicates an increased volume of the affected side, which may be merely a line or two. But at a later stage, when the disease begins to decrease, the side, which had augmented, offers a phenomenon quite the reverse: for, as the liquid is absorbed, the lung is unable to expand, on account of abnormal adherences, and consequently, a sinking of the thoracic parietes takes place, and the diseased side, instead of being larger, is, on the contrary, smaller. This fact was announced by Laënnec. I will here relate to you a case observed in my practice, on account of the *rapport* it presents with the ideas I have just announced. I was called to attend a colleague affected with pleuritis, complicated with effusion of a considerable quantity of liquid; having measured the thorax, I requested him to note down the dimensions. The patient recovered; and six months after, a new examination shewed that the thorax had diminished in volume on the affected side. Two years after, having met the same colleague, I had the curiosity to measure the chest, and was not a little surprised on finding, that the side, formerly smaller, was not only as large, but even larger than the other. In all probability, it was naturally more voluminous, and as the lung became more and more permeable, it regained its normal size. Does this phenomenon take place in every case? I do not think it possible for the lung, after having been compressed for six months or a year, ever to assume its primitive size, and, consequently, the thorax remains depressed. Auscultation proves, that, in these cases, the healthy lung performs the functions of the diseased one; it breathes for two, if such an expression may be employed. The former augments in size, in an equal ratio with the diminution of the latter, and this, although the antero-posterior diameter of the thorax is less, from the approximation of the sternum to the vertebral column. Here, the fact is analogous to that which occurs when a limb is cut off; the remaining one increases in strength and size, as if it assimilated what had been formerly intended for its fellow.

The diagnosis of pleuritis is, in general, easy; but two circumstances may occur to render it more difficult. In its first stage, it may be taken for pleurodynia; hence the necessity of not hesitating to make use of active treatment, as the latter very frequently terminates in the former. In some cases, a vomica bursts into the pleura, and the pus, by its presence in the cavity formed by that membrane, gives rise to a phlegmasia sometimes very intense. In other instances, the vomica communicates at the same time with a large bronchus and with the pleural cavity; this produces pneumo-thorax, from the air penetrating into the latter at the same time as the pus. There is a peculiar form of pleuritis, which is deserving of being mentioned: that which complicates pneumonia; this last is seldom alone, but both almost always exist simultaneously, constituting pleuro-pneumonia. In the acute stage, no effusion takes place in the pleura; but it frequently happens that, gradually, the parenchyma pulmonaris is restored to its natural state, and at the same time a liquid effusion takes place; the facies then become natural; dulness increases in extent and in intensity; in a word, pleuritis has succeeded to pneumonia or pleuro-pneumonia. The decrease of the general symptoms is, therefore, highly important with respect to the gravity of the disease.

The danger attendant on this affection is considered to be more or less, by various authors; some, and Dr. Louis is one of the number, assert that pleuritis is not a serious disease, but ceases spontaneously, and does not need any active remedies. Without denying that such may often be the case, still I think this cannot be established as a general rule, for uncomplicated pleuritis is sometimes dangerous, especially when it occupies both sides. Dr. Louis says that this is owing, not to the pleuritis, but to the existence of tubercles in the lungs; now, if this complication be true in some cases, still it must be admitted that the exceptions are very numerous. Whenever the effusion is so considerable, that the heart and mediastinum are displaced, the disease is highly dangerous; so much so, that, until last year, I never observed a case of this kind end successfully. Again, when instead of a limpid serosity, the pleura contains a sero-purulent liquid, the case is equally serious; unfortunately it is impossible to ascertain the precise nature of the liquid; we may presume that it is pus, but we cannot positively assert it. This pus may be absorbed, or after communicating with a vomica and the bronchi, be expectorated; but, let the termination be what it may, the disease is not less dangerous.

There is a curious and remarkable circumstance which occurs in pleuritis: it happens, sometimes, and that is not at all uncommon, that patients affected with a very slight effusion die suddenly; here, however, the liquid, though in small quantity at the fatal moment, was very abundant at the first stage of the disease. Death may be as unexpected as sudden. This circumstance ought to render the physician very cautious in pronouncing the prognosis; still, generally speaking, revulsives, derivatives, diuretics, and similar remedies, suffice to prevent the accidents, which may result from chronic pleuritis.

Treatment.—The importance of the organ exercises a notable influence on the treatment: thus, venesection is far more requisite in pneumonia, than in pleuritis; the lung must be constantly in action: should it cease, death will inevitably be the result. You must, in diminishing the quantity of blood in the system, cause, in a given time, a smaller proportion of blood, or blood whose composition is not so rich, to go through the parenchyma pulmonaris. Therefore, in pneumonia, bleed largely, first, to subdue the inflammation, and next to diminish the quantity of blood, and consequently the action of the lungs. In pleuritis, the treatment ought to be: (choice being made of these different means according to circumstances) general or local bleeding; powerful and energetic revulsives, exteriorly or interiorly, such as tartar emetic; diuretics, diaphoretics:—in chronic pleuritis, vapour baths have been recommended, when there is no fever, to produce perspiration; mercurial frictions have likewise been employed, but with no great advantage. As to blisters, Dr. Louis considers them not only as useless, but even as injurious. Now, I cannot coincide with him; on the contrary, I think they constitute one of the most efficacious remedies in the treatment of diseases of the chest.

Rupture of the Uterus.—A woman, already the mother of four children, was taken with labour pains for the fifth time, and, soon after, the membranes burst and the liquor amnii escaped. On

examination, the child was found to present by the side, its head situated to the right, and its thorax corresponding to the symphysis pubis. Version having been repeatedly and fruitlessly attempted, the woman was brought to the Hopital des Cliniques, and placed in Professor Dubois' ward. She was so weak that death appeared imminent: labour-pains had entirely ceased, and Professor D. said he feared that rupture of the uterus had taken place; however, as the trunk had descended a little, the shoulder was placed under the pubis, in the hopes that the uterine contraction would terminate the accouchement by spontaneous evolution. The manœuvre was easily accomplished, the arm being already beyond the os externum: unfortunately, the child was voluminous, and the labour-pains trifling, so that, in order to facilitate it, it became absolutely necessary to perform detruncation, the child being evidently dead. To accomplish this, Professor Dubois divided the neck posteriorly, until the vertebral column was cut through, and the resistance presented by this part being overcome, the child was easily removed. This semi-decollation, performed for the second time by the distinguished Professor, is useful, inasmuch as it enables the accoucheur to extract the head without the least difficulty, the which does not always take place, when the head is completely separated from the trunk. The accouchement being terminated, an abundant hæmorrhage took place, and, though it seemed to yield to cold applications on the abdomen, yet the woman died two hours after. *Sectio cadaveris*: no liquid in the abdominal cavity; sub-peritoneal ecchymosis, of a dark color, on the small intestines, the uterus, the bladder, the ligamenta lata, the abdominal parietes, and in the pelvis, shewing that evidently a rupture had taken place, and that the blood, unable to overcome the resistance offered by the peritonæum, had infiltrated itself to a considerable distance. In fact, on dividing the serous membrane, a large opening was discovered on the left side of the uterus, extending downwards to an inch and a half from the vulva, and presenting a rupture of about five inches in length, which affected not only the uterus and its cervix, but likewise the vagina. This resistance offered by the peritonæum, said Professor Dubois, was observed by me in a case in which, after the rupture, the child had escaped through the opening, and its elbow was found at the autopsy to press against the peritonæum, and yet it had not torn it; this may be explained by the modifications produced in the uterus by pregnancy; the peritonæum seems to become thicker and stronger.

As to the cause of the rupture, it was, in all probability, produced by the efforts made to perform version.

Popliteal Aneurism; ligature of the Femoral Artery. By Dr. Jobert de Lambelle. M——, ætat. 26, of intemperate habits, nervous temperament, robust, has never been ill, with the exception of a gonorrhœa in 1838, and a bubo in 1841. In the beginning of February, he experienced all at once smart pain, accompanied by cramps, and a sentiment of lassitude, followed by a pulsative tumour in the popliteal region, which increased rapidly in size, and obliged him to seek relief. On his entering St. Louis, the swelling was as large as an egg, not fluctuating, presenting pulsations isochronous with those of the heart, and a bellows-sound when auscultated. The throbbing and size increased on pressing on the popliteal artery, between the gastrocnemii; a contrary effect was produced by pressure on the crural artery. Mensuration of the sound and diseased limbs gave the following result:—

Left limb.	
Under the tumour	12 inches.
Over the patella	14 "
¾ inch below the patella	13¾ "
Over the upper part of the tumour	14 "
Length of the tumour	2¾ "
Right limb.	
Corresponding part	11⅓ inches.
"	12¾ "
"	12¾ "
"	12 "

The general health being good, the operation was proposed and accepted. An incision of about 8½ inches was made on the anterior and inner part of the thigh, immediately over the femoral artery and the sartorius muscle. This last pushed aside, the sheath of the vessels was perceived and incised; the artery separated carefully from the vein, and a ligature passed under it. The pulsation in the tumour instantly ceased, and the wound was united by the twisted suture, the thread protruding through the centre; finally, the limb was slightly bent, and, being somewhat colder than the other, was surrounded with warm sand. The day after, the throbbing was distinctly perceived in the anterior and posterior tibial arteries; and, on the fourth day, an erysipelatous tint declared itself, and extended from the edges of the wound to the groin, but which soon yielded to fomentations, with camphorated spirits of wine, and opiates internally, with an ointment composed of nitrat. argenti ʒj., adipis suillæ ʒj. The ligature fell on the 14th day, after which the wound gradually healed up, and the patient left the hospital cured, six weeks after the operation, the swelling being reduced to the size of a nut, and quite hard.

Academy of Sciences—Sitting of the 30th July. Baron Ch. Dupin in the Chair. Books received. "Proceedings of the Geological Society, London, Session 1843-44," with plates, part 4, No. 97. "Descriptions of apparatuses and processes for the Isolation of the Metals of the Alcaline Earths," with engravings, by Robert Hare, M.D.

Operation of Enterotomia performed in the lumbar region, without opening the peritoneal cavity: by J. Z. Amussat, M.D. (This case, with the reflections of the distinguished author, will shortly be published in the "Medical Times.")

On the Genito-Urinary Organs of Reptiles.—M. Dufrenoy read a long memoir on this subject, and on the calculi contained in the bladder of the cheloniæ, which he found on analysis to be composed, in 100 parts, of:—

Phosphate of lime	64·70
Carbonate of lime	15·10
Organic matter and water	20·20
	100·00

also, on the existence of fossil *urolithes*.

On the Oxydation of Organic Matter by Iodic Acid. Memoir presented by M. E. Millon.—Iodic acid possesses an oxydizing power equal to that of nitric acid; moreover, it presents certain characteristic qualities: thus, an aqueous solution of iodic acid, converts oxalic acid into carbonic acid, at the ordinary temperature; decomposes entirely formic and mucic acids, at about 212° F.; oxydates cane sugar, at 212° F., and converts all its carbon into carbonic acid; deprives salicine of ¾, milk sugar of ⅔, and tartaric and citric acids sometimes of less, of their carbon. The essence of bitter almonds, by ebullition in a solution of iodic acid, is converted into benzoic acid; loses an equivalent of hydrogen, but none of its carbon. The decomposition of cane sugar takes place after twenty-four or twenty-five hours' boiling; citric acid and milk sugar require a long time; diabetic sugar (non-crystallized) is decomposed with rapidity, but when crystallized this does not take place so easily. Tannin is converted into carbonic acid and oxyde of carbon; starch, sugar, albumine, legumine, fibrine, gluten, gum, &c., are decomposed by iodic acid; gelatine and acetic acid resist. As to prussic acid, not only is iodic acid without action on it, but, on adding a small quantity to the solutions of the different substances just mentioned, they are no longer affected by that of iodic acid, as proved by the following experiments: 1° ʒv. of iodic acid were dissolved in a small quantity of water, and ʒiiss. of oxalic acid in ℥ij. of water; on mixing the two solutions, reaction took place immediately, iodine and carbonic acid gas being disengaged; 2°, on adding gtt. x. of prussic acid, containing only 15 per cent. of anhydrous acid, to the same solutions, decomposition was prevented. This phenomenon did not take place on adding the yellow or red cyanurets of potassium and iron.

Powder for Purifying Common Sewers.—M. Siret, who has devoted much time to the study of this question, recommends the following powder:—℞. Sulphat. ferri lb. lxxxviij., sulphat. zinc. carb. lign. āā lb. ivss. sulph. calc. lb. cxvij.—sixty-six pounds, made into a paste with water, suffice to purify a sewer about 656 feet in length.

Academy of Medicine.—Sitting of the 30th July. M. Ferrus in the Chair. The proceedings of the former sitting, after a few remarks from Messrs. Dupuy, Virey, and Londe, were adopted.

Dr. Devergie addressed a letter, stating that, in a late trial, he did not say that the liquor arsenicalis was poisonous in very small doses; consequently, it was erroneously that M. Bally attributed this opinion to him.—M. Bally, in reply, stated, that he did not say any thing in a personal, but only in a scientific, point of view.—M. Chevallier remarked that this substance, being very active, when administered, cannot be too carefully watched.

Dr. Rochoux read the description given by Malpighi (*Opera omnia*, vol. I. *De pilis et spinis*, page 44), of the Urtica aculeata.

M. Boullay read a report on a letter from the Minister of Commerce, concerning an invention of M. Dupré, who proposed employing metallic capsules instead of tar, and concluded by proposing that a favorable answer be given.—A confused and tumultuous discussion succeeded, in which Messrs. Londe, J. Cloquet, Dupuy, and other members, were heard; at length, Professor P. Dubois rose and said, that he considered it beneath the Academy of Medicine to occupy itself with similar questions; that the capsules were useful only as replacing twine or wire; and that, in his opinion, the Academy ought to reply, that, the object being commercial, not scientific, the Academy is not a competent judge.—Professors Moreau and Royer Collard emitted a similar opinion; the former added, that it would be a great fault were the conclusions of the report adopted, as it would encourage every manufacturer to seek the approbation of the Academy, in order to obtain a more rapid sale of his merchandize.—Finally, on the proposition of Dr. Desportes, the report was sent back to the commission, in order to have the conclusions modified.

Cancerous tumour of the sigmoid flexure; removal of the tumour and the portion of the colon, affected; union of the divided portions of the colon; cure.—Dr. Jobert de Lamballe read a report on this case, communicated by M. Reybard of Lyons.—The author having been requested to perform several experiments before the commission, composed of Professors Blandin, Berard, and myself, I purpose to day to give some details: 1° on M. Reybard's case; 2° on the operation, performed for the extirpation of the tumour; 3° on the experiments of the author on animals.—1° *case:* M. ——, 28 years old, had been for several years affected with violent and repeated colics, accompanied by lancinating pains from time to time, in the left hypogastrium. On examination, M. R. discovered a considerable development of the abdomen, owing to the presence of gases; colon easily felt through the parietes; in the left fossa iliaca, a tumour about the size of an apple, deep-seated, mobile, and non-adherent to the walls of the abdomen; frequent eructations; appetite good; constipation; no gas, but a sanguinolent, puriform liquid, escaped by the anus, giving rise to tenesmus; the finger introduced into the rectum could not distinguish the tumour; insomnia; shivering fits daily; emaciation; three months ago, after a considerable evacuation of pus, the local pain decreased somewhat, but the other symptoms, especially the three last, increased. M. Reybard diagnosticated a carcinoma, situated at the sigmoid flexure, and, convinced that death would inevitably follow, determined upon removing the tumour.—2° *Operation:* The patient being placed on his back, an incision, six inches in length, was made parallel to, and an inch from, the spine of the ilium; the different muscles were then carefully divided, the arteries tied as cut, and, finally, the peritonæum opened to the extent of three inches. The tumour was then, though with some difficulty, brought to the surface; two ligatures were placed on the mesocolon to prevent hemorrhage taking place; three inches of the intestine were removed; the arteries tied, the ligatures being left of some length, in order to permit their being introduced into the intestinal

canal, and, finally, the two portions of the colon were united by a suture. This done, the intestine was pushed back, the external wound united, and the patient placed so as to prevent the contraction of the abdominal muscles. The only consecutive accidents, which took place, were on the fifth day: these were tympanitis, tension, pain, which yielded promptly to local bleeding, cataplasms, and emollient enemas; and, thirty-eight days after the operation, the wound was completely cicatrized; the patient took solid food; stools natural. Unfortunately, six months after, the tumour re-appeared, accompanied with pain in the left thigh and leg, and in two months more, the patient died. The autopsy was not performed. The tumour removed is thus described: of the size of a rennet, hard, of a greyish white; presenting several tubercles, perceptible when touched, occupying the posterior two-thirds of the intestine, into which it protruded, so as to diminish its cavity one-half. This case not being sufficient to permit our forming a conclusion, M. Reybard performed a series of experiments. The reporter, after giving, at length, the details of the different experiments, and their results, confirmed by *post mortem* examinations, concludes: 1° that the modifications proposed by M. Reybard, in the manner of performing the suture, do not facilitate the thread falling into the intestine, nor prevent fistulas, nor fatal effusion; 2° that, consequently, such a mode of operating cannot be approved of, especially when we consider that the intestine is replaced in the abdomen; 3° that experiments, performed on dogs, seem to indicate the immediate re-union of wounds of the intestine as impossible, and, therefore, it ought to be still less likely in man; 4° finally, that it cannot be affirmed, that, in the case recorded above, cicatrization had taken place. However, in consideration of the zeal shown by M. Reybard, the commission proposes thanking him for his communication, and placing his observation in the archives of the Academy (adopted.)

The Academy then formed itself into *comité secret*, to hear Professor Berard's report on the titles of the candidates for the place in the section of operative surgery.

Garland de Beaumont, D.M.P, B.L., & S., &c
Honorary Physician to the Spanish Embassy.

Pathology of the spinal cord. — In the *American Journal of the Medical Sciences* is contained a communication by Dr. Flint, on the pathological relations of the medulla spinalis. Dr. Flint observes, that the researches of Hall, Grainger, Müller, Mayo, and others, render probable, if they do not demonstrate, that the medulla spinalis is the fountain of innervation, upon which all the vital processes are dependent, to which the (so called) sympathetic system is subordinate, and which is the centre of a reflex influence in every automatic and sympathetic movement, and have thus invested this portion of the organism with an importance of so fundamental a character, that pathologists cannot shut their eyes, if they would, to its agency in disease. The physiology and pathology of this very important part of the nervous system have been lately investigated with exceeding industry and much success, and Dr. Flint is firmly of opinion that the new physiological developments connected therewith are destined to exert a radical influence upon the theory and practice of medicine; an influence, which can only be rivalled by the progress of organic chemistry. In illustration of the pathology of this structure, Dr. Flint gives the result of his experience in fifty-four cases, of what he calls by the generic name, "Spinal Affection," and of which cases he had full notes recorded in his journal. The cases thus included in his list, were such only as afforded to his mind unequivocal evidence that the disorder, or disorders, were induced by morbid influence derived from the medulla spinalis, whether the action of the remote or external causes were central or peripheral. The analysis of the symptoms presented in these cases, is as follows:—*Of tenderness in the vertebral column;* in one case, on this subject, it is recorded; in two cases it is spoken of as indistinct; in three as not discoverable; of the remainder in which it was present, the tenderness was distinguished as extreme in twenty-two. The location of the tenderness was over the dorsal vertebræ alone in twenty-one cases; over the lumbar and dorsal in ten; over the cervical and dorsal in three; location, not specified, in five; over the entire column, five. The cases also differed in respect to the extent of tenderness, it being in some confined to a single vertebra; in others, embracing several, or extending over a whole division; in much the larger number, the dorsal vertebræ were either the seat of increased susceptibility, or were implicated, thus according with the observations of Messrs. Griffins. In some cases, where the tenderness is excessive, lying on the back is painful, and even the pressure of the clothes is a cause of inconvenience. Patients, under these circumstances, are indisposed to violent exertion, and their movements in walking, &c., indicate a carefulness to preserve the spine from the effects of concussion. In some instances, the effects of pressure over the tender portions, will be felt in other parts of the body than the spine. If neuralgic pains co-exist, they may be aggravated on a paroxysm being excited. Dr. Flint has heard of instantaneous insensibility having been thus produced, but never saw an instance of it. Nausea, oppression of breathing, cough, faintness, sense of sinking, &c. may be caused by pressure over the vertebral column; in one case, the examination produced highly interesting results, pressure over successive vertebræ giving rise, firstly to dyspnœa; secondly, to palpitation; thirdly, to nausea, a burning sensation in the region of the stomach, and a sense of sinking. Tenderness of the spine, although an indication of value, is not, in Dr. Flint's opinion, an essentially diagnostic symptom, inasmuch as a morbid condition of the cord may exist, and be very severe, without the occurrence of any such tenderness, as was the case in the five instances in which it was recorded, as being either indistinct, or not discoverable, or it may be absent in the commencement of the case, and afterwards become highly developed. Neither do the degree and extent of the tenderness furnish a certain index to the extent, location, and severity of the disorder seated in the peripheral nerves. When tenderness exists in several portions, it does not invariably follow, that we shall find apparent disorder in the extremities, or trunks, arising from the medulla at points corresponding with all the tender portions: nor is it always the case that the portions manifesting the greatest degree of tenderness sustain immediate nervous connections with the parts of the body in which local pains or disorder exist. The tenderness over the spine may reside at the integuments or soft parts. This was strikingly illustrated in one case, in which such exquisite sensitiveness existed, that the lightest possible touch was painful. The excited state of the sensibility was present over the whole cutaneous surface, being greatest over the spine, and gradually diminishing with the distance from it. The examination of the spine to discover the existence of tenderness, is conducted by Dr. Flint, by exerting pressure with the palmar surface of the thumb and index finger, flexed at the second joint, the pressure being continued with a gradual increase of force. In a careful examination, pressure should be made upon the interval between each spinous process, so as to bring the force to bear on the posterior and lateral portions of the column, and also on each vertebra over and on the sides of each spinous process. The fingers can be so applied as to exert direct and lateral pressure at the same time, and sufficient time should be allowed for the patient to observe his sensations. The best position for the patient is sitting, with the body bent forwards, the elbow resting on the knees. If the patient be a male, he should take off his coat and waistcoat; if a female, the stays should be removed. Dr. Flint objects to percussion, and he has mentioned the use of a sponge and warm water. The healthy spine will bear strong pressure, even if the individual be delicate or feeble. Modifications of sensibility were more or less prominent symptoms in all but seven cases; but so exceedingly various in their character and location, as to defy classification. In fourteen cases, pain in the head was a prominent symptom; it was felt most frequently in the forehead, and, in some cases in the occiput, temples and on the summit. It frequently affected different portions at different periods, and, in some instances, two or more at the same time. Pain was felt on the chest in nine cases, either constant, or occurring in severe paroxysms. In fifteen cases it was experienced in the abdomen, its parietes, and several of these cases had been treated for inflammation or liver complaint. The uterus was the seat of pain in six cases, and in two of these the whole organ was extremely tender. The pain was much increased at times. Pain occurred in seven cases in the lower extremities, in four in the upper, in two in both the upper and lower limbs. In three cases pain was felt in the spine itself, and in two the trifacial nerve was affected. The pain which was complained of varied in character in different cases. Sometimes it was described as acute and sharp, and sometimes dull and heavy; as a burning sensation by two patients especially; by another a sense of gnawing, as if by a small animal; by another a sense of numbness; and in two cases a painful sensation of heat, in each instance shooting down the lower extremities. In one case a shooting sensation of coldness in the same locality was experienced. With respect to the effects on the muscular system, Dr. Flint is inclined to attribute hysteria, tetanus, &c., to a morbid condition of the excito-motory system. He has also met with cases of general convulsions, and partial contractions, which he referred to this source. Spasms, permanent, or tonic, contractions, and a general muscular tremor, have also been produced by it. General debility, with lassitude, a painful weariness, with a corresponding loss of muscular power, occurs in so large a proportion of cases, as to be regarded as highly characteristic of spinal affections. Out of forty-two cases, this symptom was either absent, or no mention was made of it, in the record, in fifteen; but Dr. Flint believes it was present, in a greater or less degree, in many of these. It is mentioned as present, and its degree not stated, in sixteen cases; it is recorded as a prominent symptom in nineteen; and was a principal feature in two instances. Another class of symptoms, which Dr. Flint also regards as characteristic, is especially manifested by a perversion of the feelings. These peculiarities consist in loss of energy and buoyancy of spirit, despondency, melancholy forebodings, great anxiety on the subject of health, apprehension of some severe disease, susceptibility to emotions from slight causes, &c. The great majority of those in whom this affection becomes confirmed, evince some, or all, of these symptoms. They constituted a prominent circumstance in twenty-seven, and are recorded as absent in five. In seventeen cases they were connected with derangement of the digestive organs. There was also more or less disturbance of the digestive apparatus in thirty-seven cases. In some, however, these symptoms were probably merely accidental; in some there was every reason to suppose they were induced by mental anxiety, so commonly incident to spinal affection; and in several it was fairly attributable to the use of cathartics, emetics, and other remedies, taken or administered without any reference to the true character of the disease. In other instances, however, these disorders were among the most prominent symptoms. The stomach was the part of the canal most frequently affected. Vomiting existed in eight cases; in two of these it had the character of pyrosis, and in the others of obstinate irritability. Acidity and flatulence is also a prominent symptom in some cases. In five cases the throat was affected, principally with spasm, more or less severe. In one instance, the difficulty consisted in spasmodic contractions, apparently of the pharyngeal and laryngeal muscles, occurring in paroxysms, which were particularly excited by cold fluids, and were so severe as to give a faint resemblance to hydrophobia. In conjunction with this was a painful sensation, which the patient compared to that produced by the contact of ice upon the skin. With regard to affections of the genito-urinary organs, too frequent occurrence of the catamenia existed in three cases; menorrhagia in six, leucorrhea in eleven, uterine pains in four, and amenorrhea in one. The number of females affected was twenty-five. In eight

cases there was some difficulty in urinating, all, with one exception, being females. In one instance, this appeared to depend on a loss of voluntary power over the muscular coats of the bladder, accompanied by diminished susceptibility to the presence of the urine. Pregnancy existed in five cases, and appeared to aggravate the symptoms, giving rise in two instances to apprehensions of abortion. Gestation was completed in all the cases. In two cases there was increased secretion of limpid urine, which however was soon relieved. Palpitation constituted a prominent difficulty in fifteen cases. In two, intermittency, occasioning a distressing sense of impending dissolution, was present; and in one of the cases of palpitations there was also an intermittent action. Continued frequency of pulse occurred in six cases only, and was connected with a general disorder of the functions. Affections of the respiratory organs were met with in sixteen cases; namely, a sense of suffocation, occurring in paroxysms at night, in one case; dry cough in four; paroxysmal cough, without expectoration, in one; cough, with slight mucous expectoration, in one; tearing hacking cough, without expectoration, in one; sense of oppression in breathing, complicatingp alpitations, in four; dry hacking, almost constant, cough, in one; and convulsive catching inspirations, with sense of suffocation in two. The nervous character of the cough was abundantly tested. The peculiar barking, or crowing cough, described by Tate as connected with irritation of the spinal cord, was not present in any of these cases, but Dr. Flint has met with it in a well-marked case of spinal affection. Paroxysms of fainting, sinking, giddiness, and prostration, &c., occurred in some instances; in one of these there was also loss of consciousness for a few moments. In one case the patient complained of the occurrence of paroxysms of indescribable distress. Among the occasional complications are enumerated pain: in motion of the eyes in three cases; hypertrophy of the uterus in one case; sense of throbbing all over the body, two cases; perspiration, without febrile movement, three cases; coldness of extremities, three cases; chills and rigors, three cases; mild icterus in one case, and enlarged spleen, consecutive to intermittent fever, one case. With respect to the physical habits of the patients, they very often presented the appearence of full flesh, and sometimes even of corpulency. In twenty-five cases the habit is recorded as spare, or rather spare, and in twenty-five as *embonpoint*, or moderate *embonpoint*. Dr. Flint considers it a legitimate conclusion, that this disease does not tend to produce emaciation. The age of the patients who were under Dr. Flint's care, varied from five to fifty; but the greatest number were under thirty-five. The proportion of the sexes was thirty-five females to nineteen males. The results of medical treatment are recorded as successful in four, immediately successful in five, relieved in six, speedily relieved in thirteen, immediately relieved in nine, much improved in two, and termination in hemiplegia, (still under treatment) in one. The probable remote causes are: exposure to cold, overexertion, severe exertion of upper extremities, especially, as in lifting, &c., remittent and intermittent fever, prolonged lactation, and too frequent child-bearing; mental anxiety and afflictions, intemperance, conjoined with sexual excesses, leucorrhea: sudden cessation of the menses, deranged menstruation, development of the catamenia, sedentary position, local injury. These causes admit of division into two classes, according as, first, the effect is excited directly and primarily upon the spine; and secondly, indirectly and secondarily by irritation: influences transmitted through the incident nerves, or as consecutive to certain general conditions of the system. Under the head of treatment, it is observed that by local irritation over the spinal column, the particular morbid symptoms, whatever they may be, will be either speedily removed, or alleviated, or a transfer of location, a change of form of the disorder, is induced; but it does not follow that a cure will, therefore, be effected. It may be so when the action of the remote cause has been immediate, or where the indirect influence has been excited by causes which have ceased to be operative. The great principle to be borne in mind is, that in addition to the local applications to the spinne whatever irregularities or disorders may co-exist, which have preceded or appear to have produced the spinal affection, are to be treated by appropriate measures. The local remedies to the spine should be cupping, either with or without scarifications, sinapisms, or frictions with a stimulating liniment, the use of stimulant plasters with tartarized antimony or capsicum, and the formation of caustic tissues, as recommended by Dr. Reid, of Rochester, N. Y. The local neuralgic pains and disorders will be best palliated by opiates administered under the usual restrictions; and the former also by the specific remedies, quina, ammon. carb. &c., in many instances. Dr. Flint also uses the preparations of iron, of which he prefers the sulphate, either combined with a minute proportion of socotrine aloes and capsicum in the form of pill, or with myrrh as in Griffith's mixture. Diet, exercise, and regimen, are also very important in the treatment of this disease. The former should be of easy digestion, nutritious, and devoid of stimulating properties. Coffee and tea ought frequently to be interdicted; as also the excessive use of tobacco, and all alcoholic beverages. With respect to exercise, violent exertions are regarded as one of the remote causes of the disease. The patient should be directed to lie down for a portion of the day, and late hours should be avoided. It is important to protect the body from the vicissitudes of temperature.

HOSPITAL REPORTS.

KING'S COLLEGE HOSPITAL.

Strangulated Inguinal Hernia. Operation.—W. Ryan, æt. 32, fishmonger, was admitted into the above hospital at 3 a.m., July 17, under the care of Mr. Partridge. Has always enjoyed pretty good health, except that for many years he has been subject to inguinal hernia on the right side. About eight years ago, it became strangulated, and was returned with difficulty by Mr. Keate, at St. George's Hospital. Ever since that time, he has worn a truss. On the day before his admission into King's College Hospital, the bowels being confined, he took some aperient medicines, which acted freely on the intestines, and in the afternoon he took off his truss, and in changing his clothes, forgot to replace it.

The patient was of a middle stature, of dark complexion, and rather spare habit. On his admission into the hospital, he was stripped, placed in bed, and the taxis applied, without benefit. He was then placed in a warm bath, and the taxis was again tried; but still with the same result. About six, a.m., he complained of tenderness of the abdomen, and most especially in the seat of the rupture. He was then bled to sixteen ounces, from the arm, and fell faint (though without actual syncope), when the taxis was again renewed, with no better effect than before.

At seven a.m., Mr. Partridge saw the patient. At this time, he was pale and sallow, from the bleeding, and complained of a great dragging pain down the abdomen, and of great tenderness at the upper part of the rupture. He was sick, vomiting bilious matter. The sickness had existed more or less since his admission. The rupture was very firm and painful at its neck; it was not large, though it descended into the scrotum, and its lower part was not much distended; the right testicle was placed immediately below it. As there appeared to be no reasonable hope of returning the rupture by the taxis, as the vomiting continued, and the tenderness of the tumour and abdomen increased, it was resolved to perform the operation at once. The patient was placed upon the operating table, and the operation performed in the following manner. The skin just between the internal and external abdominal rings was pinched up; then, dividing it with a scalpel, so as to make a longitudinal incision, this was enlarged, and the dissection carried down to the tendon of the external oblique, some superficial vessels being divided. The tendon of the external oblique was then divided upwards from the ring, as well as the fibres of the cremaster muscle, and some of the lower fibres of the internal oblique. The sac was next exposed, and opened, by a small puncture, from which clear serum escaped; the opening was then enlarged upwards, as well as downwards, and a coil of small intestine, of a florid hue, from distended vessels, protruded through the opening; by the side of this intestine, and behind it, was a piece of omentum. On carrying the finger upwards, the stricture was found to be very tight about the situation of the internal ring; even the point of the finger could not be got underneath it, so as securely to protect the edge of the bistoury from the distended intestine. Sir A. Cooper's director, with the deep curved groove, was, therefore, employed, and the stricture divided with a probe-pointed concave-edged bistoury. The intestine was then drawn down gently, and examined; where it had been compressed by the stricture, there was no ulceration, and the bowel seemed perfectly healthy; not even of a dark colour, but a little red, probably from its distended vessels; it was returned into the abdomen. The omentum was then examined; it was rather vascular, healthy, and readily unfolded above; but below, it was firm, moulded into a rounded cord, and adherent to the lower part of the sac, just above the testicle. Upon drawing up this part of the omentum, the testicle was also raised. The spermatic cord was felt, after some examination, behind the sac. The omentum was divided transversely, just above its firm rounded part, and two small divided vessels, which bled, were tied with fine thread, one end of which being cut off, the omentum was returned first within the abdomen, and the thread turned over the skin at the upper part of the wound. The wound was then united by an interrupted suture; the patient was placed in bed, with the body and lower extremities half flexed. He experienced some relief from the operation. About half an hour after the operation, still complaining a good deal of pain, he was ordered the following:—

℞. Tinct. opii. min. xxv.
Mist. camphoræ ℥ss. M.
Statim sumend.

Water dressing was applied over the wound.

July 18th.—He dosed during the night; seemed comfortable, though low. At half-past one, a.m., he complained of pain in the abdomen, and about the wound. Constant fomentations, with flannels wrung out of hot water, were ordered to be employed. At two o'clock, a.m., he was given:—

℞. Ol ricini, ℥ss.
Decot. avenæ lbss. ft. enema.
Statim tepide injiciend.

At four, a.m., the injection was repeated, (the first having returned without fæces) still without effect.

At six, a.m., fifteen leeches were applied to the abdomen, just above the wound; they bled freely, and soon afterwards the bowels were moved three or four times, small hard fæcal motions coming away. At this time, the patient was languid; the pulse quick and small, varying from 100 to 120.

At seven, a.m., he felt so low that a little wine and water was given to him.

At four, p.m. Has been occasionally sick, and complains of pain in the abdomen. The abdomen is rather distended.

Fifteen more leeches were ordered, and the following mixture:—

℞. Tinct. opii, mv.
Haust. effervescens ℥j. M.
quartis horis.

At seven p. m., he began to vomit a dark-colored fluid. Ordered—

℞ Ammon. sesquicarbon. gr. x.
Aquæ puræ, ℥j.

M. ft. haustus cui temp. capiend. adde succi limon. recent. cochl. mag. j. in effervescentiâ sum.

At ten p. m., he continued in the same state. Ordered—

℞ Tinct. opii, m. xx.
Spt. ammon. aromat. m. xx.
Mist. camphoræ, ℥j. M. statim.

This he immediately rejected, as he had done all the ammonia draught.

At eleven p. m., a mustard poultice was applied to the epigastrium, and the following draughtgiven, to allay the sickness:—

℞ Liq. opii sedat. m. xv.
Aquæ puræ ʒij. M. haustus statim.

July 19th—Three o'cloek a. m.; the former mustard poultice having produeed very little effeet, although it was applied for a quarter of an hour, it was repeated, and kept on for half an hour. Five a. m.—The sickness still eontinues unabated; the bowels have not been moved sinee yesterday morning. The enema was repeated. Ordered:—

℞ Aeidi hydrocyanici m. ij.
Aquæ ʒss.

M. ft. haustus seeundis horis sumendus, and a little wine frequently.

The mustard poultiee has slightly reddened the skin.

Ten a. m.; has taken four doses of hydroeyanie acid, but without any benefit. To suspend all medicines.

At three p. m., the patient was seen by Dr. Budd, and was ordered to take one grain of solid opium directly, and afterwards, half a grain every hour, till the system was fully under its influence; but the patient being unable to swallow, a mustard poultiee was applied, which seemed to revive him, when the medicine was again given regularly.

At ten p. m., a little more wine was given, and repeated every half hour, the pulse beginning to sink.

July 20.—1 a. m.—The siekness still continues, and he has great diffieulty in swallowing the opium pills. Ordered—

℞ Spt. æther sulph.
Liq. opii. sedat. āā m. x.
Aquæ ʒss. M. omni horâ sumat.

At four a. m.; the pulse having rallied a little, and the siekness having increased, the mixture was omitted, and the pills renewed.

At seven a. m.; he continues in the same state. Ordered—

℞ Morphiæ hydroehlorat, gr. ¼.
Aquæ, ʒij.
M. omni semi-horâ sumat.

At twelve a. m; the sickness seemed eonsiderably abated, and the skin, which had been eold, resuming its natural temperature. The pulse, which was impereeptible a few hours ago, eould be felt again. To have another mustard poultiee, and to continue the morphia. He began gradually to sink again, and fell into a kind of stupor. The eyes becoming fixed, the pupils a little contraeted, but quite sensible to the stimulus of light. At three p. m. he died.

Sectio cadaveris—twelve hours after death. The appearanees observed after death were those of subaeute inflammation of the peritonæum, with serum effused in the eavity. Slight injection of the peritoneal eoat of the intestines, where the convolutions were in eontaet with a small quantity of floeculent lymph on portions of their peritoneal surfaces. The portion of intestine, that had been strangulated, was more injeeted than the rest, but its eoats were entire. The traet of the wound was healthy.

NOTICE TO CORRESPONDENTS.

As an opinion has gone partially abroad, that the destruction or sale of other Medical Journals, will lead to our raising the price of the Medieal Times, *we wish thus publicly to announce, that no such change of price is contemplated, and that the vicissitudes of other Medical periodicals will exercise no influence whatever on the management or conduct of the* Medical Times.

Mr. Smithiers.—*At the end of the present volume, we do propose devoting* 16 *or* 24 *pages, solely to a full and ample general Index. The volume will thus be a perfectly complete half-yearly scientific record, the cheapest (and our readers will say if the* best), *yet ever given to the Medical Profession. The volume will cost about* 12*s., and will actually contain the matter of a score of Ten Shilling books.*

Mr. Akester.—*Several formulæ for a substance to stop decayed Teeth, will be found in our Almanack for* 1844, *and in the* Medical Times, No. 241, vol. X. May 4*th.*

H. W.—*The List of Fellows, with their residences, appeared in our Almanack for* 1844.

Mr. Lewis, Hanley Castle.—*The letter will be shortly inserted or noticed.*

"A Sufferer from a Forged Diploma," *should favour us with his name.*

Dr. Gore.—*Our Almanack for* 1844.

College of Surgeons.—*For F. W. Grylls, a new member, as given in our last, read J. G. Grylls.*

X. Y. Z.—*We have no such intention It is not worth purchase.*

An Old Subseriber.—*The advertisement refers to the two exhibitions spoken of by M. Marcillet, and the recitals are mere reprints from the* Medieal Gazette. *At a leisure day we may analyze the papers.*

Mr. Bank's *opinions, though opposed to those we published, are not irrational, or by any means worthy of ridicule.*

"A Fellow."—*We cannot notice the regulations for the election till next week.*

M. S.—*The subject is treated of with ample experiments in our Pharmaceutical Number for June.*

The publication of the Parliamentary Report has delayed several communications. The Lecture of Sir B. C. Brodie will appear next week.

Mr. Williams.—*To anything that will help the progress of Science our columns will ever be most freely open. It is our hope that Science will never charge us with omitting an effort which could serve her. In England, she depends almost wholly for her encouragement, her rewards, and, above all, her* empire, *on the Press—and the Press would fail in its highest duty if it proved false to her.*

Dr. Neale.—*The report pronounced, on the equivocal authority he names, "infamous and false," is taken* verbatim *from the* Annual Register, *a work enjoying a historical reputation.*

Stains *asks us if medical officers of Unions are paid for trusses—a patient having had one given him for a hernia, where there was only an enlarged inguinal gland. Medical officers are paid for trusses: and one mistake would not prevent such remuneration—if our correspondent were a Poor Law officer, and had the allocation of payments.*

Union *tells us of a widow (residing with a surgeon and apothecary) in actual medical practice. We pity both her and patients.*

Mr. Akester *recommends the following "method of taking casts of the electrotype."*—"I make a easing of pasteboard rather longer in diameter than the artiele to be east; it must be sewn at the joining, as paste would be liable to eome undone. I then mix some plaster of Paris not very thick; I plaee the easing on a board, and fill it half full of plaster; then put the artiele you want a east of, on the top of the plaster, and immerse it half under; when the plaster begins to set, which it does very soon, take a piece of stick, and make two holes in the part of the plaister exposed, betwixt the artiele and the easing; when the bottom part is perfectly set, pour in the rest of the plaster, and the two holes, previously made, will show how the two parts of the mould are to be put together when any thing wants easting: but afraid it should be put together wrong, I take the mould, and just cut a mark with a penknife, on the outside, where the joining of the mould is to take a east. Melt a little wax, and pour it in the mould (it being previously warmed) put the top on, and shake it round. The artiele should be oiled previous to being east."

THE MEDICAL TIMES.

SATURDAY AUGUST 10, 1844.

Puras Deus, non *plenas*, adspicit manus.

At length we have the long-promised, long-expected Government bill. Seven months must pass ere it ean eome again before us in that practical shape calling for our aetive exertions, and the interval will allow the Profession full opportunity for serious thought and mature deliberation. We are heartily glad of such a breathing-time. It almost eonsoles us for the non-appearance of the bill at the beginning of the session,—for if we *have tardy*, we at least *escape scrambling* legislation. We sineerely thank Sir James Graham for not again taking us by surprise, and wish the right hon. gentleman had learned a little earlier that to give *thus* some little time for the *thought*, and to promise *thus* some little attention for the *opinion* of the Profession, is a eompliment our weight in the State deserves, and a debt to sound poliey that regard for his own eharaeter requires. He would, in that ease, have been spared the severity of many of the remark we have been obliged to launeh against his hasty and ill-advised eoneession of the New Charter, and would not, as now, stand before the publie as the supposititious father of a doeument the most inept and misehievous that ever bore a statesman's name.

After earefully reading through Sir James Graham's explanatory speeeh, in the fullest report the publie are likely to eommand (that furnished our readers by our own reporter), we are obliged to own that while unsatisfied with it, sometimes in prineiple and often in detail, it is yet eonsiderably a *better* measure than we expeeted—and certainly far better than we should have had, if a bill had been introdueed by the same quarter some twelve months anteeedently. Let us hope that the latter eireumstanee offers a prestige for the future; and that, in Mareh next, when the measure will be formally introdueed, we shall observe still further improvements. To plaee the Profession in a better state than it now is, is a worthy objeet—but surely not the highest in the ambition of one who would be known as a Medieal Legislator. In sueh eirenmstanees, it is not *better*, but *best*, that should be desiderated, and Sir James Graham will lose a golden opportunity if he eonsent to present us with what is just worth aeeeptanee, when he might lavish what would eternally win our gratitude.

One vast good Sir James Graham aehieves, and we will not rob him of one iota of its just merit. He destroys at one blow that hideous system of rival eompetition between the different diploma manufaetories at home and abroad, by which the profession ean be inundated with men of doubtful respeetability and half edueation. It would be idle to deny for an instant that this provision is rife with good things for both the profession and the publie. Imagine for a moment seventeen or nineteen different, impoverished, not to say insolvent, bodies—*those* of the Dioeesan bishops not included—having the clearest and most decided peeuniary interest, in letting loose on society men with the smallest amount of respeetability as to eharaeter, or aequirements as medieal praetitioners! Add to these the different foreign laboratories, and their forging imitators, whom reeent eireumstances have introdueed into the diploma market, and shall we be surprised that our profession shall stand low in popular estimation—that people shall resort to druggists and empirics as readily as to the general practitioner—or that our repayment bears no proportion to our investments of time and eapital, and the requirements of a gentlemanly ealling? In limiting the marts to seven in the three kingdoms, in plaeing even these under a rigid responsible supervision, an immensity of good will be seeured. Growing seleet, shewing higher attainments, soeiety will give us their full eonfidenee, and be well repaid in the skill that will be at their eommand. Our station among men will gradually rise—a better and more enlightened

esprit de corps will inspire in us greater unity and harmony—respecting each other, we shall be respected—and shall in truth be a PROFESSION.

But though we fully agree that the elevation of our body in social standing and scientific merit, is one of the *means* of suppressing *quackery*—it is not the only means, and of itself, we think, it is far from sufficient for its end. We, therefore, lament the Government's resolve of giving empiricism no other punishment, but State discountenance and indirect annoyances. The suppression of illicit rivalry, while a matter that concerns the well-being of the people, is—and it would be idle to conceal it—a bread-and-butter question for the Profession. To the present rampant state of empiricism, we trace much of the impoverishment of our brethren, and though the general tendency of the bill is to deal a damning blow at the whole system of ignorant medical practice, we are convinced that the Profession will only give a very modified support to a bill, which leaves matters, in regard to this important point, as they now stand. We say, as they now stand—for we suppose there are not two opinions in the Profession as to the complete inefficiency of the Apothecaries' Company—as a Quack Prosecution Society. This antiquated Corporation avows, in a recent statement of theirs, that the machinery of prosecution is too costly to be used—and the emblazoned impudence of practising empirics in every well populated street to the empire relieves them from all necessity of adducing witnesses. Indeed, how can it be otherwise? When the legally qualified man—notwithstanding the excellent examinations asked from him—is ashamed, from the force of opinion, to proclaim himself—apothecary; i.e., a legally qualified man—how can it fail to happen that—when a people know nothing of the secret examinations which win us the despised diploma—any bold pretender, however ignorant, shall be the medical man's formidable rival? The possessor of a despised and concealed diploma, and he who possesses it not, are much in the same position: and the state in placing the competent doctor, as now, in a false position, makes popular preference to depend on popular sagacity—which is not so great as some parties charitably think—or the question, which of the rivals lies more boldly—a contest which is highly favourable to the empirical adventurer.

The arrangement by which the general practitioner shall be recognised as "Licentiate of Medicine and surgery," is one not likely to be unfavourable to him. He will, *of course*, take the title of "doctor," will stand much in the position of the present Licentiates of the College of Physicians—except in having a double, instead of a single, medical title to distinction—and he will then stand out before the public broadly distinguished from the body of druggists, and pretenders; and while by his very name presenting to the individual, claims to confidence, will tacitly teach the whole public the very useful lesson, that no class but his is competent to advise on a medical matter. As the transition from Licentiate to Doctor of Surgery and Medicine will depend solely, we presume, on competency, and not at all on fees, or party cliqueship, the different ranks in the profession may be made so many insignia of different scientific excellencies, and will be scarcely complained of.

Another excellency that we cannot be favoured with too soon, is the annual registration of all practitioners, and the privilege to each one so registered, of being a legally authorized medical practitioner in the remotest corner of the British empire. We shall not occupy time in dilating on the happy effects of this important enactment; almost its least good is, that it will allow British medical men to feel that, whether in Ireland, Scotland, or the Colonies, they are still but in one empire.

The Council of Health, in securing uniformity of educational qualification among medical men of equal grade, will achieve for us much amelioration. To its present construction we, however, strongly object, and there can be little doubt but that we shall have this part of the bill modified. Both sides of the House, if we may judge by Mr. Gally Knight's speech, are disposed to concede the elective principle to us in its largest extent, in the formation of this Governing Council.

Without entering on the further details of the bill—which will be best understood, perhaps, by a reference to the report—we may state that though it enkindles in us, in its present form, no emotions of gratitude—much less, of full satisfaction—it yet has commended itself to us as a great improvement, an important step to what we want, and one day must have. The first feeling of the ardent medical reformer, on finding that it is not all he asks, will be dissatisfaction and opposition. The habit of opposition of *evil* begets a tendency to oppose even *good* when it comes from the same quarter, and to *approve* has been so little among our duties that we find some difficulty in giving Sir James Graham credit for the improvements he really proposes. We can easily imagine that there will be some all anxious to take advantage of this predisposition, and who will advise a course of thorough hostility. Such a course would gain us nothing, and lose us much. Whatever we get by the new measure is pure gain: it deprives us of nothing. Miserable and distracted as our body is, let us not lose the good within our reach, by insisting on more than is possible of attainment. Let us augment the good points if we can—anything but lose them. Let us remember that while there remains a grievance there will always be a Parliament—and the less we have to ask, the more our chance of success.

We observe with much satisfaction that Mr. Wyse on Thursday evening directed the attention of the Chancellor of the Exchequer to the fact, that since the beginning of the session the stamp returns, shewing the circulation of the different journals, were no longer published. The Chancellor honestly acknowledged that such publications exercised a most unfavourable influence on weak and half-established papers, which owed their livelihood to a fictitious reputation; and that he felt some difficulty, from the representations made to him, to continue the practice.

Mr. Wakley followed, supporting the Chancellor, expressing an earnest desire that the order for such publicity, if existing, should be rescinded, and "hoping the returns would never be made again."

The worth of Mr. Wakley's parliamentary and senatorial conduct for the good of the people of England, will be duly appreciated, when it is known that the *Lancet* circulates weekly 150 stamps—the *Medical Times* sixteen hundred.

A member of Parliament, with the prefix of "honourable," supporting his gentlemanly dignity by suppressing the stamp returns, avowedly to hide the deficit of his own journal, is something new. A seat in Parliament may be turned under some persons, to very low and sullying utilities.

We, of course, were as much *for* the return as our honourable opponent was against it, and we may frankly avow that it was at our request the question was put; its answer would not have injured us,

SIR JAMES GRAHAM'S NEW MEDICAL BILL.

HOUSE OF COMMONS, (Wednesday).

THIS important bill, which was fixed for twelve o'clock, was not brought on till about five, when the House had thinned down to about twelve members, when Sir James Graham, who spoke in a very low and subdued tone, commencing by a reference to a conversation which had just been held on a grave-yard question, as something ominous at a time when he was about to propose a bill which had for its object the settlement of the whole question of Medical Reform, said: I need not say how unnecessary is all panegyric, from me, of the Medical Profession. If I were to consult my own convenience and benefit, I should rather place myself under medical treatment than venture on the attempt after Medical Reform in this House; but having given a direct pledge that I would lay the bill on the table of the House before the close of the session, I think I should be neglecting my duty if I omitted at some length to lay the question before the House. I feel this the more, as I know the Profession are anxious about the nature of the bill, although they are partially silent in the expression of their feeling: *tacito silent timore*. There is no art or science which has done so much for suffering humanity as that of medicine, and in no country in Europe has its beneficent influence been extended so widely as in our own. Its improvements have been marvellous beyond expectation, and almost beyond belief. By it, the most deeply-seated maladies have been reached by solace and mitigation: and I am not using the language of exaggeration when I add that, through its recent progress, the deaf hear, the blind see, the lame walk. Being an inductive science, its boundaries are enlarged by enlightened knowledge and increased experience; and although, at the present time, there are some legal imperfections in the system, I am glad to pay my tribute of respect to the great body of medical practitioners throughout the kingdom. It is not lightly or unadvisedly, therefore, that I presume to interfere with them. All interference by law has, it is true, been stigmatised, and there is a letter extant from Adam Smith to Cullen on the subject, in which, with more playfulness than is generally characteristic of that author, Dr. Smith deprecates all legislation, in the strongest terms. On the other hand, the practice in this country has not been to leave this matter unguarded by all legislative interference. From an early period there has been legislation in regard to medical practice. Physicians in England now practice under licences from the College of Physicians in London, or by virtue of degrees granted by the Universities of Oxford and Cambridge. For seven miles round London, the degrees granted by Oxford and Cambridge are ineffectual, and confer no privileges. In later times, the Legislature has conferred upon the Universities of London and Durham the power of granting degrees, but they are worthless as to privileges. For a long time before 1800, the College of Surgeons gave the title of Surgeon. In 1800, the Charter was renewed, and they still give the title, but confer no privileges. The Apothecaries' Company is still more anomalous. Great powers are given by the State, and to whom? I should be sorry to say anything disparaging of the individuals composing that Society; still it must be recollected that, after all, they are but a trading body [hear, hear], and entrance may be obtained into it, as member, by apprenticeship, birth, or by almost any mode, except by examination as to qualification. Yet, no man could practice, as Apothecary, without being examined by this trading body. The Apothecaries' Act was passed in 1815, and in that Act there is a clause which, considered in regard either to the skill, knowledge, or attainments which

should be possessed by the great body of medical practitioners in England, appears to me utterly indefensible. I need not dilate on the importance of the medical man having a general acquaintance with his profession. Celsus has well said that all the divisions of the medical art are so bound or tied up together, that, to be master of one part, one should have a knowledge of all; and Mr. Lawrence has declared, in equally strong language, that a medical man who knows but the surgical or medical part of his duties, knows nothing. It is obvious how much the Apothecaries' regulations are opposed to this sound principle. I particularly allude to the clause by which no person who has not been apprenticed five years to an apothecary, sball be qualified for examination. Now those five years occur exactly at the period of a life the most valuable and important for obtaining knowledge. The youth is bound at twelve or fourteen years old, to an apothecary; with whom opportunities for acquiring general knowledge are very limited, and then at eighteen or nineteen he enters upon a more enlarged sphere of study and action. He becomes then naturally desirous of turning his profession to account, and often, at twenty-one, seeks to enter practice,having passed five of the best years of his life in an apothecary's house and shop, cut off, generally speaking, from attending lectures, and from all opportunities of general study and improvement.—With respect to the subject of licensing, throughout the United Kingdom, there are, I am imformed, on good anthority, no less than sixteen or seventeen colleges for granting licenses. There are the Universities of Oxford and Cambridge, both of which have the power of giving degrees or licenses in medicine—the University of Edinburgh, the University of Glasgow, tbe University of Aberdeen, the University of Dublin, the King's College, Aberdeen, the College of Physicians in London, the College of Physicians at Edinburgh, the College of Physicians at Dublin, the College of Surgeons in England, the College of Surgeons at Edinburgh, the College of Surgeons at Dublin, the Societies of Apothecaries in London and Dublin, and the Faculty of Physicians and Surgeons of Glasgow. Now, it is obvious, that under such a system, the utmost confusion must prevail, unless there is some general controul established. These various bodies are naturally rivals, and being rivals, and having peculiar interests involved in that rivalry, the tendency, if unchecked, is to underbid one another. Now what is underbidding each other in this matter? If one required only lower fees than another, that would be, comparatively speaking, a small object: but, with lower fees, there exists the desire to attract students, and to grant licenses or degrees, by lower demands of qualifications: and just in proportion as the fees are low, and the standard of knowledge kept relatively low, the attraction is greater. Without imputing any thing which is unworthy as a motive, the inevitable tendency of such rivalry is to produce the effects I have stated. I will not particularise, but I know that in the northern part of England degrees have been sold without requiring any examination. In these rival institutions, residence in one is necessary; whilst, in another, is is dispensed with; and, until a late period, the standard of examination in the College of Surgeons at Dublin, was, I am told, much higher than that of the College of Surgeons in London. The facilities of obtaining licenses in the northern part of Great Britain are much greater than in England, and, in consequence, I believe that five out of six medical practitioners have their licenses from the universities and colleges in the north. This is the result of the imperfections in the state of the law. I have now shortly sketched the present anomalous state of the laws and usages governing the medical profession. Now one evil attendant on the practice of medicine, is the incompetency of those who profess to practice it; and the great remedy in my mind is to secure the public a sufficient degree of knowledge and skill on the part of the body of practitioners. But all men are tenacious of life, and when life is endangered, by what we conceive a mortal malady, there is an all-powerful tendency in us to fly for aid to those who hold out the most confident promises of relief. To aid this effect of quackery winning an ascendancy over the mind—man loves to bo cheated, for the pleasure is as great "of being cheated as to cheat." And certainly the affinity between being deluded and the gain to be derived from the delusion, is so strong, that no legislative interference will ever succeed in putting a stop to this. I therefore think to attempt to extirpate quackery by statute altogether useless. To legislate in that direction is to seek the attainment of an impossibility. I therefore do not propose that quackery shall be put down by statute; but at the same time I do think it is within the scope of a wise legislature to offer encouragement—direct encouragement to the able, the qualified, and accomplished practitioner. Now, the principle of the measure which I seek to introduce I may state in general terms to be this: I propose no restriction on private practice whatever. I intend it to be open to every man, whatevever may be the degree of his skill or knowledge, to practice medicine. I propose no restraint on the practice of medicine; but I do conceive that a wise legislature should offer to the public some certain and accredited guarantee of the competency, the accomplishments, the skill and knowledge of those practitioners, who, upon examination, have proved themselves to be possessed of that competency, skill, and knowledge. My principle then is, that none, except those who are recognised by competent authority, shall be eligible to fill any public medical or surgical office. What do I mean by public offices? I mean those offices in which the charge for medical attendance does not rest with the patient or any member of his family. In the present state of the House it would be useless for me to enter upon further illustration or argument, but I propose to enter more fully into the subject on a future occasion. Having said thus much, I will, therefore, proceed to state that I propose the repeal of all those acts and charters which impose restrictions on the practice of physicians and surgeons and to re-enact such as it is deemed adviseable to retain *de novo*. The effect of this will be, that all particular privileges, and all local privileges (as that of practising in England as contradistinguished from Scotland, or Ireland, or *vice versa*), will be abolished. In Scotland licences are granted, but they avail nothing in England. I propose even to exorcise the magic circle, and abolish the right of the College of Physicians to grant exclusive privileges within seven miles of the metropolis. But the most important feature of the measure I seek to introduce will be anticipated by the house from the anomalies I have detailed as arising from the 16 local bodies I have mentioned as all acting independently of each other, and without any controlling authority. I propose to establish a Council of Health in the metropolis in direct connection with the executive government, and for the proceedings of that Council of Health to make the executive government more or less responsible. The want of such a body has been long felt by the executive. To it all matters affecting the public Health—questions of contagion—the laws of Quaratine—and matters of a similar kind could be referred by the Government and information obtained of great value, and the great anomaly of bodies possessing power without responsibility would be abolished by this regulation. Henceforward competition, by lowering fees, and the standard of examination by which such great and serious evils had arisen, would be obviated, for to this body would be given the power of control of examination, and of equalising the scale of fees throughout the various colleges, This being the great object of the bill, I will now detail to the House the composition of the council. I propose, then, that the Council of Health, at all times, hold periodical sittings in the metropolis, and consist of the following members: the Regius Professors of Medicine at Oxford, Cambridge, Dublin, Edinburgh, and Glasgow, by virtue of their several offices. I propose also that one physician and one surgeon shall be chosen by the Colleges of Physicians, and the Colleges of Surgeons in England, Ireland, and Scotland, respectively, and that six persons, in addition to them, shall be appointed by her Majesty, by the advice of the Privy Council. Of these six, if I may advise on the subject, I would recommend that one physician and surgeon, at least, should be from the rural districts, as contradistinguished from the metropolis. These six, nominated by the Crown, with the *ex officio* and elected members, making in all 18, and the Secretary of State, for the time being, shall compose the Council. Of the members, nominated by the Crown, I propose, that one physician and one surgeon should retire annually, but be eligible for re-election; for the first appointment alone should be from the Crown; and that of those elected by the Colleges of Physicians and Surgeons, one physician and one surgeon shall retire every three years; but that the retiring members shall be eligible to be re-elected. I propose also that any member of the Council may resign, or be dismissed by the Crown for misbehaviour. It is also proposed that the Council shall appoint one principal secretary, resident in the metropolis, and attending the Council, and that they shall have power, with the approval of the Secretary of State, to appoint two local secretaries, one in Scotland and one in Ireland.—To the *ex-officio* members no salary will be given, but for the other members it is proposed that their travelling expenses shall be defrayed, and that a moderate salary shall be given them, with the consent of the Treasury. It is proposed also that minutes of all their proceedings shall be kept by the council. I now come to that which is the real and essential method of controul to be exercised by the council over the sixteen licensing bodies existing throughout the kingdom. I propose that an alphabetical register shall be kept of all physicians, and surgeons, and licentiates, in medicine and surgery. (Hear, hear.) This list is to be kept in alphabetical order, and published annually. The council of health would, on letters testimonial being granted by any of the licensing bodies in the country, who were to retain the power of giving diplomas, permit the party to be registered.

Mr. Wakley—Without examination?

Sir J. Graham—Yes, without examination; I have mentioned the three degrees of licentiates, surgeons, and physicians. With regard to the licentiates, I propose that none of these licensing bodies shall grant degrees to any person under the age of 21, and that their letters testimonial shall be founded on examinations by them in medicine and surgery. With respect to surgeons, I propose that no person shall receive a licence under the age of 25, or without examination, after at least five years' study, by one of the licensing colleges. And with respect to physicians, that they shall be 26 years of age, and have graduated in medicine at some university, or, in default of this, be 40 years of age, and bave passed an examination by the Royal College of Physicians in England. Therefore it will be by this bill practicable at 26 to be both doctors of surgery and medicine. In the case of foreign degrees, no person is allowed to practise without a special certificate from one of the Royal colleges in England, Scotland, or Ireland, stating that they have made inquiry and found the degree valid and respectable. Facilities are provided in the bill for licentiates who have attained the age of 26 years and they are registered to practice, if they desire it. both as physicians and surgeons. (Hear, hear.) I attach very great importance to this, because of the good results I anticipate from the general practice of men of ascertained capacity both in medicine and surgery. (Hear, hear.) But all this would be useless, unless precautions were taken by the controlling body to maintain the required standard of knowledge in the different colleges themselves as uniform as possible.—I, therefore, proposo to give the Council of Health an inquisitorial power with respect to all these points, and that the course of study, and the scale of fees in all the licensing colleges, shall be submitted to and regulated by the council. I should add, that it is provided that no university shall grant degrees in medicine to any person who has not matriculated, attended lectures for at least two years, and possessed a competent knowledge of Greek and Latin, and that the council can make regulations for the course of study in all medical schools and hospitals. To secure efficient

examinations, the secretary of the council, or any member, when deputed, may attend the examinations at any time. And further than this, the council would have the power of refusing to register, notwithstanding any testimonial from the licensing colleges, if they deemed the parties to be deficient in skill and knowledge. I have already stated that I do not propose to proceed by penalties, but by inducements. I now come to what, in this respect, is the really operative part of the bill. I have stated that none but those who are duly admitted and registered, shall be able to fill certain specified offices. What these offices are, I will now proceed to enumerate. I propose that no person, not registered by the Council of Health, shall fill any medical or surgical office in any public hospital, prison, infirmary, dispensary, workhouse, or other public institution in the United Kingdom, or any medical or surgical office in the army or navy, or—with a special reservation in favour of native Indians—in the service of the East India Company. The Council of Health is also empowered, from time to time, to make such regulations, specifying what are to be considered public institutions under the act, and what form of qualifications shall be necessary to qualify for such situations. I propose, also, that certain privileges of exemption now given by law, as exemptions from serving on juries, or in any corporate or other public offices, shall henceforward be confined to those medical men only who are duly registered (hear, hear), and also, that no medical certificate shall be received in any court of law, except the certificate of a person duly registered (hear, hear). I think these provisions will be found very effectual (hear, hear). With respect to persons now practising, I do not seek to make the measure operate with hardship. With respect to them, therefore, I propose, that all persons now lawfully practising in any part of the United Kingdom, may, within twelve months after the passing of the act, or within two years in the case of persons residing in foreign parts, or the colonies, apply to be registered on production, to the Council of Health, of their diploma, licence, or certificate, or such other proof as shall be satisfactory, that at the time of the passing of the act, the applicant was legally entitled to practise as a physician, surgeon, or apothecary, in some part of the United Kingdom. I propose to impose a penalty of £20 for each offence on any person practising medicine in any public office who is not duly registered. The House will observe that I proceed not by penalties, but inducements; I offer inducements to practitioners to obtain those testimonials of competency by which they will be entitled to hold public offices; but having held out this inducement, I propose further, in this case, to subject those parties who practise in public offices, without the qualification of registration, to a penalty of £20. All existing practitioners, on producing their diplomas or licences, to practise in any part of the kingdom whatever, may practise in such public offices for twelve months; but after twelve months, if not registered, and they continue to practise in these offices, they are subjected to a penalty of £20 for each offence. I am now about to propose a clause, respecting which I have some hesitation; but on the whole I am disposed to recommend it for the adoption of the House. I have already said, that I propose to proceed in my new measures, by inducements rather than by penalties. The clause, however, to which I now allude, has more of the character of a penalty than an inducement. I propose that none but registered persons shall have the power of recovering by law any charge for attendance or medicine. Any one practising medicine before the passing of the act, although not registered, would be entitled to recover for attendance, medicine, &c.; but this privilege is to cease after twelve months. The clause is a guarantee that henceforth none but registered persons can recover at law, charges for medical advice and attendance. Any one, again, falsely pretending to be on the registration is to be held guilty of a misdemeanour. (Hear.) I have now gone through the heads of the bill, and I am greatly indebted to the house for the kind attention which has been bestowed on my statement. The measure has undergone much consideration. The public, it is true, are left by it to choose, their medical adviser; but they have the advantage of selecting a practitioner who has undergone the test of examination, and whose competency is sufficiently and publicly established. He should now conclude, by moving for leave to bring in a bill for the better regulation of the medical practice throughout the United Kingdom.

Mr. Macaulay now rose to second the bill, and though he felt, as probably the right hon. baronet did, that something might yet be done with the details, he gave his hearty approbation to the main provisions.

Mr. Warburton briefly referred to his own exertions for medical reform, to the utter impossibility of meeting fully the demands of the whole profession, and gave his marked approbation of the general features of the proposed law.

Mr. Gally Knight hoped the bill might be favourably received, but expressed his own opinion that, in reference particularly to the elective principle, he did not think it had been sufficiently consulted in the Bill. He strongly objected against mere compounders of medicine having the power to prescribe also. Though the Bill placed the profession in a better position, he should vote for changes in its details.

Mr. Wakley followed, giving the highest encomiums to the able speech of Sir James Graham, expressing his belief that he was actuated by an earnest and sincere desire to put the profession on an improved footing; and after enlarging on the mischief of the new Charter, and the evils of quackery, (contending that though he would not object to the rich being quacked, for they had knowledge, he would deny the privilege to the poor,) formally threatened that he would oppose the whole Bill by every means the forms of the house would allow him.

Mr. Hawes charged Mr. Wakley with wandering from the question, and considered the present Bill a great improvement; as such it should be received; he declared that as Mr. Wakley had opposed two former bills which did even more for the elective principle than the one here proposed, that the profession would never receive any improvement if they waited till he approved of a bill.

Sir James Graham expressed the pleasure he felt that the Bill was so favourably received in its main features by every honourable member that had spoken, except Mr. Wakley. He explained with reference to the Charter of the College of Surgeons, that he had found vested interests that he could not touch—that he had at least introduced the elective principle, and that he could not be denied the honour of having amended it. He added that he had further to state, that it was proposed to repeal the act of 1815, and to form a board of examiners for general practitioners—the Licentiates of Medicine and Surgery—by the union of certain of the apothecaries and physicians. Moreover, only seven bodies would have the power, under the Council of Health, to confer diplomas, viz., the London Colleges of Physicians and Surgeons; those of Edinburgh, those of Dublin, and the Faculty at Glasgow. The Bill was then read *pro forma* for the first time, ten members being present.

SEAT OF GONORRHEA IN THE FEMALE.—According to Dr. Mercier, the inflammation always commences in the mucous membrane of the vulva, the patient experiencing there a troublesome itching increased by walking or the introduction of injection-tubes. The labia minora are usually red and swollen, and their condition easily accounts for the pain experienced in a certain number of cases on making water. After the lapse of a short period the inflammation extends to the neighbouring canals, the urethra, and vagina, and from the vagina it may extend to the mucous membrane of the uterus.

At the last quarterly board of Governors of the Lincoln Lunatic Asylum, Dr. Nicholson was elected one of the Physicians of that institution, in the room of the late Dr. Cookson.

THE HEIDELBERG DIPLOMA.

[We have received the following letter from Professor Tiedemann, with which we preface the publication of the promised list.]

To the Editor of the "Medical Times."

Heidelberg, 14th July, 1844.

SIR,—The Faculty of Medicine having been requested, on the part of the editor of the *Medical Times*, in London, to send a list of all those English gentlemen who during the last ten years have obtained the degree of doctor of medicine in Heidelberg, responds to the request with pleasure—a pleasure much enhanced by the fact, that many false and injurious reports are being constantly spread about our mode of granting the degree of doctor. No longer ago than 1842, the Faculty intended to publish in an English journal a list of the English graduates who had passed, from 1830 to that time, the examinations prescribed by our statutes, and the enclosed list was for this reason ordered to be made out in the year 1842. Different obstacles, however, prevented its publication in an English journal: I, therefore, now send it you, *with the seals of the Faculty attached to it*, adding the FORM OF A DIPLOMA, and lastly, THE ORIGINAL SIGNATURES OF THE MEMBERS OF THE FACULTY. These will enable you to distinguish the genuine diplomas, for, unfortunately, there is reason to suppose that a manufactory of false M.D. diplomas exists in England.

Galignani's Messenger a short time ago contained the following advertisement, which also found its way into the German journals. I transcribe it here literally:—"Every duly qualified practitioner, desirous of obtaining the degree of doctor of medicine, can acquire the same by the mediation of the advertiser *from one of the oldest continental universities*, without leaving his home. The whole expense will amount to £40. Address, with full particulars as to name and qualifications, to Dr. John Bond. 24, Cornhill, London, or *Poste Restante*, Paris, till the 31st July."

Dishonest intentions must be at the bottom of this; and I will not, therefore, omit acquainting you with the conditions under which ALONE the degree of doctor of medicine can be obtained here, *according to the statutes of our university.*

1.—To submit testimonials of having attended the following lectures: physics, botany, chemistry, anatomy and physiology, pathology and therapeutics, materia medica, surgery and midwifery, and of having attended medical and surgical practice.

2.—The candidate has to answer questions put by the Dean of the Faculty on anatomy and physiology, materia medica and chemistry, pathology and therapeutics, surgery and midwifery, which he must answer in writing, in a room destined for the purpose in the Dean's house, either in German, Latin, English, or French. Besides this, he must construe an aphorism of Hippocrates into Latin.

3.—If the answers of the candidate are to the satisfaction of *all the members of the Faculty*, then only is he admitted to the *viva-voce* examination, in which he is examined during three hours on all branches of the healing art, in presence of all the member of the Faculty. If the *viva-voce* answers have likewise given satisfaction, (a minute-book is kept as regards the answers) the degree of doctor is granted the candidates, with either of the following notes: "*cum laude*," "*insigni cum laude*," "*summa cum laude.*"

The costs of the examination and of granting the degree are 258 florins (= £21. 10s.), and the printing of the diploma amounts to 14 florins, (= £1. 3s. 8d.); thus amounting in the whole to 272 florins (= £22. 13s. 8d.), and not to 480 florins (= £40.), as that deceiving advertiser says. In no German university do the costs amount to such a high sum as he mentions. I authorise the editor of the *Medical Times* to make any use he pleases of these statements, given

according to strict truth, to the honour of the Medical Faculty of Heidelberg.

I remain, with great esteem,

F. TIEDEMANN,

Privy Councillor and Professor,

Dean of the Medical Faculty, pro. tem.

[Here follow two impressions of the seal of the Medical faculty of Heidelberg and the original signatures of all the Members of the Faculty. The signature authenticating them is then certified by the seal of the University.]

LIST FROM 1830 TO 1842.

From the 1st of January, 1830, till the 22nd of February, 1842, the following English physicians have obtained at Heidelberg the degree of doctor, after having fulfilled the conditions prescribed by the statutes. It is to be observed, that no degree of medicine was obtained by English gentlemen from 1820 to 1830:—

Names of the Gentlemen who obtained the Degree of Doctor.	Date of the Diploma.
William Tapley, from London....	March 29, 1830
James Graham Nicholl, England..	May 4, 1831
John James Tobin, London	July 26, 1831
John Murray, Berwickshire.....	July 3, 1832
John Williams, England	Oct. 12, 1832
James Scott, London.....	Feb. 15, 1833
Charles Shillito, Putney	July 5, 1833
Miles Marley, London	Oct. 23, 1833
Robert Cross, Wisbeach	Nov. 6, 1833
Jonathan Green, London	April 20, 1834
William H. Neville, London.....	April 4, 1834
William Scott, Scotland	Aug. 11, 1834
John Thomson, Scotland	Aug. 11, 1834
Alfred Lochee, London	April 7, 1835
Wm. Brodum Dickinson, London.	Aug. 8, 1835
Frederick Collings Lukis, England	Aug. 22, 1835
John Tilstone, England	Aug. 24, 1835
John Green Crosse, Norwich	Sept. 11, 1835
John Prout, Gloucester	Nov. 11, 1835
John Bland Wood, Pontefract....	April 6, 1836
George Farnley, Dewsbury	April 6, 1836
J. Stevenson Bushnan, London ..	May 14, 1836
Charles Lingen, Hertford.....	Aug. 2, 1836
Thomas West, Coventry	Sept. 11, 1836
John Meyer, London	Sept. 9, 1836
Alexander James Dunbar, Calcutta	Nov. 8, 1837
John Ingleby, Birmingham	May 28, 1838
William Rogers, London	May 29, 1838
John Smart, Yorkshire.....	May 29, 1838
John Harland, Stafford.....	July 30, 1838
Wm. A. Francis Browne, Dumfries	Jan. 28, 1839
Frederick Edmonds, London	Feb. 28, 1839
James Godfrey, London	Feb. 6, 1839
Thomas Radford, Manchester	April 4, 1839
James Dimble Henwood, Helston .	July 12, 1839
Edwin Lankester, Suffolk.....	Sept. 2, 1839
John Ramsay Brush, London	Sept. 7, 1839
George Everett, London	Nov. 20, 1839
John H. E. Stubbs, Manchester ..	Nov. 30, 1839
Robert Lewins, Edinburgh	April 4, 1840
Thomas Guy, Chichester	Aug. 17, 1841
Charles Searle, London.....	Aug. 26, 1841
William B. Dolton, London	Sept. 8, 1841
Robt. Gee, Denbigh, North Wales	Feb. 22, 1842

The Medical Faculty,

Dr. F. C. NAEGELE, *Dean p. t.*

Heidelberg, Aug. 4th, 1842.

[This signature is then certified as genuine.]

LIST CONTINUED TO THE PRESENT TIME.

Names of the Gentlemen who obtained the Degree of Doctors.	Date of the Diploma.
Frederick H. Protheroe, England.	Aug. 2, 1842
Champ. de Crespigny, London....	Aug. 13, 1842
John Imray, England	Aug. 28, 1842
John Stanton, Brighton	Aug. 31, 1842
Richard Manuel Blemiay, England	Sept. 3, 1842
George Neville, Leeds	Sept. 27, 1842
Henry Travis, London	May 19, 1843
James Lithgow, England	Jan. 2, 1844
Thomas George Slaughter	July, 13, 1844

[If any gentleman have a doubt of the genuineness of a diploma supposed to be granted from Heidelberg, he can satisfy himself by comparing it with the seals and signatures at our office.—ED.]

APPEAL TO THE PROFESSION BY A POOR LAW MARTYR.

("To the Editor of the Medical Times.")

SIR,—Myself among numerous other Union Surgeons hereabouts, have been earnestly waiting the result of Lord Ashley's committee on medical relief, with hopes highly wound up, of seeing long before now, a report duly made and acted upon by the present session of Parliament.

Mr. Guthrie gave us something very like a *pledge* that every necessary evidence of the hardship, injustice and degradation of the past system to medical men, and of its total inefficiency to the poor, should be furnished to the committee in one week, yet three months, at least, have elapsed,—the Poor Law Bill has passed the Commons, amended in very many respects; but, excepting a few stale, and, as usual, unproductive remarks of Mr. Wakley, on the third reading, scarce a word has been said, and nothing *done* on this important point.

What are we to conclude by this? Is the matter really to be blinked for another year, and so on *ad infinitum*; or is a mere formal, listless report, to be presented to Parliament, apathetically approved of, and left as that of 1838, to be stifled, or, at least, barren of all but such fruit as the Poor-law functionaries will dole out to us? "Lord Ashley," says the *Times* newspaper, "although a most praiseworthy, benevolent and well-meaning man, clever and persevering in detecting and exposing abuses, is yet deficient in the moral power of enforcing remedies." These remarks may be true or not, but surely, after the language of *Mr. Guthrie* on this question, and the exertions he has so kindly voluntered, *he* cannot desert us ingloriously in the midst of the battle; nor turn back, or waver in the course he has chosen. We are fully inclined to confide in him, and are still, I think, warranted, by what has passed, in resting our hopes on his exertions, and on his ability to serve us. Still the question will occur, why this delay? at any rate, a short time must prove whether our confidence has been well or ill placed. If he for a moment covets the heartfelt earnest thanks of the profession, especially of that part, not a small one, forced in self defence to solicit year after year, a renewal of service in unious illiberal and repulsive almost beyond endurance, let him only rescue it from the humiliating thraldom and the cutting indignities of Poor-law authorities, down to the relieving officers (men by-the-bye, as I have found to my cost, highly necessary to be propitiated), and even to the paupers themselves; for every complaint is encouraged, and, if possible, heightened against the medical officer, seemingly as an ostentatious, telling and cheap way of showing sympathy and charity to the poor; and in proportion to the lowness of his pittance, is he exposed to the jealousy and suspicion of his hard taskmasters, who will allow no limit to his duties or responsibilities. This is no overcharged picture, as if desired, I can readily prove. Only the other day I received an offensively worded summons to "the Board," to answer for not visiting a patient until the Friday, although an order was said to be sent to me on the Tuesday preceding. I answered that the order was not delivered to me until Wednesday, although written on the Tuesday, which was now admitted, that it was given to my servant man on the road as a closed note; that in reply to my inquiries, my servant told me he had the note handed to him by a man coming to work in the place, with directions to give it me, and I should know all about it. This was all he could tell me, The note merely gave the name and parish of the patient. I knew not what particular patient it referred to; whether he required to be visited or not, or where he lived, there being many of the same name in the parish. By inquiring in my rounds, I learnt on the Friday who was meant, and then visited the patient, whom I found labouring under mild rheumatism. On hearing this evidence admitted to be true, the clerk, a lawyer, and, in fact, actual master of the Board, turning to me, said, "No doubt, Sir, you know where the overseer who gave you the ticket lived:" I replied, "No; but I could easily have ascertained that." "To be sure," continued he, "and I say, Gentlemen, the medical man was bound in this case, to have applied to the person who gave the ticket, and on his information to have seen the case at once." Chairman: Yes, "I look upon the case in this light, suppose the patient had died in the interval without being visited, where would the blame have rested?" 1st Guardian: "Not on the Board of course." Vice-Chairman: "No; certainly on the medical man; we employ doctors for the poor, and expect them to do their duty, or give up the concern." Medical Officer: "But how could I attend to this case, knowing nothing of it previously, or in what quarter the man lived? As to inquiring of the overseer, I never for a moment considered that a part of my duty. The parish is at least five miles in extent, and it often happens that this officer lives full that distance from me and from the patient." Clerk: "No matter, Sir, it is your bounden duty to see the patient as soon as possible after receiving an order, otherwise how can you tell whether the case is dangerous or not?" Medical Officer: "What, if the patient is able to attend himself? You tell us as a set off against the lowness of our contract (5s. per case), that the good cases must pay for the bad, implying that all cases may not require visiting, yet now you assert we are bound not only to visit all, but even to apply, perhaps many miles distant, for directions to enable us to do so; surely, in this case, the patient's friends are to blame in not sending a proper message. The man who left the note passed my house every morning to work, and could easily have called again, besides which the patient had a grown up daughter at home, doing almost nothing." Vice-Chairman: "My belief is, that if the patient does not attend on you, it is your place to presume he requires visiting, and ought to see him without delay. Really, Gentlemen, we must protect the poor: the medical man, by his own confession, allowed from Wednesday to Friday, three days, to pass without seeing this poor man—what can you think of it?" 2nd Guardian: "In my opinion the surgeon has been guilty of great neglect in this case, and I beg to propose a resolution to that effect," The Medical Officer and the complainant were then ordered to withdraw, and a resolution of culpable neglect at once passed against the former. I do not now wish to argue the justice of this verdict; some, perchance, may think it merited, others not; but all must agree that the judgment is not impartial, that it is all on one side; that the medical man has not fair play; and that gentility or even civility to him, is out of the question. Scenes of this kind, often on far paltrier grounds, are of frequent occurrence in the Union I speak of, and one thing is worthy of notice, that although many of these complaints are not half substantiated no recompence or apology is offered to the medical, man, nor is any resolution ever thought of inimical to the guardians or informants; and as to seeking redress, in the most oppressive cases, of the Commissioners, even if there was much hope in this quarter, which alas! there is not, whoever adopts this course must be prepared, sooner or later, to vacate his office, unenviable as it is, perhaps to an anxious and unscrupulous rival. I am willing to believe the Union I speak of may be an exception to the general rule—indeed I know one where the medical men are far more respectably treated—but, generally speaking, we seem to be regarded as unwelcome, but compulsory evils.

While it is so evident that the interest and respectability of our profession is wholly set aside in the management of the Poor-law, it is worth while to glance at the probable results of this kind of taxties to the poor themselves; and on a superficial view it really looks a healthy and effectual state of matters to them, No matter at whose expence, they seem to be tenderly, and even paternally, regarded, and their healths and lives carefully protected.

Lord Ashley was kind enough lately to invite medical men who could prove the sufferings of the poor by the bad system of medical relief to communicate with him, but, according to my experience, the poor can have little *show* of complaint. That they are sufferers, and that to a dreadful extent by inefficient tampering and heartless

treatment, and by the omission of important but costly appliances and drugs, there can be no doubt but this part of the tale necessarily can never or seldom be directly proved. The grave alone will give up this secret. The guardians depend on themselves to command the *show* of medical aid by "pitting" us against each other, for it is by this alone they are enabled to use us as they do, but it rests at last with the medical man whether they have the substance—aye, with the very man they are everlastingly degrading and screwing into abjectness and dishonesty. Oh! how little do they reflect while pluming themselves on their hard bargain with the doctor, how many widows and orphans and cripples they are fastening for life on the rate books!

This letter has already ran on insensibly to a most unreasonable length. Let me only repeat, in conclusion, that if Mr. Guthrie values the character, the credit, or the honour of the profession he is so bright an ornament of; if he desires the esteem and fervent thanks of his brethren lower in rank than himself, let him only obtain for them *by right* the courteous and honourable consideration their standing and education entitle them to, and he will deserve and have their deepest acknowledgements, their warmest and most enduring gratitude. I am, Sir,

Your obedient servant,
A POOR LAW MARTYR.

August 5, 1841.

[Mr. Guthrie in some short remarks made at the Royal Westminster Ophthalmic Hospital—the publication of which we are obliged to defer till next week—stated that the Committee had concluded its labours, and the evidence had been ordered to be printed.—ED.]

PETITION AGAINST THE SURGICAL CHARTER.

To the Hon. the Commons of Great Britain and Ireland in Parliament assembled, the Petition of the undersigned Medical Officers of the Horse and Foot Guards,

Humbly sheweth,

That the recent Charter granted to the Royal College of Surgeons of England, a copy of which was lately laid on the table of your Hon. House, presses with peculiar severity on the Officers of their Department, nearly the whole of whom are by it deprived of those privileges they have hitherto enjoyed, in consequence of an undue precedency granted to Surgeons in Civil life; whilst they will also be deprived in future of the hope of succeeding to offices of honour and profit in the College, whatever may be their ability, or the eminence they may have acquired in the service of their country.

Your Petitioners now appeal to your Hon. House, in full confidence that their claims will be fully and favourably considered.

Your Petitioners, whenever employed in the service of their country, either at home or abroad, have always endeavoured faithfully to discharge the duties of their station, and have used every exertion to improve the practice of their Profession.

Your Petitioners respectfully but earnestly submit that they should not, in consequence of being employed in the public service, be considered to have forfeited their civil rights as Members of the Royal College of Surgeons.

Your Petitioners humbly pray that your Hon. House will not confirm any measure depriving them of their hitherto acknowledged rights and privileges, without giving them an opportunity of being heard by themselves or counsel, either at the bar of your Hon. House, or in such other way as your Hon. House may be pleased to direct.

And your Petitioners, as in duty bound, will ever pray, &c.

RISE AND FALL OF THE AGE OF WAKLEYISM.

To the Editor of the 'Medical Times.'

SIR,—The sale—I beg pardon, for I mean quite another thing—the offer of sale of your contemporary, is a small fact in reference to the event itself, but of gigantic importance considered as a grand mark of the progress of the profession. On all hands we hear of the profession's improvement; and the ancients among us, who have doubted the fact, must depose their incredulity at the fact of an event so clear and convincing. I give myself some credit for foreseeing the circumstance years ago. When an old physician betakes himself to quackery, you may swear he is getting out at elbows, and lives over an empty wine-cellar: and when I saw your contemporary more and more a mob paper, when I saw its prescriptions (to the murder of the half informed) turn into the vernacular—our time-honoured symbols make way for terms comprehensible to the vulgar—when I saw all kinds of opposite and conflicting changes, except one in the right direction—when I saw advertisements drawn up in the fashion, and as widely published, as if a new cure-all were in the distressed advertisers' possession—when I saw it threatening and giving up actions and injunctions by dozens, with a sacred disregard of truth and decency—when I saw the very names of the editors disappear from the work, as if even *they* had grown ashamed of its miserable degeneracy—when, finally, I saw an humble, abject reprint from *another* Journal, *of news a month old at the least*, advertised far and near as news, as something passing extraordinary: when I saw all this, I went home to my wife, and told her what I now tell you, Mr. Editor, "My dear, if that confounded, demoralizing Paul Pry of the profession, that begun with publishing, *verbatim et literatim*, the trial of a parson for some supposed abominable offence (a pretty thing for a medical paper), and finished with publishing the parliamentary acquittal of an M.P. for arson, has not received its death-blow of trials, never believe another word I, your old, infallible husband, tell you."

I am, Sir,

Your obedient servant,
A GENTLEMAN.

WHAT IS IT THAT PROPELS A GALLON OF ALE THROUGH THE LIVER INTO THE HEART?

To the Editor of the "Medical Times."

SIR,—A few days ago, I was told, by a publican and his wife, that a man had just drank, in their presence, and in that of several other persons, *a gallon of ale in three minutes*. This feat, if not very extraordinary, is interesting in a physiological point of view. Where did the ale go to, from the stomach and intestines? Into, and through, what vessels did it first pass? Did it go into the lymphatics, and through the thoracic duct into the left subclavian vein? Nothing can be more ridiculous than such a supposition; besides, we know for certain, that, when the thoracic duct is tied in a living animal, fluids, injected into the stomach, disappear from it as fast as if the duct had not been tied. There is only one course that this gallon of ale *could* take; that is, it must have passed from the stomach and intestines into the radicles of the gastric, duodenal, and mesenteric veins; and, through these veins, into the splenic and portal vein. This vein, the splenic and portal vein—or, as I would call it, the SPLENO-HEPATIC VEIN—has its roots in the spleen, and its branches in the liver. It differs from all other veins, in originating in an isolated congeries of roots (the spleen), and in having *branches*. Now, the ale could not pass through the roots of this vein, but it must have passed through the branches, and, then, through the capillaries of the liver and the hepatic veins, to the right side of the heart. But what *propelled* it through the branches of the spleno-hepatic vein, hepatic capillaries, and hepatic veins? It is certain that through the liver it went, and that *something* propelled it through, for there could be no motion unless something produced it. What was it, then, which produced, or generated, the motion? Did the left ventricle of the heart? How could it? How could the left ventricle propel more *portal blood* * through the liver, than arterial blood through the cœliac and mesenteric arteries? How could it, by propelling a certain quantity of blood through the capillary terminations of the cœliac and mesenteric arteries, propel a much greater quantity through the capillary terminations of the spleno-hepatic vein? The thing is physically impossible; and the notion that it takes place, quite absurd. Yet it is this notion, and nothing else, that prevents physiologists from getting over that *pons asinorum*, the spleen. The spleen is as certainly subservient to the propulsion of the blood through the first, or hepatic, vascular system, as the right half of the heart is subservient to the propulsion of the blood through the second, or pulmonary, vascular system; or, as the left half of the heart is subservient to the propulsion of the blood through the third, or general, vascular system. These three systems are each composed of an afferent vessel, capillaries, and efferent vessels. The *hepatic afferent vessel* is the spleno-hepatic vein; which comprises the splenic vein and its roots, and the portal vein and its branches; the *hepatic capillaries* are intermediate between the ultimate branches of the spleno-hepatic vein; and the primary roots of the hepatic veins; and the *hepatic efferent* vessels are the hepatic veins. The *pulmonary afferent vessel* comprises the right half of the heart, and the pulmonary artery and its branches; the *pulmonary capillaries* are intermediate between the ultimate branches of the pulmonary artery and the primary roots of the pulmonary veins; and the *pulmonary efferent vessels* are the pulmonary veins. The *general afferent vessel* comprises the left half of the heart and the aorta and its ramifications; the *general capillaries* are, firstly, those intermediate between the ultimate branches of the general afferent vessel, and the primary roots of the general efferent vessels; secondly, those between the ultimate branches of the splenic artery, and the primary roots of the spleno-hepatic vein; and, thirdly, those between the ultimate branches of the hepatic artery, and the ultimate branches of the spleno-hepatic vein: and the *general efferent vessels* are, firstly, the gastric, duodenal, and mesenteric veins, which terminate in the hepatic afferent vessel; and, secondly, the superior and inferior cavæ, and the coronary vein, which terminate in the pulmonary afferent vessel.—Here, then, are *three* distinct and perfect vascular systems, and yet physiologists are content to believe there are only *two* propulsive agents of the blood, the two halves of the heart! They can rest satisfied with a doctrine which says that one half of an organ propels blood through one vascular system, the pulmonary,—and that the other half of that same organ propels blood through *two* vascular systems, the general *and the hepatic!* They can believe that the left ventricle propels the blood through the liver, when, at the same time, they know that very much more blood passes through the liver than the left ventricle propels through the cœliac and mesenteric arteries! For two centuries, they have known the use of the commencements of the pulmonary and general afferent vessels (the two halves of the heart), and yet they are ignorant of the use of the commencement of the hepatic afferent vessel (the spleen)!

It may be asked—why the spleen, if it be subservient to the propulsion of the blood through the liver, is not half a heart?—or, (as I would put the question) why the splenic and portal vein is not an artery, like the pulmonary artery or the aorta—and the spleen, an auricle and ventricle? In answer to this, I say, that the hepatic afferent vessel is not merely *unlike* the pulmonary and general afferent vessels, but *diametrically different* from them. The hepatic afferent vessel is *venous*; the pulmonary and general afferent vessels are *arterial*. The *commencements, only,* of the pulmonary and general afferent vessels (that is, the two halves of the heart) are contractile; the *whole* of the hepatic afferent vessel (the trunk and branches, as well as the roots or spleen) is contractile. Into the commencement of the hepatic afferent vessel *arterial branches* go;* into the commencements of the pulmonary and general

* The ale, when in the spleno-hepatic vein, was necessarily a constituent of the portal blood.

* The branches of the splenic artery.

afferent vessels *venous trunks* go.* Out of the commeneement of the hepatic afferent vessel a *vein* comes;† out of the commencement of the pulmonary and general afferent vessels an *artery* comes.‡ Thus, the hepatic afferent vessel differs as widely from the pulmonary and general afferent vessels, as the thymic and thyroideal apparatus differ from each other (see *Medical Times*, for July 20, page 326): and the reason it does so—the reason the hepatic afferent vessel is diametrically different from the pulmonary and general afferent vessels—is, because there is a diametrically different kind of motion of the blood in the hepatic vascular system, to what there is in the pulmonary and general vascular systems. In the hepatic vascular system, the motion of the blood is *intermittent and slow;* in the pulmonary and general systems, it is *constant and rapid.* An intermittent and slow motion could not be produced by the same kind of afferent vessel as produces a constant and rapid motion, but only by one diametrically different; and, therefore, it is that the hepatic afferent vessel is not *arterial*, but *venous*, and its commencement not *half a heart*, but a *spleen.*

It must not be supposed that I attribute the propulsion of the blood, through the liver, wholly to the spleen; for, I do not; but to the vein, of which the spleen is only the commencement or roots. That the spleen, however, co-operates with the trunk and branches of this vein, in the propulsion of the portal blood, is indicated by numerous facts, but by none more strongly than by this:—*It* (the spleen) *is twice as large, relatively to the liver, in man, as in quadrupeds.* The explanation of this fact is:—That, as the axis of the trunk, and, therefore, the direction of the hepatic vascular system, also, are *vertical* in man, and *horizontal* in quadrupeds, a much greater power is required to propel the portal blood through the liver in man than in quadrupeds; and, therefore, a much larger spleen exists in the former than in the latter. I have found that, in quadrupeds, the longer the hind-legs, and the shorter the fore-ones, the less is the size of the spleen relatively to the liver, and *vicê versâ:* in the giraffe, for instance, the spleen is larger, relatively to the liver, than in the horse or ox. It is even larger in the pig than in the sheep.

I will just add, that the man, to whom I alluded at the beginning of this letter, is as good at eating as at drinking. I am told that he can, with considerable celerity, and peculiar satisfaction to himself, dispose of, at one meal, a few pounds of beef, or a small shoulder of mutton, or even a little quarter of lamb! Now, does all that he eats and digests go through his thoracic duct? To believe that it does, must, I think, require a sort of moral swallow equal in capacity to this man's physical one. It is never likely that the nutritious portion of the food he eats, and the ale he drinks, dissolve partnership, as it were, in his digestive tube, and then go by different routes to his heart; the first by his thoracic duct, and the last through his liver. If, then, all he eats, as well as drinks, passes through his hepatic system into his heart, is there nothing required to propel it through? It would be difficult to conceive how this system could do, without an appropriate propulsive agent, any better than either his pulmonary or general system.

I am, Sir,
Your obedient servant,
J. J.

July 27, 1844.

* The superior and inferior cavæ, and the pulmonary veins.

† The spleno-hepatic vein.

‡ The pulmonary artery, and aorta.

BOHEMIAN REMEDY FOR HYDROPHOBIA

To the Editor of the "Medical Times."

Sir,—In the hope that you will make it public, I enclose you the receipt for the Bohemian remedy for the cure of hydrophobia.

Of the German prescription I have obtained a Latin translation, and a copy of that, is what I now send you. There may be defects or inaccuracies in this copy, arising from my possessing no knowledge of medicine, and that I have the aid of no professional person to apply to.

Though it appears easy, yet it has cost me much time and trouble to procure these receipts; and I should have given it up, if it had not been for my own conviction of its efficacy, founded upon the testimony of those upon whom I can rely. It will cure even in an advanced stage of the disorder. The tendency of the medicine is to produce violent perspiration about the head and neck: the patient should, therefore, be kept warm.

I should wish to suggest, that constitution and climate may have the effect (possibly) of diminishing the effects of this medicine; and it will be for the English physician to decide upon improving upon this receipt, according to the constitution of his patient; and not, therefore, to discard this remedy, if he does not find it successful in all cases.

I am, Sir,
Your obdient servant,
M. MALET.

Vienna, July 22, 1844.

RECIPE.

Extr. Hyosciami—gran. quatuor.
Pulv. Gummosi—drach. sex.
—— Amyli—drach. duas.
—— Sacchar. cand—drach. unam cum semis.
M. ft. pulv.

This powder must be taken for three days, fasting, every morning. A teaspoonful (a small teaspoonful) of the powder must be given in a pint of warm beer, and nothing must be taken afterwards for five or six hours.

The powders are given to mad dogs in warm milk—to horned cattle in warm water.

To preserve the strength of the powder for a sufficient length of time, the powder, in quantity according to the above receipt, should be mixed up with good salad oil; three or four ounces of oil should be used in the mixing.

BIBLIOGRAPHICAL RECORD.

July 8th to August 10th.

Andral's (G.) Pathological Hæmatology, an Essay on the Blood in Disease; Translated from the French by J. F. Meigs and A. Stille, M.D., 8vo., 7s. 6d., cloth.—Apothecaries: A Statement by the Society of Apothecaries, on the Subject of their Administration of the Apothecaries' Act, with reference to some supposed Features of Sir James Graham's promised Measure of Medical Reform, 8vo. 1s.—Bullock (J.) A Lecture on the State of Pharmacy in England and its Importance to the Public, with Remarks on the Pharmaceutical Society, 8vo. 1s.—Dufton (W.) The Nature and Treatment of Deafness and Diseases of the Ear, and the Treatment of the Deaf and Dumb, 12mo. 4s. cloth.—Graham's (T. J.) Modern Domestic Medicine, 9th edition, 8vo. 16s.—Hall (J. C.) On the Nature and Treatment of some of the more Important Diseases, Medical and Surgical, including the principal Diseases of the Eye, 2nd edition, 8vo. 7s. 6d., cloth.—Rigby (E., M.D.) On Dysmenorrhœa, and other Uterine Affections in connection with Derangement of the Assimilating Functions, 8vo. cloth, 6s.—Sweetser (W.) Mental Hygiene, or an Examination of the Intellect and Passions, designed to illustrate their Influence on Health and the Duration of Life, 8vo. 1s. 6d.—Wardroper (W.) A Practical Treatise on the Structure and Diseases of the Teeth and Gums, and on a New Principle of their Treatment, hitherto disregarded by the Dentist, and on the Pernicious Practice of Indiscriminate Tooth-Drawing, 3rd edition, 8vo. 3s. cloth.—Fownes' (G.) Chemistry, as exemplifying the Wisdom and Benificence of God, 8vo. 6s. cl.—Peppercorne's (T.) Practical Memoirs of Cutaneous Diseases, Indolent Sores, Inveterate Ulcerations, Scrofula, &c. 12mo. 2s.—Quacks and Quackery: a Remonstrance against the Sanction given by the Government, the Press, and the Public, to the System of Imposture and Fraud practised on the ignorant and credulous in the Quackeries of the Day, with Remarks on Homœopathy, Hydropathy, Mesmerism, Mesmero-Phrenology, &c. 8vo. 1s.—Spooner (W.C.) The History, Structure, Economy, & Diseases of the Sheep, 12mo. 7s. cl.—Steggall's (J.) First Lines for Chemists and Druggists preparing for Examination before the Board of the Pharmaceutical Society, 8vo. cloth, 3s. 6d.—Rowe (G. R.) On some of the most Important Disorders of Women, 8vo. 5s. 6d.—Chailly (M.) A Practical Treatise on Midwifery, Translated from the French, by G. S. Bedford, M.D., 8vo. 18s.—Mosely's (W.) Twelve Chapters on Mind, or Nervous Complaints, 4th edition, 8vo. 4s. 6d. cloth.—Johnston's (F.) Lectures on Agricultural Chemistry and Geology, 8vo. £1 4s. cloth.—Dana's (J. D.) System of Mineralogy, 2nd edition, 8vo. £1 1s. cloth.—Karsten's (H.) De Cella Vitali, 8vo. 1 2½ sgr.—Kuttner (R.) Ueber die Ursachen des Häufigen Vorkommens Körperlicher Verkrummungen, in Dresden, gr. 8vo. 7½ sgr.—Textor's (K.) Ueber Wiedererzengung der Knochen, nach Resectionen bei Menschen, 2 anfl. 8vo. 15 sgr.—Versmann (F. W. G.) Ueber die Rotz-und Wurmkrankheit des Pferdes, 8vo. 10 sgr.—Hirschel (B.) Geschichte der Medicin, 8vo. Dresden, 2 Rthlr.—Masse ( ) Handatlas der Menschlicheh Anatomie, Lief I. 17½ sgr.—Canstatt's (C.) Die Specielle Pathologie und Therapie vom Klinischen Standpunkte, aus bearbeitel, 8vo. 1 Rthlr. 25 sgr.—Hertz (J.) De Enchondromatite, 8vo. 7½ sgr.—Herzog's (H.) Ueber die Hypertrophieen der Ausseren Weiblichen Genitalien, 8vo. 10 sgr.—Braithwaite's (W.) Retrospect of Practical Medicine and Surgery, vol. IX, Jan. to June, 1844, 12mo. 5s. 6d. cloth.—Chapman's (N.) Lectures on the more Important Diseases of the Thoracic and Abdominal Viscera, delivered in the University of Pennsylvania, 8vo. 18s. cloth.—Jeffreys' (T.) Remarks on the Efficacy of Matico as a Styptic and Astringent, with Cases, Mode of Exhibition, &c. 8vo. 1s.—Mantell (G. A.) The Medals of Creation, or First Lessons in Geology, and in the Study of Organic Remains, 2 vols. 8vo. cloth, 21s.—Pidgeon's (E.) Fossil Remains of the Animal Kingdom, 2nd edition, 8vo. 18s.—Root (J.) The Horrors of Delirium Tremens, 8vo. cloth, 14s.—Shew's (J.) Hydropathy; the Water Cure, its Principles, Modes of Treatment, &c. 8vo. cloth, 5s.—Smith's (H. H.) Anatomical Atlas, illustrative of the Structure of the Human Body, Part 2, 8vo. 6s.—Smyth's (J. R.) Miscellaneous Contributions to Pathology and Therapeutics, being a Series of Original and Practical Papers on Rickets, Hydrocephalus, Impotence and Sterility, Pulmonary Apoplexy and Hæmoptysis, &c. 8vo. 10s. 6d. cloth.—Transactions of the Provincial Medical and Surgical Association, vol. XII, 8vo. 21s. cloth.—Transactions of the Zoological Society, Vol. III, Part III, 4to. 19s. 6d.—Transactions of the British Association for the Advancement of Science, 8vo.—White's (R.) Advice on the Management of the Teeth, 8vo. cloth, 3s. 6d.—Leupold's (J. M.) Geschichte der Gesundheit und der Krankheiten, 8vo. 25 sgr.—Muller's (H.) Uber den Nabelbruch, mit einem Vorschlage zu seiner Behandlung, gr. 4to. 22½ sgr.—Prinz (G.) Uber den Brucham untern Ende des Radius, gr. 8vo. 19 sgr.—Stilling (B.) Uber die Textur und Function der Medulla Oblongata, 4to. 3 Rthlr.

PERISCOPE OF THE WEEK.

Theory of acids.—[This and the twenty following articles, comprise the principal contents of the three last numbers, of the *Lancet.*] Liebig puts forth a new theory of the combination of acids, with oxides of metals. With regard to the hydrogen acids, there is no doubt, he says, as to the cause of their capacity to form salts with bases. When a metallic oxide is brought into contact with a hydrogen acid, for instance, potass with hydrochloric acid, the oxygen of the base combines with the hydrogen of the acid, forming water; the chlorine of the acid at the same time, combining with the metal, forming a chloride. The saturating capacity of the acid therefore depends upon the hydrogen it contains; the property of the base or metallic oxide of neutralizing the acid, depending on its oxygen. The amount of hydrogen contained in

one of these acids, is therefore replaced by an equivalent amount of metal. In like manner, Liebig thinks himself authorized in asserting that a similar change takes place with the oxygen acids, taking, for example, sulphuric acid and potass, he considers the resulting salt, sulphate of potass, to be a compound of potassium, and a compound radical, constituted by sulphur and oxygen, and performing functions completely analogous to those of chlorine.

THE PERIODS REGULATING THE RECURRENCE OF VITAL PHENOMENA. Dr. Laycock has published a summary of his views on these important branches of medical and physiological science. He has termed it *proleptics* from a Greek word, signifying an anticipation of events, because it is the science which investigates the laws of recurrence of events involving individuals and societies of men, measures their periods, and applies the knowledge thus obtained, to practical uses, in connection with the sciences of medicines, and political and social economy. He divides periodic vital phenomena into three classes, viz. the exoteric, esoteric, and the endexoteric; the first comprising those resulting from internal causes, proper to the organism; the second, those resulting from external causes, independent of the organism; and the third, those compounded of the two. The esoteric and exoteric periods are first, two minor periods, including a maximum, and a miuimum; a lunar, barometric, or meteorological day; 2d: two barometric or lunar days=a solar day; 3d. seven solar days=a lunar week; 4th. four weeks=a lunar month. The endexoteric periods, of which Dr. Laycock takes the periods of fever as the example, although all periodic physiological phenomena may be so adduced, are thus illustrated;—Let a=the barometric or lunar day; then a=the term of a briquotidian, and of certain physiological acts; 2 a=the diurnal or quotidian period; 4 a=the tertian period; 6 a=the quartan period. As in agues the interval is calculated from the beginning of one paroxysm to the beginning of the next, the unit of the second series must comprise the time occupied by the last paroxysm, as well as the period of intermission, so that we have 6 a+a=7 a, or one week of seven days of twelve hours; let b represent this period. Then b=the half week of physiological periods, and the fourth day of fevers; 2 b = one week, and the seventh day of fevers; 4 b = fourteen days, a physiological period, and a critical day in fevers; 6 b = a minor menstrual period, and the limit of a twenty-one day fever; 6 b + 2 b = the menstrual period, and its analogue in hæmorrhoidal and neurotic patients. Thus then the minor periods may be considered to be multiples of four basic units—1. The day of twelve hours; 2. the day of twenty-four hours; 3. the week of twelve hours or lunar days; 4. the week of solar days. If any of these be multiplied by 2, 3, or 4, or by 4, 6, 8, the products yield all the observed periods of menstruation, four weeks being the normal period. The processes of generation and development display throughout the most striking examples of periodicity. Similar multiples give the periods of mixed fevers, the cycle of paroxysms observed in intermittents, gout, &c. The preceding are the minor periods of development, the esoteric series commencing with conception, and go regularly on unless broken up, and a new series begun by some powerful influence on the system. It is by these periods that we can theoretically explain the period of incubation of contagious and epidemic diseases. It is by these, too, that we can understand the singular coincidences observed in families as to death, time of sickening from contagious fever, &c., the period of conception of the mother being a common point to which the esoteric periods of the offspring can be referred, in virtue of these periods being precisely alike as to the date of conception, and the circumstances of their life undergo similar vital changes at the same time, because they are equally exposed to the same exoteric agencies, and undergo the same series of esoteric changes. The seasonal and annual changes, and the period of utero-gestation aud of fœtal life are intermediate between the preceding and the major periods of development. The term of fœtal life is composed, both as regards the parent and offspring, of minor esoteric periods, consisting either of the week of seven lunar days, or the week of seven solar days, but generally the latter. The analogous process in insects occupies the whole life, from the vivification of the ovum to the imago state, and its minor periods are marked by the evolution of the animal from the ovum, the successive months, and the crysalis state. This period of embryonic and fœtal life is of varying length in insects, reptiles, fishes, birds, and mammalia, but is always a multiple of a lunar, or solar day, and heptal or referable to 7. The intermediate periods pass imperceptibly into the major, and tho major periods complete the whole period of life. The primary unit of the latter is a solar year, subdivided into four portions by the equinoxes and solstices, which constitute two means, one maximum, and one minimum. All the preceding have reference to the individual, and the minor have reference to the individual exclusively. The basic unit of years has, however, a bearing upon man as constituting society, and is the unit limiting the periods of those exoteric causes which influence the spread and mortality of epidemics, and induce physiological mutations on a large scale, as well in man as in animals and vegetables, through their action on the atmosphere, and the crust of the earth.

CONGENITAL FISSURE OF THE IRIS.—Dr. Mackin describes a case of congenital fissure in the lower segment of the iris of the right eye occurring in a female, who at the time of his seeing her was about twenty years of age. The edges of the fissure appeared somewhat rounded off, and were of a rusty tinge, the remaining portion of the iris being of a lightish blue. The texture of the margin of the fissure was for above a line in extent, evidently consolidated, and dense in its consistence. The portion of the posterior chamber exposed by the lesion of continuity in the curtain of the iris presented the same appearance as the pupil. The shape or extent of the deficiency was not in any way affected either by the expansion or contraction of the iris, so that the closure of the pupil was in this case effected by the action of the orbicular fibres from one fixed point to another; the loss of power consequent on the deprivation of continuity of the orbicular fibres was thus compensated. Vision was as perfect as in the other eye.

OVARIAN DISEASE.—Mr. J. C. Atkinson briefly narrates a case of ovarian disease, in which he performed paracentesis seventy-two times. In operating, he says, from experience of its propriety, he always carefully avoided wounding the external epigastric arteries or veins. On the *post mortem* examination, it was found that the left ovary alone was diseased, enlarged, and full of cysts, about an inch in length, and filled with gelatinous matter; its weight was five pounds, and it was perfectly unattached. The other ovary and the abdominal viscera were healthy clearly constituting, therefore, a case adapted for ovariotomy. The cause of death, in Mr. Atkinson's opinion, appeared to be *mechanical obstruction offered to the food by the rapidly accumulating fluid, and the excessive exhaustion consequent thereon.* If Mr. Atkinson will take a word of advice from us, when he publishes cases in future, he will content himself with simply recording facts,—a task of no slight difficulty—and altogether eschew attempts at theorizing, in which he is sure to fail.

A REGULATED WARM AND MOIST ATMOSPHERE IN THE SICK ROOM.—Dr. M. Hall advises preventing the influx of air by the windows, by means of slips of paper pasted accurately from one side of the frame to the other; the door may be secured by means of list, whilst sufficient air is admitted at its upper part through an opening of half an inch in breadth, made nearly across the door, slanting from without to within, upwards. The air thus admitted passes to the ceiling, and thence to the fire, and the lower and inhabited part of the room is kept from draughts. The patient may be still further protected by hanging sheets, or muslin curtains round the bed, besides the usual curtains, so as to avoid every little crevice which might admit a draught of air, whilst foot-pans, or large basins of water, of 180 Faht., are placed at the foot of the bed, and on chairs within the curtains, so as constantly to distil a gentle vapour.

THE ATMOSPHERE FOR TETANUS AND HYDROPHOBIA.—Dr. M. Hall recommends in cases of tetanus and hydrophobia, to prevent exposure to draughts of air, &c., by surrounding the patient's bed with screens two, and three fold, with intervening spaces, with covering at the top. Within the first, or inner screen, no one should be admitted but the physician, surgeon, and nurse; but the space between this and the second should be so arranged as to admit the pupil's seeing the patient without disturbing him. An artificial atmosphere may also be formed and maintained around the bed, by placing jars of hot water within the first screen, so as to induce such a temperature and such a condition of hygrometric moisture as may be most conducive to the patient's comfort, well-being, and recovery.

PLEURITIS AND PERITONITIS.—Dr. M. Hall has derived great advantage in the treatment of these diseases from the application of linseed meal poultices; he attributes the benefit to the exclusion of atmospheric air, and says he has seen other applications which produce a similar effect, of service in other diseases.

INJURY TO THE THIGH.—Mr. Berncastle relates the case of a man of intemperate habits, who fell from the shafts of his team, and the wheel passed over both the thighs. The left femur was fractured, the right limb apparently merely bruised. He was seemingly doing well until about four weeks after the accident, when Mr. Berncastle was called to him in great haste, as the right leg had turned quite black. The leg and thigh were livid; the veins swollen and prominent; the surface of the limb cold and tender on pressure; the patient in a state of collapse, and covered with a clammy sweat; the pulse quick and very feeble; and there were great anxiety and intense pain; obstinate vomiting came on, the lividity extended as high as the right breast, the pulse was imperceptible, low delirium set in, and he died the next morning. There was not any examination of the body.

CASE OF CYST OCCUPYING THE POSITION OF A PSOAS ABSCESS.—A case of this kind is reported from the London Hospital. The tumour was the size of a large orange, and was seated at the upper and inner part of the right thigh, extending four or five inches below Poupart's ligament. It was punctured, and a clear brown fluid, with a number of particles of chlolesterine floating on its surface, evacuated to the extent of eight ounces. This operation was repeated several times, after which inflammation set in, and suppuration took place; the tumour was again punctured, and fifty-five ounces of fœtid pus with a large quantity of gas, escaped. After this, the contracted cyst could be plainly felt in the right iliac region, and several ounces of pus were discharged daily. No stercoraceous matter ever came away by the opening, nor any urea, nor was there any evidence of the connection of the cyst with abdominal viscera. The patient afterwards went into the country.

PRUSSIC ACID.—The Messrs. Smith have ascertained that sulphate of iron is not an antidote to prussic acid.

STRICTURE.—Mr. Wilkinson King is of opinion that all common stricture is essentially vascular and inflammatory, and not muscular and spasmodic.

UTERINE POLYPUS.—Uterine polypi vary greatly in their size, some being not larger than a pea, whilst others are of the magnitude of a large cocoa-nut; at one time, when separated, being lost in the discharge from the vagina; at another, when the ligature has cut through the pedicle, requiring considerable effort to extract them from the vagina, or exciting strong uterine action to expel them. The comparative size of the pedicle by which the tumour is attached, varies considerably, being in one case as thick as the wrist, whilst the tumor is not larger than the fist; in another, it is so thin that the tumor may be easily twisted off with the fingers, and is sometimes separated by the act of vomiting, or some other violent effort. Uterine polypi differ widely also in their color and structure, as well as in the part of the uterus to which they are attached, and the manner of their attachment. It may be of a deep red or of a pale flesh color; the latter is the more

usual, and its surface is occasionally streaked by blue veins. In the majority of cases, the tumor is firm and compact, and its cut surface is very like that of the white or fleshy tubercle of the uterus, exhibiting a firm white substance intersected by strong membranous bands. When it is very large, it sometimes consists of loose cellular tissue connecting many of these firm, fibro-cartilaginous masses of various sizes. Uterine polypi are sometimes hollow, but do not differ in other respects from their ordinary structure. The glands of Naboth occasionally become enlarged, with a morbidly thickened state of their parietes, and sometimes give rise to polypi. Such cases are described by Dr. R. Lee, and by Dr. Bright. Andral speaks of a polypus composed of a white semi-cartilaginous substance, which was divided into cells filled with a colourless jelly-like substance, which was also found in small cells at the cervix uteri. Another kind of polypus is formed by an hypertrophied condition of some of the fasciculi of muscular fibres forming the arbor vitæ within the cervix uteri. A polypus may be attached to the fundus or neck of the uterus, or to the lips of the os uteri; in some rare cases it may have an attachment to the uterus by a pedicle, whilst on all its surface, it may be adherent to the uterine parietes by loose cellular tissue easily broken down by the finger. There is very little difficulty in forming a diagnosis, and in the majority of cases, we may arrive at a certainty by an examination per vaginam. The violence of the symptoms is not always proportionate to the size of the tumour. The treatment consists in their removal by ligature, the best instrument for applying which is the double canula of Niessen, altered by Dr. Gooch. These observations, taken from a communication by Dr. Heming, are illustrated by cases. The first is that of a lady in whom the polypus had a very thin pedicle, and was separated by the act of vomiting. In the second case, the pedicle separated by ulceration. The polypus was very large, and had caused considerable constitutional mischief. In the third case, narrated by Dr. Gooch, the thin pedicle broke while the polypus was in his hand during examination. The fourth case was one of an exceedingly large polypus, as large as the head of a newly-born infant, protruding externally, with a pedicle as thick as an infant's neck. It was attached to the anterior lip of the os uteri, and its protrusion was attended with severe hæmorrhage. A strong ligature was applied around it, and three days afterwards it was removed with the scalpel. The patient did well. The fifth case occurred to the late Dr. Hamilton, and is that of a lady who had a large polypus, which did not present any appreciable symptoms, until just before it was discovered by a vaginal examination. The sixth was of a female who had a small polypus within the uterus, which was expelled by small doses of secale cornutum, and removed by the wire ligature. In the seventh case, the polypus, which was about the size of a large walnut, with a comparatively thick, long, and soft pedicle, was not discovered by several practitioners for want of a vaginal examination. It was removed by a ligature applied by means of the speculum, and a single tube. No polypus could be discovered during the life-time of the patient in the eighth case, but after death a polypus was found growing from the fundus uteri, and still within its cavity. The patient was subject to leucorrhœa, and occasional discharge of blood from the vagina; the uterus was somewhat enlarged. The ninth case, was that of a lady in whom no polypus could be discovered by two practitioners of eminence in Edinburgh, nor afterwards in London, at Rome, or at Geneva. A year and a half afterwards, when again in London, she had a recurrence of the hæmorrhage, with bearing-down pains, and a polypus was then discovered in the vagina. It was easily removed, and the patient recovered. In the tenth case, an unmarried lady was partially operated on by a distinguished provincial surgeon; but the proceeding giving great pain, was abandoned, and Dr. Heming afterwards consulted. There was not any polypus, only a little more projection of the cervix into the vagina than usual. The eleventh case is also an illustration of a tender and enlarged vagina with copious sanguineous discharge, being mistaken for polypus. In this case, the practitioner, who committed the error, did not make a vaginal examination. The twelfth case presented symptoms of the cauliflower excrescence; but an examination shewed the disease to be a rather large polypus. The thirteenth case is one apparently of polypus, with carcinomatous degeneration of the uterus. The fourteenth and last case, is one of adhesion of the polypus, to the uterine parietes, by cellular tissue, in which the patient did apparently well without the removal of the tumour.

Abscess of the septum nasi.—Mr. Liston says, when a person receives a blow on the front of the nose, violent inflammation may take place, and sometimes very serious consequences may result. The septum of the nose is shaken, great infiltration takes place under the lining membrane covering the bones, and inflammation and abscess are very often the consequence. A patient presents himself, with the nostrils closed up by a large swelling occupying both nares, and the breathing is obstructed. This has been more than once mistaken for a polypus; and Mr. Liston has seen a practitioner take hold of such a swelling with the forceps, give it a twist, and out has come a gush of purulent matter. Instead of taking a blunt instrument and pulling it, it should be freely opened in one or both nostrils, with a keen cutting bistoury, and the matter allowed to escape. If this be done at a sufficiently early period, the probability is the patient will soon get well; but if not, the septum may be destroyed, and the two nostrils so far thrown into one; ozœna will follow, accompanied with great fœtor, and the patient may only recover with the partial or total falling down of the prominent part of the organ. Cases have occurred in which the columna nasi have been destroyed after such an accident. Abscess of the septum is not well described in the ordinary works on surgery.

Secondary syphilis.—Mr. Smith gives a brief abstract of several cases of secondary syphilis cured by a mild but continued course of mercury, followed by sarsaparilla, after iodine, the iodide of potassium, and nitric acid in decoction of sarsaparilla, had only produced temporary benefit. The primary treatment did not include any mercurial course.

Enlargement of the heart.—Dr. Henderson relates the case of a woman, 41 years of age, in whom structural enlargement of the heart was produced by the repeated and continued occurrence of palpitations, consequent on menorrhagia. The valves were sound.

Abscess of the heart.—Dr. Chambers narrates the case of a boy fourteen years of age, who was an in-patient of the Essex and Colchester Hospital for disease of the ancle joint, and who was seized with convulsions of an epileptic form, from which he was partially roused by the treatment that was adopted, but relapsed and died the next day. On examination of the body, the pericardium was found thickened, and strongly adherent to the heart; and an abscess was discovered extending from auricle to auricle round the apex of the heart, and lodged in its substance; it contained about two ounces of matter. The patient had been in bad health for three years previously, his illness commencing with an attack of typhus fever, according to the report of his friends, but which Dr. Chambers thinks may have been rheumatic. It is not improbable that the abscess of the heart may have occurred by metastasis from the ancle-joint. The nature of the disease of that part is not mentioned.

Acids and salts.—Liebig defines acids to be combinations of hydrogen, with simple or compound radicals, in which the hydrogen may be replaced by its equivalent amount of metals. Salts are combinations of simple or compound radicals with metals, corresponding in their composition with the degrees of oxidation of the latter.

Albuminuria.—Mr. Ross presents an analysis of forty cases of dropsy, the details of which were recorded in order to ascertain the relations of albumen and the various salts found in the urine to the organic lesions, indicated by symptoms, or shewn by a *post-mortem* examination. These cases are given to demonstrate that albuminuria is a consequence of the arrest of the functions of the skin. The reasons that first influenced Mr. Ross in forming this conclusion, were derived from observing the fact of the urine being found uncoagulable, when the anasarca was trifling, and the skin in a freely perspiring state; but that when the skin was dry, and the anasarca extended to the hips, coagulable urine would be certainly found, unless at the same time any one of the serous surfaces should commence a secretion of albuminous fluid, and by such means relieve the kidneys. If also extensive anasarca should remain *in statu quo* for several days or weeks, the urine during this time would be albuminuous; but if, as before, effusion into a serous cavity should take place during the previous twenty-four hours, the urine would cease to render a coagulum, which would again appear upon an arrest of the functions of the secretory surface. Hence, albuminous urine does not alone depend upon the state of the kidneys as organically diseased, but also upon the state of the skin and serous surfaces. The experimentum crucis of this doctrine is the non-co-existence of ascites and albuminuria. Upon examining his cases, Mr. Ross found they supported his views in this particular; for out of the forty cases of dropsy, there were seventeen of albuminuria, five of which only were ascitous; these five cases proved the rule on a different ground. The examination of the urine with regard to the presence of albumen, was made in only twenty-four cases out of the forty, and of these, in seven instances, there were not any traces of albuminuria. In twelve out of the seventeen cases, the degree of coagulation was proportionate to the extent of the anasarca. In the remaining five cases, where the albuminuria was accompanied by ascites, there were only traces of albumen in the urine, or in the ascitic fluid, or else, as in the first case, the urine being very coagulable, ascites was not present at that time. In concluding, Mr. Ross states what he conceives to be the most important and specific function of the skin as a glandular organ. The secretion of the perspiratory fluid, composed of salts and aqueous particles, is by no means the distinctive office of the skin; it is a specific excretory gland, and equally as important as the kidneys. The specific substance it secretes is albumen, in the form of the cuticular envelope, hair, nails, &c. The secretion of albumen in this form is, under certain circumstances, extremely rapid and considerable. The amount of the perspiratory fluid is merely a criterion of the activity of the secretion of albumen, although this relation is by no means constant. If this secretion of albumen be interrupted, the kidneys will be required to eliminate it, and they will do so with the greater facility, in proportion as they have undergone the state of granular degeneration, When the kidneys, from being thus diseased, carry off the retained albumen, there is, in a ratio to their activity, a prevention of effusion into the internal serous cavities. Mr. Ross observes, therefore, that the disease of the kidneys is thus the better of two evils, and becomes a means of prolonging life.

Spontaneous expulsion of the fœtus.—Mr. Wardleworth was called to a woman, thirty-five years of age, in labour with her seventh child. On examination, he found the right arm, which was livid and swollen, protruded, and the shoulder was resting against the anterior portion of the pubes. On the recurrence of uterine action, the shoulder was forced against the pubes, and by placing the fingers in the axilla of the child, at the same time elevating the shoulder, upwards and outwards, the thorax, breech, legs, head, and remaining arm, with the placenta, cleared the perinæum at one sweep. The child, a male of the average size, was born dead: the mother is doing well.

Neuralgia.—Dr. Allnatt has a firm conviction of the truth of the following propositions:—1st. That peripheral neuralgia never occurs as a primary idiopathic affection; but that (independent of organic disease), its invariable source may be ascribed to irritation of the ganglionic centres.—2dly. That this condition is transmitted by direct communication, irrespective of the laws of sympathy.—3rdly. That (functional) tic is an affection peculiarly amenable to constitu-

tional treatment—and, 4thly. That local applications, whether sedative or stimulating, anodyne or destructive, are more frequently detrimental than sanative in their operation.

CURE OF STONE BY ELECTRICITY.—An anonymous correspondent offers to pay one hundred pounds to any one who may succeed in removing a calculus from the bladder by galvanism.

LACERATION OF THE BRAIN.—In the *Provincial Medical Journal*, is contained the brief abstract of the case of a man, who was thrown from a horse in the street, and was brought to the hospital with extensive fracture of the skull. Laceration of the brain and of the lateral sinus, with great effusion on the surface of the brain was found. There were slight tetanic convulsions before death, a symptom regarded by Mr. Banner of Liverpool, as diagnostic of laceration of the brain, and consequently indicative of the inutility of the trephine.

VICARIOUS MENSTRUATION.—A case is related by Dr. Cowan, of a woman previously healthy, and the mother of two children, who had not menstruated for seven months, in whoma discharge of fluid resembling the catamenia occurred at menstrual periods from the rectum. A tumour was discovered at the lower part of the abdomen, which was supposed to be ovarian, but ultimately proved to be the impregnated uterus.

FROWNING.—Mr. May narrates the case of a lady, thirty-four years of age, who had been affected for seven years with almost continual spasm of the orbicularis palpebrarum, and the muscles allied in the production of frowning, and which no treatment could stop. Mr. May supposed it was a habit, and ascertained that by making pressure on one brow, frowning was prevented. A patch was ordered to be worn on each eye for a few hours alternately, covering the eye, and making gentle pressure on the brows. The habit was thus broken, and a cure effected.

RARE DISEASE OF THE HEART.—Mr. Harrison presented to the Reading Pathological Society, the heart of a child, two years and two months old, the subject of cyanosis. The right side of the heart was enormously distended with clots and fibrine; auricle and ventricle greatly enlarged. The auriculo-ventricular orifice was so much enlarged, or dilated, as to annihilate the functions of the valves. The pulmonary artery was greatly dilated; the ductus arteriosus impervious. On the left side, the auricle was very small; the foramen ovalo open, its edges rounded; no valvular apparatus; the auricula absent. No appearance of the entrance of any pulmonary veins. Ventricle very small. The circulation must have been very peculiar, and tracing it from the right auricle, it would appear that a portion of blood would escape into the left auricle, ventricle, aorta, and general circulation in the usual way; but that the greater portion would pass into the right ventricle, the pulmonary artery, and lungs, as usual; that it would then be returned by the pulmonary veins into either the vena azygos, or into the superior cava, more probably the latter, and then into the right auricle. There would thus be in the right auricle a mixture of arterial and venous blood, and this mixture it would be, which, passing to the left side, alone ministered to the wants of the body, in this manner accounting for its peculiar appearance and imperfect development. The circulation would be carried on nearly independently of the left side of the heart, approaching the dicælious heart, as described by Hunter.

TARTAR-EMETIC IN SYPHILIS.—M. Willebrand, it is said, has used tartarized antimony successfully in the treatment of syphilis. The sores in the primary forms healed in from twelve to twenty days. Its effects were most strikingly beneficial in secondary affections of the throat and scrotum. The remedy was usually continued for six or eight days after the disappearance of the symptoms.

SUPPOSED POISONING BY ARSENIC.—In the two last numbers of the Forceps are contained the particulars of an interesting case, occurring in the person of an American physician, who while labouring under ill-health, had a minute portion of arsenic and morphia in powder, inserted by a dentist into a decayed tooth to destroy the nerve. The arsenical preparation was covered with wax, was withdrawn a few hours after the application, and the tooth extracted, as relief had not been experienced, and in fact the doctor's sufferings were aggravated. The patient, according to the report before us, was attending his patients the next day, without exhibiting any local or constitutional effects of arsenic on the system. He rode this day several miles in windy and uncomfortable weather, the journey and the previous extraction of the tooth being followed by febrile symptoms, and erysipelatous inflammation of the neck and face, with a tendency to diffuse suppuration and perhaps sloughing, of the cellular tissue. When visited by a physician, the whole face and neck were excessively swollen, red, and painful, and the swelling extended downwards upon the upper part of the chest. Upon the sides of the neck and in the region of the lower jaw, especially upon the right side from which the tooth was extracted, the swelling was hard and painful under pressure. The tumefaction of the face was so great as nearly to close the eyes; the mouth could not without difficulty be sufficiently opened to protrude the tongue, or to allow an examination of the tongue and fauces. The patient spoke with difficulty and scarcely intelligibly; deglutition was difficult and painful; respiration laborious and attended with mucous rattle in the throat, and the patient was frequently, by drinking warm water, irritating the fauces with an instrument, and by voluntary efforts, exciting vomiting, apparently with the view to dislodge the mucus, as he seldom or never vomited until some or all these means had been employed; the skin was cool and moist; pulse feeble and irregular; great restlessness; he made no complaint of pain in the stomach or bowels, nor of tenderness under pressure of the abdomen; urine passed without pain or difficulty, and there was no apparent delirium. Sufficient evidence here exists of the presence of unhealthy inflammatory action, especially affecting the interior of the mouth, fauces, and upper part of the larynx, and the cause may be found in the previous ill-health of the patient, his liability to erysipelatous attacks, the exposure to cold and windy weather, and the local cause of toothache and the subsequent extraction of the offending tooth. The evidence against these symptoms being produced by the arsenic which was used, is found in the fact that other cases occurred about the same time in the same locality, in which no arsenic was employed, that Dr. Boardman, of Haisford, died after similar phenomena, the local (suspected) cause being the application of creosote to a diseased tooth. Besides which, the dentist, when he examined the tooth, found all the arsenic which he had used perfectly dry in the cavity of the tooth, and covered by wax. The evidence against the opinion that the arsenic was the cause of death, is thus summed up:—"We are not aware that any one who has with any intelligence examined the subject, supposes that the poison escaped from the tooth, and was inadvertently taken into the stomach. There is not the slightest evidence, either from the circumstances of the case, or the subsequent symptoms, to indicate that such was the fact. The tooth affected, into which the arsenical preparation was introduced, was a bicuspid of the lower jaw, with a favourable cavity for the introduction of the remedy, and effectually securing it there by a covering of wax; and we have no reason to doubt the whole was judiciously and skilfully performed by the dentist. We have no proof that any escaped so as even to fall upon the tongue, or mucous membrane of the mouth. The attack of pain in the stomach and vomiting, referred to by Dr. Woodruff, did not occur until more than thirty hours after the application, and twenty hours after the tooth was extracted, and the patient had in the interval, repeatedly taken food. Could the operation of so virulent a poison be thus delayed, how tremendous would be the agent for evil, in the hands of the designing. In case of poisoning, we should have to inquire into the circumstances, not merely of the last but of several previous repasts. There was an absence of symptoms of inflammation of the stomach and bowels, which must have existed had a poisonous dose of the article been received into it, nor could the inflammation of the neck and face be at all explained upon such a supposition. The whole quantity applied to the tooth was not sufficient, if received into the stomach, to cause death. It did not exceed the ordinary dose as exhibited in intermittents, lepra, &c.; that is, from one-tenth to one-fourth of a grain. The dose has been increased when administered internally in the form of Fowler's solution, even to one half of a grain, with beneficial results. The dentist tells us that from one-eighth to one-twelfth of a grain of the arsenious acid, with half the quantity of morphine, moistened with creosote, is quite sufficient to destroy the nerve of a tooth, and is more than was used in the present case, the tooth having but a single root. The more plausible supposition is, that the consequence resulted from the local action of the remedy. Cases have occurred showing peculiar insceptibility to its influence. The external, as well as the internal application of arsenic is, in sufficient quantity, known to be poisonous. But here, if strictly confined to the cavity of the tooth, it is believed there could be absolutely no absorption; if it escaped the tooth at all, there must have been the protection afforded by the lining membrane of the mouth, and the skin covering the part through which it could only act slowly, and after the membrane was destroyed.

TETANUS FOLLOWING THE OPERATION FOR FISTULA LACRYMALIS.—According to a communication by M. Petri published in the *Gazetta Toscana delleScienza Medico-fisiche*, tetanus attacked a woman, fifty years of age, on whom the operation for fistula lacymalis had been performed, and terminated fatally on the fourth day. Dr. Betti witnessed a similar case in the practice of Vacca, but in that instance a cure was effected by withdrawing the pin.

A SELECT PRACTICAL FORMULARY.

TRANSLATED FROM THE FRENCH OF M. FOY, PRINCIPAL PHARMACIEN OF THE HOSPITAL ST. LOUIS, AT PARIS.

(Continued from page 298.)

PILLS OF THE NITRATE OF SILVER: one grain of melted nitrate of silver, seventy-two grains of crumb of bread, mixed together, and made into sixteen pills. Mode of exhibition—one evening and morning, then two, three, &c., successively, in the treatment of epilepsy, nervous trembling, and paralysis.

MERAT'S NITRATE OF SILVER PILLS: thirty-six grains of the aqueous extract of opium, forty-eight grains of powdered camphor, twenty-four grains of powdered musk, three grains of nitrate of silver, mixed together, with a s ufficient quantity of simple syrup, and made into forty-eight pills.

PILLS OF CAMPHOR AND OPIUM (Ricord): forty-eight grains of powdered camphor, eight grains of aqueous extract of opium, mixed with a sufficient quantity of mucilage, to make sixteen pills. Mode of exhibition—from two to three daily, at bed-time; used in the treatment of painful erections, and of irritation at the neck of the bladder.

— OF OXIDE OF GOLD, see auriferous pills.

— OF STORAX (L'Heritier): one hundred grains of purified storax, mixed with a sufficient quantity of liquoriee powder, and made into pills weighing six or eight grains each. Mode of exhibition—three evening and morning, the dose being gradually increased until twelve are given in the course of the twenty-four hours. Used in blenorrhea and leucorrhea.

SWEDISH PILLS: a drachm and a-half of calomel, one drachm of the black sulphuret of mercury, one drachm of Kermes mineral, made into one hundred and forty-four pills, with a sufficient quantity of crumb of bread. Mode of exhibition—three or four daily, as an antisyphilitie.

PILLS OF THE SULPHATE OF QUININE (Elliotson): fifteen grains of the sulphate of quinine, fifteen grains of extract of camomile, made into twelve pills, and given in the course of the day. Used in the treatment of intermittent fevers.

PILLS OF TURPENTINE (Faure): pills weighing six grains each, prepared with turpentine solidified, with calcined magnesia. Mode of exhibition, from five to six daily, in phlegmasia of the urinary organs.

PILLS OF THRIDACE AND THE PROTO-IODURET OF MERCURY: see Pills of the iodurct of mercury.

TONIC PILLS (Gall): seventy-four grains of cinchona powder, one hundred and eight grains of powdered alum, mixed together, and made into pills weighing three grains each, with gum tragacanth mucilage. Mode of exhibition—five daily in the treatment of cancerous affections of the uterus.

PILLS OF VALETTE: five hundred parts of crystallized sulphate of iron, recently prepared according to Borsdorff's method, (these parts to be either drachms or ounces,) five hundred and eighty-eight parts of pure carbonate of soda, three hundred and six parts of very pure white honey, and a sufficient quantity of simple syrup. These substances, properly treated, and brought by evaporation to a pilular consistence, are to be preserved in well stoppered vessels. Twelve pills are to be made with two drachms of this mass, mixed with a sufficient quantity of an inert powder; they

contain about fourteen grains of carbonate of iron, and nine grains of protoxide. Mode of exhibition—from ten to thirty pills daily, in chlorosis.

Pills of Valette with Cubebs (Puche): one grain of the pill mass of Valette, four to six grains of powdered cubebs, made into a pill. Mode of exhibition—twenty to fifty daily, in chronic blenorrhagia.

Pills of Veratria (Magendie): one grain of veratria, forty eight grains of powdered gum arabic, and a sufficient quantity of syrup to make twelve pills. Mode of exhibition—from one to three daily; drastic.

Pills of Veratria (Turnbull): one grain of veratria, ten grains of extract of hyoscyamus, ten grains of liquorice powder, mixed together, and made into ten pills, one to be given every hour.

Vermifuge Pills: one drachm of powdered rhubarb, half a drachm of calomel, mixed together, and made into pills weighing four grains each, with a sufficient quantity of extract of wormwood. Mode of exhibition—from one to six daily for children from two to six years of age, and from ten to fifteen pills daily for adults.

Piperine: piperine, the active principle of the black pepper, possesses well marked febrifuge properties; from forty to sixty grains are generally sufficient. It may be given in the form of bolus or pill, or by the endermic method.

Pœony (Pœonia Officinalis): powdered root, half a drachm to a drachm, in bolus or pill, as antispasmodic; distilled water of the flowers, one to three ounces, as the vehicle of a draught or sedative mixture.

Plantago: distilled water, one to three ounces, as a discutient collyrium.

Platina: the oxide of platina has been recommended by Niemann as emetic or purgative; its crystallized chloruret, employed in the treatment of syphilis in the dose of one-fifth of a grain, in friction on the gums, has been of but little service.

Pepper (Black): powder, four to twenty grains, in bolus or pills; infusion, half a drachm or a drachm, to a quart of water or wine. Pepper is a stimulant and tonic, and is used daily as a condiment. Alone, or mixed with bitters, it is of service in cases of atony of the digestive canal, in gouty affections, accompanied with dyspepsia, &c. Combined with cinchona, it is very successful in the treatment of obstinate intermittent fevers. In India it is exhibited in the form of infusion, in cases of cholera morbus, and to stop vomiting. It is one of the components of the Asiatic Pills. Externally, it is used with advantage in relaxation of the uvula, and as a rubefacient and vesicant agent. *** The long pepper, the Indian pepper, or annual pimento, the pimento, or Jamaica pepper, and the betel pepper, all possess the same properties. They are but little employed in France.

Burgundy Pitch: Externally spread upon leather, as a derivative in rheumatic affections, pleurodynia, &c. This substance, which enters into the composition of several ointments and plasters, produces a rubefacient effect upon the skin, and often an eruption of small pimples.

Pollen: the fecundatory dust of plants; that of the typha and hazel-tree may be employed for the same purpose as that of the lycopodium. See lycopodium.

Polygala Amara: powder, twenty to seventy-two grains; decoction, half an ounce to an ounce to a quart of water; tonic; sometimes employed in large doses as emetic and purgative.

Polygala of Virginia (Polygala Senega): powder, ten to thirty-six grains, in bolus or pill, as stimulant; hot or cold infusion, half an ounce to an ounce to a quart of water, to which is often added a pint of milk; syrup, one to three ounces. Polygala is at present but little used; it was employed much more frequently formerly, in the latter stages of pulmonary catarrhs, and in all the phlegmasiæ of the chest, even when in the acute form; it was also administered as sudorific and diuretic, in chronic rheumatism, certain dropsies, &c.

Polypodium: the expectorant, diuretic, and purgative properties of the polypodium vulgare are now generally forgotten.

Poly-sulphuret of Potash: see sulphuret of potash.

Pomegranate Root Bark: decoction, half an ounce to two ounces, and much more—four or five ounces—to a quart of water. (See decoction of the bark of the pomegranate root.) Powder, one to three drachms, in bolus or pill, or in a little water. *** Astringent and anthelmintic, used in cases of tænia.

Pommade Ammoniacal: see ammoniacal caustic.

Pommades Anti-Syphilitic: see white precipitate cerate, pommades of white and red precipitate, mercurial cerate, mercurial pommades, pommades of calomel, cyanuret of mercury, the iodurets of mercury, &c.

Pommade of the Arseniate of Soda (Hopital du Midi): one drachm of the arseniate of soda, sixteen drachms of lard, incorporated together. Used as a topical application in cancerous affections.

Pommade of Calomel (Formulary of Parisian Hospitals): one drachm of calomel, prepared by steam, three ounces of lard, triturated together.

Calomel Pommade with Opium (Hopital du Midi): three ounces of the calomel pommade, one drachm of gummy extract of opium, or two drachms of liquid laudanum, mixed together. Used to dress flat pustules, or indolent indurated chancres, &c

Pommade of the Carbonate of Lead: see ointment of Blanc-Rhasis.

Pommade of the Chloruret of Gold and Sodium: fifty grains of the chloruret of gold and sodium, two drachms of lard. Used as a topical application in the denuded skin, against syphilitic and scrophulous ulcerations.

Pommade of Cinnabar, called No. 4, (Hospital St. Louis): three drachms of porphyrized cinnabar, one drachm of powdered sal ammoniac, four ounces of lard, two drachms of rose-water, mixed together, by incorporation and agitation. Mode of exhibition—in frictions in cases of prurigo pedicularis, in the dose of one or two drachms each time.

Pommade of the Cyanuret of Mercury (Biett, Parent): ten to fifteen grains of the cyanuret of mercury, one ounce of lard. Used in syphilitic ulceration, and certain moist squamous dartrous eruptions, attended with inflammation and pruritus. *** This pommade may be aromatised with a few drops of some essential oil.

Pommade of the Cyanuret of Potassium (Lombard of Geneva): three to six grains of the cyanuret of potassium, one ounce of lard, mixed together. Used in scrophulous ulcerations, complicated with syphilis, and attended with pain. Mode of exhibition—a piece the size of a nut, used in frictions.

Pommade of Hellebore (Biett): one ounce of powdered white hellebore root, eight ounces of lard, mixed together, and twenty drops of the essential oil of lemons added. Used in frictions, in the course of a fortnight, in cases of itch.

Pitch Pommade: one drachm of pitch, one ounce of lard, mixed together; used in frictions in cases of itch and porrigo.

Pitch Pommade (Hopital du Midi, Ricord): two drachms of the sulphate of mercury, four drachms of pitch, three ounces and a-half of lard, mixed together. Used as a topical application in the treatment of syphilitic psoriasis. It has also been employed with success in tinea, the acute form of the disease having been previously diminished, and the crusts having been removed by emollient poultices.

Pommade with the Oil of Tar (Girard): two ounces of lard, two to four drachms of the pyroligneous oil of tar, mixed together. Used in frictions in psoriasis.

Pommade with the Hydrobromate of Potash (Magendie): half a drachm of the hydrobromate of potash, one ounce of lard, mixed together. Mode of exhibition—half a drachm to a drachm, in scrophulous swellings.

Pommade of Hydrochlorate of Gold (Formula of Montpellier): ten to twelve grains of the hydrochlorate of gold, one ounce of lard, mixed together. Used as a topical application, either thinly spread, or in gentle frictions, on syphilitic excrescences, or obstinate chancres of scrophulous origin, &c.

Pommade of Iodine: one drachm of iodine, two ounces of lard, mixed together, and kept in a large mouthed well-stoppered bottle, to prevent the volatilization of the iodine, and the discoloration of the pommade. Mode of exhibition—see hydriodated pommades.

GOSSIP OF THE WEEK.

College of Surgeons.—The following official notice has been issued and circulated in the general papers.—"Notice is hereby given, that the following are the hospitals and schools of surgery and medicine from which certificates of the professional education of candidates for the fellowship will be received by this college for the year commencing the 1st of August next, viz.:—*Hospitals in England.*—London: St. Bartholomew's, St. Thomas's, Westminster, Guy's, St. George's, London, Middlesex, University College, Charing-cross, King's College. Provincial—Bath United Hospital, Bedford General Infirmary, Birmingham General Infirmary, Queen's Hospital, Birmingham, Bristol Infirmary, Addenbrook's Hospital, Cambridge; Derbyshire General Infirmary, Devon and Exeter Hospital, Gloucester Infirmary, Hull Infirmary, Kent and Canterbury Hospital, Leeds General Infirmary; Leicester Infirmary, Liverpool Infirmary, Liverpool Northern Hospital, Manchester Royal Infirmary, Newcastle upon-Tyne Infirmary, Norfolk and Norwich Hospital, Northampton General Infirmary, Nottingham General Hospital, Radcliffe Infirmary, Oxford; Salisbury General Infirmary, Salop Infirmary, Sheffield General Infirmary, Stafford County General Infirmary, Sussex County Hospital, Winchester County Hospital, Worcester Infirmary, York County Hospital.—*Hospitals in Ireland*—Dublin—Richmond, Dr. Steevens's; City of Dublin, Mercer's, Meath, Jervis-street, St. Vincent's. Provincial—Belfast Hospital, North and South Infirmaries, Cork; Limerick County Infirmary,—*Hospitals in Scotland.*—Edinburgh—Edinburgh Royal Infirmary, Provincial—Glasgow Royal Infirmary, Aberdeen Royal Infirmary.—*Schools in England.*—London—St. Bartholomew's. St. Thomas's, Westminster, Guy's. St. George's, London, Middlesex, University College, King's College, Charing-cross, Aldersgate-street, Grosvenor-place, Kinnerton-street, Charlotte-street. Provincial—Royal School of Medicine and Surgery, Birmingham; Old Park Medical School, Bristol; Hull and East Riding School of Medicine, Leeds School of Medicine, Liverpool Royal Institution; Royal School of Medicine and Surgery, Manchester; Newcastle-upon-Tyne School of Medicine and Surgery, Sheffield Medical Institution, York School of Medicine.—*Schools in Ireland.*—Dublin.—Royal College of Surgeons, Trinity College, Apothecaries-hall, Richmond, Dublin School of Medicine, Original School of Medicine, Peter-street; Park-street School of Medicine. Provincial—Belfast Royal Institution, Cork Southmall School of Medicine, the several schools recognized by the Royal College of Surgeons of Ireland.—*Schools in Scotland.*—Edinburgh—The University. Provincial—The University, Glasgow; King's College; Aberdeen; Marischal College and University, Aberdeen. The several schools recognized by the Royal College of Surgeons of Edinburgh.—*In Foreign Countries.*—The several hospitals and schools in the following cities, viz:—Paris, Montpelier, Strasburg, Berlin, Vienna, Heidelburg, Bonn, Gottingen, Leyden, Pavia, New York, Philadelphia.—By order of the Council.—Edmond Belfour, Secretary. July 13, 1844."

Royal College of Surgeons of England.—Gentlemen admitted Members, on Friday, Aug. 2, 1844:—H. Bunn, M. O'Grady, R. Fowler, J. B. Hallinan, J. E. Brine, J. F. Clark, J. Hope, D. Davies, S. B. Gwynn.

Apothecaries' Hall.—Gentlemen admitted Members, 1st August, 1844.—Joseph William Harrison, John Williams James, Thomas Massey, George Harday.

Edinburgh.—[From a Correspondent.]—Great excitement has been produced to-day (July 31) in the medical circles here, and amongst those who take an interest in the affairs of the University, by the intelligence that Mr. Mackenzie has received his *congè* as assistant to Dr. Munro, the Professor of Anatomy, after a service of 27 years' duration. The act is understood to have been that of Professor Syme, the Dean of Faculty, with whom Mr. Mackenzie is said to have had a serious difference, during the spring, on the question of fees; and though the former, then, resisted the design of Mr. Mackenzie to raise the Course of Practical Anatomy from three to four guineas, it is reported that he now entertains no objection to the increased scale, if the appointment be conferred on Mr. Goodsir, a nominee of his own. Whatever may be the opinion held on these squabbles, the public judgment points to one man exclusively as fitted for the vacant office, if it were conferred with a view to successorship in the chair: but we question whether the position of Dr. Knox, the eminent individual alluded to, with respect to the Town Council, at whose disposal the gift would be, is not such as to preelude him. A *biting* letter, which Dr. Knox some time ago addressed to the Council, concerning their disposal of the seats in the University, will not be forgiven him.

Metropolitan Mortality for the Week ending Saturday, July 27.

Causes of Death.	Total.	Average of 5 Springs.	Average of 5 Years.
All Causes	1014	900	946
Zymotic, or Epidemic, Endemic, and Contagious Diseases	1009	897	942
Sporadic Diseases—			
Dropsy, Cancer, and other Diseases of uncertain or variable Seat	98	106	111
Diseases of the Brain, Spinal Marrow, Nerves, and Senses.	169	159	157
Diseases of the Lungs, and of the other Organs of Respiration	240	233	286
Diseases of the Heart, and Blood-vessels	24	19	21
Diseases of the Stomach, Liver, and other Organs of Digestion	90	88	69
Diseases of the Kidneys, &c.	9	5	5
Childbirth, Diseases of the Uterus, &c.	11	9	10
Rheumatism, Diseases of the Bones, Joints, &c.	5	5	6
Diseases of the Skin, Cellular Tissues, &c.	0	0	1
Old Age	51	56	57
Violence, Privation, Cold, and Intemperance	85	25	26

No. 256. **SUMMARY.** Aug. 17.

CLINICAL LECTURES ON SOME IMPORTANT POINTS OF SURGERY, BY SIR B. C. BRODIE, BART.:—
LECTURE XV.—Method of Treating Strictures of the Urethra (continued.)—Application of Caustic, as practised years ago, and lately revived—Mode of performing this Operation—Practice of Mr. Hunter and Sir E. Home—Cases in which this application is useful—Bad Effects which it is occasionally apt to produce—Different Plans adopted in these Diseases—Necessity of constantly Passing the Bougie—Nature and Treatment of some kinds of Fistula in Perinæo—Their Dependance on Stricture, and Removal with the Cure of the latter—Difficulty of getting these False Passages to Heal, when they communicate likewise with the Rectum—Dangerous Consequences sometimes resulting from the mere passage of a Bougie and best Mode of Preventing them 399

LECTURES ON THE THEORY AND PRACTICE OF MEDICINE, BY DR. C. J. B. WILLIAMS, M.D., F.R.S.:—
Intestinal Inflammation — Chronic Enteritis — Causes—Symptoms—Treatment—Dysentery—Its Varieties and Symptoms—Malignant Dysentery—Treatment—Chronic Dysentery—Treatment 400

ON AN OPERATION OF ENTEROTOMIA Successfully Performed without Opening the Peritonæum, followed by Remarks on the Pathological Anatomy of the Colon in the Lumbar Regions, by J. Z. AMUSSAT, M.D., Member of the Academy of Medicine, &c.. 401

ON REFLEX NERVOUS ACTS AND THEIR DISTURBANCES, AND THE MORE PROBABLE PARTS OF THE DOCTRINE OF SYMPATHIES, BY F. WILKINSON KING, F.R.C.S.E.:—
Merit of Generalizing Reflex Acts—Views of Whytt, Mayo, Hall—Simple Reflex Acts, and Obscure, Direct, Crossed, Retrograde—Medulla Oblongata—Spinal Cord excluded—Indices of its various Functional Columns 403

CASES OF CHOREA, BY DR. WATERS 404

OBSERVATIONS ON NEURALGIA, BY DR. ALLNATT .. 405

SINGULAR CASE OF MONSTROSITY, BY MR. TIBSON.. 405

OBSERVATIONS ON A WORK ENTITLED "CHEMISTRY IN ITS APPLICATIONS TO AGRICULTURE AND PHYSIOLOGY," BY PROF. LIEBIG, M.D., PH.D... .. 405

HOSPITAL REPORTS:—
Royal Westminster Ophthalmic Hospital.. 407
St. Bartholomew's Hospital.. 407

PARISIAN INTELLIGENCE:—
Professor Velpeau on Diseases of the Eye.—Conjunctivitis Purulenta—Varieties; Ophthalmia Egyptiana—O. Infantum — O. Blenorrhagica — Prognosis — Treatment — Conjunctivitis Simplex—General and Local Remedies .. 407
On Fractures of the Neck of the Femur, &c. by Dr. Robert 408
On a Case of Cancerous Cachexia 409
New Mode of Reducing Exomphalus 409
Proceedings of the Academy of Sciences, Aug. 5th 409
M. Dutrochet's Researches on the Volubility of the Stems of certain Plants, and on the Cause of this Phenomenon .. 409
On the Compounds of Phosphuretted Hydrogen, by M. P. Thenard 409
Proceedings of the Academy of Medicine, Aug. 6th 410
Professor Velpeau on Varicocele 410
On Spontaneous Separation of the Uterus 410
Lusus Naturæ.. 410

REVIEWS:—
Dr Rees on the Diseases of Children; their Symptoms and Treatment 419
Mr. Harrison Curtis on the Present State of Ophthalmic Surgery.. 411
Modern Surgical Instruments, &c. 411

TO CORRESPONDENTS 411

A BILL FOR THE BETTER REGULATION OF MEDICAL PRACTICE THROUGHOUT THE UNITED KINGDOM 411

DR. BORRETT ON THE PRESENT STATE OF PROSPERITY OF THE PROFESSION 414

DR. STRANGE ON FRAUDULENT ASSUMPTION OF MEDICAL HONOURS 414

THE COLLEGE CHARTER 415

THE TRUTHS AND FALSEHOODS OF THE THEORIES OF LIEBIG, WITH NEW VIEWS ON SOME IMPORTANT POINTS OF ORGANIC CHEMISTRY AND PHYSIOLOGY 415

GOSSIP OF THE WEEK:—
Funeral of Dr. Dalton 417
Transactions of the Medical Protection Society 417
Meeting of the Provincial Medical and Surgical Association. 417
Gentlemen admitted Members of Apothecaries' Hall.. .. 418
University Intelligence.. 418

METROPOLITAN MORTALITY TABLE 418

A SELECT PRACTICAL FORMULARY 418

A COURSE OF CLINICAL LECTURES ON SOME IMPORTANT POINTS OF SURGERY,

Delivered at ST. GEORGE'S HOSPITAL, by Sir BENJAMIN C. BRODIE, Bart.

Lecture XV.

GENTLEMEN,—Besides the method of treating strictures by metallic sounds, as I explained to you at our last meeting, there is another plan which was introduced in this country nearly two-hundred years ago by Wiseman; then abandoned; then re-introduced by Hunter and Sir E. Home; and now again brought forward as a novelty by some of the French surgeons,—I mean treating them by nitrate of silver. I shall now proceed to explain how it is to be applied, and the cases in which its use is advisable. First, pass a common bougie, to see how far the stricture is down, and also to dilate the urethra properly; having done this, take a straight wax bougie and scoop out the end, and then fix to it a piece of caustic. The passage having been previously examined by a common bougie, the instrument armed with caustic is to be passed down to the stricture, and kept there for a quarter or half a minute, or it may be a little longer. This operation requires to be performed with some caution; you must take great care not to make the parts bleed, for if the parts have been torn, the caustic will do mischief; and if the bougie you introduce first has made the parts bleed, you must not apply the caustic then; but should this not be the case, you are to press it down firmly upon the stricture, otherwise it will come in contact with the urethra in front of the constricted part. Mr. Hunter and Sir E. Home thought this removed strictures by burning them out, but I think it is quite needless for me to say, that when you have a cartilaginous stricture it is impossible to burn it out with any caustic. The effect is not so striking upon an old, as it is upon a recent, or spasmodic, stricture, because it acts chiefly by relieving spasm. I have applied the caustic when a man has had mere retention of urine, and it has relieved him immediately; not that I recommend this, but I have known it succeed nevertheless. You will meet with cases where the symptoms are relieved at once, so that you are enabled to pass a full-sized instrument. When a person has permanent stricture, the stream of water is very small, and if you touch such a stricture with the caustic, the size of the stream will be increased. The cases in which the caustic applications are most useful are these:—1st. In cases of recent stricture where the parts do not bear the contact of a bougie well; sometimes it will set such a case to rights at once; but it is most useful in old standing cases, where you cannot pass an instrument at all; you apply the caustic, it relieves the spasm, and the difficulty is at once overcome, thus enabling you to cure what by other methods appeared quite incurable. I am not much in the habit of using this remedy, because it is apt to bring you into difficulties, at least so it was with Sir E. Home. When his patients had retention of urine, he almost always employed the caustic, but this is not my practice; he did it in nine cases out often at least. I have done it repeatedly for his patients with success when he has been out, but I do not employ it now, in fact I seldom have retention of urine among my patients. If the urethra has been injured by the introduction of a common bougie, the caustic will produce instead of relieving spasm. This is the great objection to the application of caustic, viz: that you are very likely to have bleeding afterwards; I came to this conclusion from seeing, both in Sir E. Home's and my own practice, very extensive hæmorrhage occur when the slough has come away. It is true hæmorrhage may occur under other circumstances, but this is the most common cause; I have also known it to produce abscess in the penis. But in those cases where it is proper, how often should it be applied? Sir E. Home said every two days; I should say once in five or six days; for, in the first place, you do no good by a too frequent application, and secondly, the irritating effects of the preceding application will not have subsided. In the cases where it is applicable, the caustic answers perfectly, and as I have said before, it is a method which was extensively employed both by Mr. J. Hunter, and Sir E. Home; you should always take the precaution to oil the bougie well. Some have thought it an improvement to use a silver instrument with the caustic put in the end; this was tried by Mr. Hunter and rejected; for the canula being a straight instrument, you are always in danger of applying the caustic to the lower part of the urethra; but with a common bougie, you have only to scoop out a small portion at the end and fix the caustic in it, and you thus entirely avoid this danger. Another method as recommended by some, consists in introducing a catheter and allowing it to remain there; but it must be owned this is something like telling a child to put some salt on a bird's tail; for if you can get the catheter in, the principal difficulty is overcome, the bird is already caught. When you introduce an elastic gum catheter, it should be mounted on an iron stilette, and passed in just as you would do a metallic sound; then, when you have got into the bladder, remove the stilette and fasten the catheter by means of a suspensory bandage; it is useless attempting to fasten it to the penis; in this way, it is to be left three or four days or a week, then remove it and introduce one a little larger, and so on again and again. Whenever you want to get a stricture well as fast as possible, this plan answers very well indeed; but beyond this, it is an excellent plan when the patient has been mismanaged, and false passages have been made by the rude introduction of instruments. If a patient comes to you, and you pass a catheter for him the first time, but then are unable to do so again for a week or a fortnight, it is better when you do succeed again to leave it there; if any false passages exist, they will soon heal under this plan, and there will be no further difficulty in passing the instrument; but recollect, in whatever way you dilate a stricture, it is not permanently cured. So long as the stricture is kept dilated, the patient is very well; therefore let him pass an instrument about once a week, never less than once a fortnight. Most persons will do this for some time, but then they get tired; but if he does not follow your advice and is fool enough to neglect himself, then you are clear, and he must abide by the consequences.

I shall now speak to you of the nature and treatment of some *particular kinds of fistula in perinæo.*" Many years ago, a Scotch gentleman came to me with stricture of the urethra, and on examining him I found a number of openings into the perinæum, groin, and scrotum. He told me he had had the stricture and these fistulas a very long time; he consulted a surgeon of eminence in Edinburgh, who told him nothing was to be done without laying these open; consequently, he laid them open and dressed them to the bottom, but nothing else was done, so that they merely contracted till they became of the same size as before. This was the method of treating these cases at one time, but now it is entirely different. It is better to leave them alone, and try and heal the stricture. Why do not all abscesses heal?—because there is dead bone, a piece of sloughy fascia, or some other foreign body at the bottom. Why do not fistulæ in ano heal? because the contents of the rectum get into them, and keep them open; and in fistula in perinæo, the urine does the same thing. What you have to do then, is to prevent this taking place, and you will heal them at once. Why do they not heal? because the urine is prevented flowing in its proper channel by the stricture; remove this and it will no longer enter these fistulæ. If a patient tells you he has fistulæ in perinæo in conjunction with stricture, tell him you will see to them at some future time; then set to and remove the stricture, and when you have done this, enquire about the fistulæ, and you will find they have disappeared; this occurs in the great majority of cases. But sometimes there will be loss of substance, and then they will not heal unless you perform a kind of Taliacotian operation; Mr. Erle performed this by taking some skin from the buttock and turning it in; but I am not satisfied that this was necessary, and if it were, such cases are very rare. If there is a large fistula in perinæo, it will not always heal when the stricture has been removed, still nothing more is to be done; then have patience and pass a metallic sound once a day. I do not remember a single case in which this plan has not been ultimately successful. Merely introduce a metallic sound daily, not a bougie, for this may pass into the fistula and thus prevent its healing by inducing suppuration; a full sized metallic sound may be introduced without difficulty. Formerly, I used to recommend the patient always to draw off his water; but this is extremely troublesome, and if continued a long time he will not be able to do without it, and strange as it may seem he will forget actually how to make water. An hysterical young woman will do the same thing. Besides this, it is unnecessary, and I have not found the fistula heal a bit quicker than when the instrument has only been passed once in 24 hours. I tried what leaving in a gum catheter for some time

would do, and thought at first it was a clever invention; but I am now persnaded that so far from doing good it has, on the contrary, an injurious effect. It seems good theory to suppose that the eatheter will draw off all the water, but it is not so good when reduced to praetice; for you will find some portion of the urine always escape by the side of the eatheter, so that it is in fact a source of irritation, sometimes exeiting a discharge from the urethra; and although some of this may escape by the side of the instrument, the greater part will go into the fistula, where it is worse even than urine, for this will be constantly flowing in. It may be necessary, in some instances, to open a fistula, on the principle, that, wherever matter is lodged it must be let out; yon know an abscess will never heal whilst matter is loeked up in it, and the same law applies equally to fistulæ. Sometimes the outer orifice eloses before the inner one, and then a fresh eollection of matter, and fresh mischief, results. If you find there is this tendency, apply eaustie potash to it. I used to apply this to the external, and a piece of nitrate of silver to the internal, orifice, but it is a practice seldom required. The worst cases of all are when the fistula commences in the urethra just behind the strieture, and terminates in the rectum; these are very troublesome to treat properly. It is extremely difficult to get these to heal, as there is little flesh, little substance between them; indeed I am not sure they ever heal perfectly. The fæces may get into them, and give rise to great distress; but this is of rare occurrence; it is seldom the opening is large enough for fæces to pass from the rectum to the urethra, and when fæces do come away by the urethra, it is generally from some other disease; nine times in ten it is from a communication between the fundus of the bladder and the small intestines. The opening between the bladder and rectum is not large enough to admit fæces, but sometimes a bubble of air gets into it. I had a case some years ago, and the only inconvenience was that he had frequently a bubble of air come away. I saw this patient 20 years after, and he had suffered no further inconvenience. He died a short time since of diseased prostate. In operating for stone, both in children and elderly persons, these openings are sometimes made, and when this happens nothing can be done for them. Sir A. Cooper advised the passage being cut through, and I tried it once but without success. Sometimes patients have severe attacks of rigor, lasting for some time, whenever a bougie or catheter is passed; I remember one case where the patient had an attack of mania; another had a stiff neck for the remainder of his life; but certain it is, many persons have peculiarities of constitution which induce these results, and then they are very difficult of management. But you will observe, the shivering does not occur till the patient makes water, as if the contact of the urine produced the effect; so that in these cases I pass in a gum catheter, and leave it in, and I have never known this to fail. The slight dribbling which occurs by the side of the instrument does not produce the shivering. You will recollect the case I related to you of a gentleman from Gibralter, in whom this plan was attended with perfect success.

COURSE OF LECTURES ON THE THEORY AND PRACTICE OF MEDICINE.

Delivered by C. J. B. Williams, M. D., F. R. S., Professor of the Practice of Medicine, and of Clinical Medicine, at University College.

Intestinal Inflammation. (*Continued*)—In chronic inflammation, the parts affected are sometimes of a dark colour, and sometimes there is with this a brownish tinge. We should, however, endeavour to separate the acute forms of membranous inflammation from those which are follicular. In the case of certain poisons taken into the intestinal canal, we see this follicular form of inflammation, and symptoms of ulceration. I take this opportunity of stating, that there are several disorders occasionally complicated with acute inflammation, not so immediately arising out of it, as from the obstructions which it causes. For example: where the intestines have been considerably disordered by a previous attack, or by fever, such as typhus, and this has been accompanied by ulceration of the intestines, the parts become affected by a narrowing, or kind of stricture; the canal is reduced in volume from the efforts of cicatrization; and ever after that, the individual, so affected, is subject to great constipation of the bowels, which, if neglected, goes on to irritation and inflammation, and an attack of enteritis, of the severest form, is the consequence. Sometimes, too, intussusception and invagination occur, where one portion of the intestine becomes forced, as it were, into another, from some spasmodic action. The constricted portion may be forced still further down by the peristaltic action of the abdominal muscles, and by the pressure of the fæces, while straining at stool, or on other violent exertion; the upper portion becomes forced down into the lower, and thus invagination takes place. Sometimes inflammation is set up in the obstructed portion, which extends to the invaginating portion, and the result is adhesion of the parts: sometimes, too, ulceration takes place; and it not unfrequently happens, in cases of enteric diseases, that dysentery occurs. I have met with such cases frequently: it occasionally accompanies acute diseases, and is sometimes connected with fever; large portions of the intestines, as it were, become sloughed away, and yet the patients have recovered. This is seen by the *post mortem* examinations. Also, portions of the intestines have been seen to pass away by stool.

At the conclusion of the last lecture, I was passing from the subject of chronic gastritis to *chronic enteritis.* Chronic enteritis in the sequel of the acute, or the sub-acute, form of the disease. It not unfrequently arises spontaneously, from long irritation of the fæces, or improper food, or from purgative medicines too freely administered. It is, too, apt to occur from an obstructed state of the bowels, of long or habitual recurrence. Sometimes it is a concomitant of various tuberculous diseases. I have mentioned the manner in which inflammation is apt to recur again and again, and that disease of the intestines puts on a chronic form from the frequent repetition of acute or sub-acute attacks, which thus materially injure the functions of the organs, and cause their obstruction. In chronic enteritis, there is more or less tenderness in the abdomen, particularly in the lower region; and with that tenderness there is occasionally continued pain, felt sometimes in the iliac region, and particularly about the umbilicus, the bowels never being free from some feeling of tenderness. Usually, in this disease, there is diarrhœa, and in this respect it is greatly distinguished from the acute form. This is not of constant occurrence, for you do find cases of chronic enteritis, in which there are the most troublesome symptoms of constipation, and now and then there comes on an attack of diarrhœa. In proportion as the inflammation is lower down in the small intestines, and occupies the ileum and the colon, there is greater tendency to diarrhœa. The stools are much disordered. Sometimes there is a great deal of slimy and mucous matter; the fæculent matter is much discoloured: sometimes green, at other times very dark, and imperfectly mixed with bile. The passage of each stool is usually accompanied with more or less pain. There is too, in this disease, excessive emaciation, and a dry and wrinkled state of the skin, which appears too large for the flesh which it covers. It is remarkable how loose the skin becomes in chronic enteritis, more so than in other diseases. The skin of the belly often shews this to a remarkable degree. The *post-mortem* appearances met with in this disease are: various changes in the ileum, a peculiar redness, and usually a sort of brownish-red discolouration, in some cases going on to ulceration, to a considerable extent.

The Treatment of Chronic Enteritis is to be conducted very much on the same principles as that of chronic gastritis. Local blood-letting may be employed, if the strength will bear it, repeated from time to time, and particularly to be used where there is any sudden increase of pain or tenderness, accompanied by fever. Blistering may be adopted, and various counter-irritants on the abdomen, and tartar emetic friction, to produce pustular inflammation of the integuments. Fomentations may be used in slight cases, and mustard poultices also, from time to time. Likewise, the application I alluded to before, as useful in the sub-acute form of gastritis: a piece of flannel, dipped in some stimulating liquid, and covered with Mackintosh cloth, the object being to keep up action as a derivative and counter-irritant; it may be used several times in the twenty-four hours. In some cases, pitch plasters are of use, when the disease is more chronic, as an external application. Then the disordered state of the secretion commonly points out the propriety of using aperients, partly to evacuate the canal, and to unload the inflamed vessels. Those medicines that act on the upper part of the canal are often useful in these cases; such as hydrarg. cum cretâ, and blue pill, combined with Dover's powder, or conium. These may be given at the same time that we are using means to promote the evacuation of the lower part of the bowels, by injections of mucilaginous, or oily liquids. Should the diarrhœa prove excessive, we may, after this, make use of certain astringents, such as the nitrate of silver, the sulphates of zinc or copper, the acetate of lead, &c. The utility of these medicines is sometimes very great, and even in other cases, in small doses, they are of considerable efficacy in promoting the return of the intestine to a natural state. In fact, you may consider, when you exhibit these medicines, that you are doing the same thing as when you act on the external surface by the application of a wash, containing these matters in solution. Sulphate of copper is, perhaps, one of the best remedies of this kind, in doses of a quarter of a grain, or even less, with a grain of conium, according as there is diarrhœa present or not. When diarrhœa is not present, conium or belladonna answers the same purpose; if diarrhœa exist to any extent, a rather free use of opium may be desirable. This may be continued for a considerable length of time, and so long as you do not cause an increase of pain or tenderness in the abdomen, and you do not block up the bowels altogether, it generally tends to do good. If the bowels require greater relaxation, castor oil, or sulphate of potash, and sulphur, answer very well. The diet should be confined strictly to farinaceous food, or a very little animal food mixed with it. Adhere as strictly as possible to this, with a view to keep the fæces as pliant as possible; for it is known, that the fæces arising from farinaceous food are less irritating than those resulting from animal food, and that is one reason why animal food is naturally constipating. Allspice, condiments, fruit, and everything of that sort, should be most carefully avoided. In some instances, various vegetable tonics are useful, to improve the general strength and the appetite.

The next disease to be considered, is an *inflammatory affection* of the *lower part of the intestinal canal*, or the *great intestines*, the symptoms of which are comprehended under the term *dysentery.* We find in inflammation of the stomach, that one of the most constant symptoms is obstinate vomiting, while the most constant symptom of intense inflammation of the small intestines is obstinate constipation. We now come to the lower part of the canal, and if you recollect the function connected with this part of the intestine, you will be ready to understand what are the peculiar symptoms that occur in this inflammation. There is a dysenteric straining, an effort to evacuate the canal. You find that inflammations of various parts usually produce some remarkable disorder of the functions of those parts. We find cough, as a characteristic symptom, occurring in connection with inflammation and irritation of the air passages; the dysenteric straining, and diarrhœa, arising from inflammation of the lower part of the bowels; and dysuria, a frequent desire to make water, from inflammation of the neck of the bladder. With the straining efforts caused by this disease, there are griping pains referred to the colon, the hypochondriae and right iliac regions, extending from the rectum, sometimes, over the whole abdominal region, accompanied with tenderness on pressure.

There are several varieties of this disease, varying considerably in degree. In some, there is a simple diarrhœa; the stools are at first fæculent

with a mueous diseharge, in great quantity; and there is a frequent desire to evacuate the eanal, and the stools are streaked with blood. There is, too, thirst; the tongue is usually furred, and the abdomen tender. In the slighter forms of the affection, the pulse may not be mueh affeeted. Now, this form of dysentery arises from irregularities of diet, unwholesome food, or a great accumulation of fæces in the bowels. This affection may last from four to eight days, and may pass into a chronic form. Sometimes, disease of this kind is epidemic, occurring in the autumn; and, in these cases, it is accompanied by constitutional symptoms. The diarrhœa may be attended by shivering and fever, coming on worse at one time than another. In the severe form of the disease, there is usually vomiting, and spasmodic irritation of the upper part of the canal: the skin is hot, and the pulse hard and quick; the tongue white, and in extreme cases brown; and there is exeessive thirst. Everything taken into the stomach seems to increase the desire to go to stool, and also the pain aceompanying it. The irritation of the lower part of the intestine is sometimes so severe, that there is a constant desire to discharge urine and water; there is at times a difficulty in making water, a state of dysuria, and sometimes cramps in the limbs; all this arising from the reflex irritation of the nerves of the intestines. The matter discharged in the most serious cases is not only of a bloody, mucous eharaeter, but sometimes there is a more solid matter, a sort of lymph or albumen voided, in eonsiderable quantity, in the form of shreds and patehes. Sometimes, too, fœtid matter is discharged under these eircumstances. If no relief oeeurs, great prostration of strength takes place; the pulse bccomes feeble, the extremities cold, the tongue brown and dry, or sometimes aphthous uleerations are manifested; the evacuations, sometimes dark, and very offensive, contain, as it were, matter in a state of half putrefaction, a brownish or reddish liquid, smelling quite putrid; this is accompanied by a general feeling of prostration and despondency, and hiccup and death take place in a longer or shorter period from the eommeneement of these symptoms. When the disease is of a more mitigated character, which it usually is in this country, there is less desire to evaeuate the bowels, and blood shortly ceases to be discharged.

Now, there is a disease of a worse description than that I have alluded to, occurring in tropical elimates, so severe chat it has obtained the name of *malignant dysentery*. This commences like the other forms of dysentery, but is soon accompanied by great prostration of strength from the dysenteric symptoms; there is excessive pain in the hypochondriac and epigastric regions, with a diseharge of bloody, fœtid, serum from the bowels, and, in some cases, many inches of membrane slough away, and are thrown outwards. This disease destroys thousands of our troops in hot countries, and it is in fact one of the scourges of tropical climates. It appears obviously to be caused, or at least greatly promoted, by malaria, arising in certain districts, in damp, low situations, especially after a sudden transition of temperature: these circumstances being added to irregularities of diet. The attack usually eomes on in the night. It is a question whether it is eontagious or not. Sometimes, the febrile symptoms are more slight, and the dysenteric phenomena are more insidious. Now, on the *post-mortem* examination, the lining membrane of the bowel presents a reddish, or a brownish colour, with a thickened state extending along the colon and the rectum, chiefly the colon, and sometimes aseending as high as the ileum; the membrane being covered with a bloody mucous secretion, and patehes of pus and lymph. This is the result of the aeute form, while, in the chronic species, ulceration takes place. The liver is not necessarily much diseased. It is true that in tropical climates, the liver is often diseased, but it does not appear to be a necessary part of dysentery.

The *treatment* of this inflammation, in the first instance, will depend on the amount of fever present. In some cases, there is no fever in the first instance, and all that is neeessary then, is to evacuate tho canal, and get rid of the causes of irritation in the colon. If the eolon is thoroughly purged, the dysenteric and irritating straining eeases. When there is great tenderness in the colon, then it may be neeessary to apply leeches, and if fever is present, often, blood-letting may be useful. This may be repeated, and poppy fomentations and poultiees applied; warm baths, also, may be used, as a means of removing the tendency to dysenteric straining. The question has been often asked, whether it is expedient to give purgatives in this disease? It seems to me, that they may often be employed with advantage at first, in order to evacuate the canal. When this disease is preceded by constipation, and where there is anything like resistance in the abdomen—when there is a hardness, and tympanitic feeling—it is generally useful to give aperients—mercurial preparations, followed by castor oil, or calomel and opium, or else calomel combined with conium or belladonna, in repeated and pretty considerable doses. If, in the first stage of the disease, large doses of castor oil are given, the symptoms will generally be most effectually relieved. Ipecacuanha is much recommended; it relaxes the spasms, and causes determination of blood to the skin. It is of great consequence in dysentery, to keep the skin warm; the surface of the body should be exceedingly well clothed, and the patient should not be allowed to go out into the cold air. It is, sometimes, desirable that the patient should even remain in bed, to keep up the temperature of the body. If the tenesmus be very urgent, it is necessary to give narcotics—opium or morphia; belladonna is also given with great effect, and Dover's powder, and ipecacuanha, in the form of mucilaginous enemata, as well as by the mouth. Now, there is another combination that may be added to these injections, calculated to allay the irritation of the lower canal—that is, sugar of lead, used as an injection, to modify the dysenteric straining; it has a peculiar efficacy, when combined with laudanum, in relieving the inflamed colon. Local blood-letting is often useful. The diet should be strictly farinaceous, such as rice and gruel, without much liquid at a time; for much liquid increases the mischief. After the inflammation and fever have subsided, and also the constant pain, there will often be an occasional diseharge of bloody mucus, and a tendency to straining and griping, oecurring from time to time. In these cases, the disease becomes sub-acute or chronic, unaccompanied by any acute symptoms, and this is best treated by injections of starch with nitrate of silver, or sulphate of copper; sugar of lead often answers extremely well. I have, however, found the sulphate of copper to be the best of any.

Chronic Dysentery often supervenes on the aeute form; it is usually conneeted with uleeration, and there is extensive organic mischief, ending in a terrible amount of disease. In chronic dysentery, the patient sinks from the accumulation of mischief, and it is only when the symptoms become eonsiderably ameliorated, that we can hope for a cure. The symptoms of the chronic form are something like those of the acute, but less constant and severe; the feebleness and emaciation increase; the abdomen becomes tender; the evacuations mostly of a disordered description, sometimes fæculent, and at others mixed with a mucous and bloody matter, and of an extremely fœtid odour. The straining is very great. The tongue is red and glazed, and exhibits a patchy appearanee. The skin presents an altered aspect: it is dry and rough; it seems to be loose and wrinkled, and has a remarkably sickly appearanee. Sometimes, œdema occurs; and a strikingly sour odour is exhaled from the skins of persons labouring under chronic dysentery.

The *treatment* eonsists in means calculated to subdue the pain and irritation accompanying the disease, and to heal up the ulcerations which usually form in the course of the intestine. When these ulcerations are small and few, they may be cured, but when they are extensive, there is no hope of recovery. When the evacuations are very bad, the strength greatly prostrated, the pulse frequent, and emaciation increasing more and more, there is little or no hope to be held out; but, where the eontrary symptoms take place, we may antieipate improvement. The *treatment* should consist of remedies to improve the secretions: such as small doses of mercury and Dover's powder, and in evacuating the eanal by means of mild doses of eastor oil or rhubarb, and restraining the diarrhœa from tho lower part of the eanal by injeetions of nitrate of silver and sulphate of eopper; it is also useful to administer somo vegetable tonies. Considerable advantage arises from the application of rubefacients and counter-irritants to the abdomen, followed by blisters, and leeches to the anus. Turpentine liniments may be used with a view to remove the excessive pain, and alleviate the tendeney to straining, and thus promote the return of the intestine to its natural condition. The most effectual remedies are tho metallic astringents, which may be given by the mouth or by the anus. In the next lecture, I shall take up the hæmorrhagie affections of the stomach and intestines.

ON AN OPERATION OF ENTEROTOMIA, SUCCESSFULLY PERFORMED WITHOUT OPENING THE PERITONÆUM,

FOLLOWED BY

REMARKS ON THE PATHOLOGICAL ANATOMY OF THE COLON IN THE LUMBAR REGIONS.

By J, Z. AMUSSAT, M.D. Member of the Academy of Medicine, &c.

[This Memoir, read recently before the Academy of Sciences, Sitting of the 30th July, 1844, has been revised and augmented by the author, for the '*Medical Times*.']

The possibility of establishing an artificial anus in the large intestines, without dividing the peritonæum, was long ago thought to be practicable, but several failures raised doubts on the subject; so much so, that not only was the idea abandoned, but likewise it was asserted that the colon could not be opened without wounding the peritonæum. I have, however, after numerous researches in surgical and pathological anatomy, proved by incontrovertible facts, that the operation is possible, and is also, in every respect, preferable to that reeommended by Littré.

In order, however, to set this question at rest, I resolved to submit it, in a series of papers, to the judgment of the Academy, the opinion of whose members is justly considered as an *ultimatum* in scientific matters. In 1842, on the proposition of a committee, composed of MM. De Blainville, Breschet, Double, Dumeril, Isidore Geoffroy St. Hilaire, Larrey, Magendie, Roux, and Serres, a portion of the Montyon prize was awarded to me for my endeavours to elucidate this subject. This decision, so favourable and flattering to me, indueces me to lay before you, to-day, the details of a cure which confirms what I previously asserted; and further, by some anatomo-pathological considerations, to prove the following facts, viz.:—*That the operation for Enterotomia may be performed in the lumbar region, on the adult and the child, without opening the peritoneal cavity, and consequently avoiding the danger attendant on wounds of that membrane.*

Case.—Occlusion of the intestinal canal during the spaee of twenty days, in a female, aged 53; tympanitis; dangerous symptoms; vomiting, &c. Seat of the disease, unknown; formation of an artificial anus in the left lumbar region; colon opened without wounding the peritonæum; cure.

Madame B——; ætat 53; strong constitution; health good, previous to the development of the symptoms about to be deseribed; menstruated at 14; married at 24; the mother of three children, which she nursed herself; catamenia ceased four years ago, and at that period she experieneed two or three slight attacks of menorrhagia; never had any sign indicating an organic affection of the uterus; stools regular and easy, until April, 1843, at which period she became constipated, and was forced to make a frequent use of enemas; it is, however, principally during the last four months, that the symptoms increased; and, from time to time, she suffered from violent colic.

About two months ago, the colic became more intense and more frequent; the fæces, which escaped after the use of the enema, were thin,

flattened, similar to a ribband, and surrounded by mucus and blood; the gases were expelled with considerable force and noise. The stools becoming more and more difficult, the patient, to obtain relief, was obliged to have recourse to castor-oil, Anderson's pills, and other purgatives. Finally, on the 12th June, the expulsion, not only of solid substances, but likewise of gases, ceased entirely, although purgatives (castor and eroton oil) were administered by the mouth and in enemas; the abdomen increased slowly in size, accompanied by vomitings, colics, and acute pains in the umbilical region.

I was now called in, on the 26th June, by my friend, Dr. Sedillot, who hitherto had attended the patient with unremitting skill and attention. Previous to my visit, Professor Marjolin, having been consulted, recommended *ascending douches;* adding, however, that he feared it would be necessary to have recourse to the operation. Fourteen days had now elapsed since the bowels had been acted upon; the abdomen was distended by gas, and sonorous on all sides; no tumour perceptible by the touch. The finger introduced, *per anum*, discovered no stricture; the mucous membrane of the rectum appeared everywhere to be perfectly healthy; *per vaginam*, the cervix uteri was somewhat lower than in its normal position, and the fundus seemed to press on the rectum, as in retroversion; no abnormal sensibility. (Continue the *douches*, and, in order to soothe the violent pains in the abdomen, which prevented the patient's sleeping, employ frictions, with a liniment composed of oleum amygdalæ, and tinctura opii.)

27th.—No change whatever; several *douches* were given yesterday, but were returned, containing no fæcal matter, but mere mucus, and portions of epithelium; no gases have escaped.

28th.—Abdomen still tense and enlarged, so much so, that, even if a tumour existed, it would be almost impossible to discover it; measured on a level with the umbilicus, the circumference was found to be, as the day before, 32½ inches; persistence of the pain; colics; bilious vomitings; uneasinoss; continued insomnia; pulse 96; (go on with the remedies.)

The formation of an artificial anus seems to become more and more urgent, and, in all probability, must be done very soon; but here, as in the other cases in which I performed the operation, similar difficulties present themselves, since the precise seat of the stricture cannot be discovered. I, therefore, hesitated, not as to performing the operation, it being indispensably necessary, but as to the spot in which it ought to be done. Should I open the colon in the left lumbar region, or, for fear of being below the stricture, operate on the right side? On taking into consideration: 1° the precursory symptoms, however vague, especially the constipation, which had constantly, though slowly, increased; so much so, that, for the last two months, the patient had evacuated her fæces, flattened like a tape, and surrounded with mucus and blood, and during the last seventeen days, nothing whatever had escaped by the anus;—2° remembering that the organic affections of the large intestine, which give rise to tympanitis and retention of the fæces, are generally situated at the union of the sigmoid flexure of the colon with the rectum:—I diagnosticated, not an acute, but a chronic stricture of the large intestine near its termination, and concluded, that the operation might be performed on the left side. But, though it was evidently indicated, still I determined to defer it for a day or two, as the state of the patient did not necessitate its immediate performance, and as I am of opinion, that, notwithstanding its utility, it ought not to be had recourse to, unless under very urgent symptoms: a medium course may, however, be held between too much haste, and too great delay.

29th.—No change for the better; nausea, but no vomiting; colics more intense; enemas were administered, as well as the *ascending douches* with Bizet's apparatus, but nothing was perceived in the ejected liquid, but fragments of epithelium and organic matter. In order to ascertain the height at which the obstacle existed, forcible injections were employed; this method is one of the best we can employ, in order to establish the diagnosis; the quantity of liquid differing according to the distance at which the stricture is placed from the anus. To perform the operation, the patient was placed standing by the bed side, bent forwards, the abdomen on the bed, and the body forming an angle with the inferior extremities; an enema was then given, and easily retained, but on trying to introduce a second, only one third entered, the remainder returning, though every endeavour was made, by pressing the surrounding parts, to prevent its escape. Thus, it was evident that only about ℥xxij of liquid (an enema and one-third) could be retained for a few minutes, when introduced by means of the ordinary instrument. It was partly returned in a perfectly limpid state; I say partly, because in comparing the quantity returned with that administered, about one-third was found to be wanting.

30th.—The patient, perceiving that no amelioration resulted from the plans adopted, entreated me to perform the operation. The size of the abdomen had not increased, but the colics were, if anything, more intense than before; no vomiting; the *ascending douches* and the enemas without effect. Under these circumstances, I considered myself justified in operating, and determined to do so the next day; but, before this, I requested Professor Crampton, of Dublin, then in Paris, to state what, from his skill and long experience, he would advise being done in so obscure and difficult a case.

1st July.—The following gentlemen met me in consultation:—Messrs. Crampton, M'Loughlin, Berthes de Gray, Sedillot, L. Boyer, Filhos, A. Amussat, and Levaillant. After having listened to all that had previously taken place, Professor Crampton examined the patient with the utmost care. Neither pressure, nor percussion, on the abdominal parietes, indicated any particular part as the seat of the disease; the finger, introduced into the rectum and the vagina, did not shew where the obstacle existed; the uterus was alone found somewhat lower than usual, and its fundus leaned on the rectum, as already mentioned; abdomen, as on the previous days. The patient begged and prayed to be operated on, and the only fear she had was, that the consultation would delay what she considered as her deliverance. Professor Crampton, being requested to give his opinion, said, that his personal experience did not permit his deciding whether an artificial anus ought, or ought not, to be established, as he had never operated under similar circumstances; but, if it was needed, the sooner it was done the better, for fear of inflammation developing itself in the intestine, and extending to the peritonæum, the which would inevitably take place, if prompt measures were not adopted, and an operation had recourse to; he, moreover, expressed his opinion in favour of the operation, from the facts which I have already published.

This opinion being, likewise, shared by the other persons present, it remained only to decide on the spot in which the intestine should be opened. After considering:—1° the *chronicity*, if such an expression be applicable to a disease which had produced a complete occlusion of the digestive canal, indicated by the gradual increase of the constipation; 2° the extreme frequency of the seat of the stricture towards the termination of the sigmoid flexure, compared to the other parts of the intestine; 3° the absence of fæcal matter in the liquids vomited, which is generally present when the stricture occupies the small intestines, or the upper part of the large intestine; 4° the *impossibility of giving more than one enema, and a third*, showing that the stricture is not situated high up; 5° and, finally, the advantages which result from the artificial anus being situated on the left side, in preference to the right, and which will shortly be discussed: it was decided that, in spite of the doubts which existed as to the precise seat of the disease, the operation should be performed on the left side.

Operation.—A pallet bed, of a convenient height, being placed in the centre of the room, a mattress was laid on it, the patient placed on the abdomen, and, in order to cause the lumbar regions to be more prominent, several pillows were placed under her. The space comprised, inferiorly by the spine of the ilium, superiorly by the last false rib, and posteriorly by the anterior edge of the sacro-lumbalis and longissimus-dorsi muscles, was then marked with ink, and an incision from three to four inches in extent was made transversely, and its depth gradually increased until the aponeurosis of the transversalis abdominis was reached; two small arteries having been divided, they were twisted. The aponeurosis was then carefully cut through; this was no sooner done, than a small lump of fat escaped, developing itself over the locality of the intestine, and which, being incised, permitted the intestine, of a reddish colour, to be seen. But, in order to ascertain whether it was the colon, I examined with care the surrounding parts, and concluded that such was the case, from the fact of the external edge of the quadratus lumborum muscle being exposed to view, and from its known *rapport* with that intestine. Notwithstanding, I was not perfectly convinced, and, on sponging the wound, and directing on it a small stream of water, I perceived, externally, on the intestine, a yellowish body, mobile during respiration, placed under the peritonæum, and apparently bound down by that membrane.

I hesitated, notwithstanding, to puncture the part of the intestine laid bare, as it was impossible to assert that it was the large, and not the small, intestine; still, as it appeared to me, from its position, and from its *rapport* with the surrounding parts, to belong to the lumbar portion of the colon, and, as I thought I had seen the limits of the peritonæum, externally, I resolved to pass a crooked needle, threaded, just behind the spot where the serous membrane seemed to terminate. I next plunged a tenaculum into the intestine, and incised it vertically with a pair of scissors, between the thread and the tenaculum. Immediately, I heard a strong hissing noise, produced by the escape of the gases, and soon after I perceived some yellowish fæcal matter. Being thus certain of having attained the proposed object, I fearlessly enlarged the opening, so as to give a free egress to the gases and fæces, the evacuation of which considerably relieved the patient. Finally, to terminate an operation which had succeeded beyond my most sanguine expectations, for I feared to have had to encounter difficulties much greater than those I met with—*difficulties* and *perplexities* which can be understood only by those who have performed this operation—I fixed the intestine, after drawing it to the anterior angle of the wound, by the interrupted suture, in three different spots. An injection was then made by the artificial anus, allowing a large quantity of fæces to escape. I did not unite the wound, posteriorly, with a suture, because having done so on a similar occasion, I was obliged to destroy the adherences which had taken place, in order to give a free issue to the pus and other liquids which accumulated under the cicatrix.

The operation was supported by the patient with a courage and resignation sufficient to embolden the most timid operator, and, when replaced in her bed, her pulse was found to be as strong, as equal, and as quiet, as before the operation. In the evening, the patient was quite calm; no vomitings; abundant evacuations by the artificial anus.

July 2nd.—The night had been tolerable, her sleep, however, having been disturbed very frequently, on account of the immense quantity of fæces which had escaped through the artificial opening; slight colics; no vomitings; abdomen soft, not painful on pressure, and reduced to its natural size; pulse ranging from 80 to 85. A few hours' sleep, towards morning, imparted a calm and comfort unknown to the patient for the last ten or twelve days. She told me that, had it not been for her children, she would have thrown herself out of the window, in order to put an end to the sufferings she had endured; adding, that, forgetful at times of family and friends, she regretted she could not reach the phial containing the laudanum (employed externally, on the cataplasms) in order to terminate a life which had become a burden. It was this feeling which made her desire so impatiently to be operated on, so much so that, as her daughter informed me, she

awaited our arrival with the anxiety of one who anticipates an agreeable event.

3rd. Features calm; no fever; several hours' sleep during the night; slight colics, which commenced in the hypogastrium, passed round the umbilicus, and terminated at the artificial anus, being immediately followed by the evacuation of gases and fæces. This circumstance is probably owing to the anti-peristaltic movement of the intestine, causing the gases and solid matter to retrograde from the seat of the stricture towards the colon, in the left lumbar region.

4th.—Pulse 76; abdomen flattened, insensible on pressure; wound red (it had been covered the preceding days with pledgets of lint, moistened with a decoction of cinchona), of a healthy appearance; one of the sutures fell to-day; the patient voided, by the *normal anus*, gases with considerable noise.

5th.—The position of the patient is more and more satisfactory.

On the following days, a small quantity of fæces escaped through the natural opening; this, however, did not prevent their passing also by the artificial one; the latter must not be closed, as the evacuation by the former was but temporary, and I fear much it will never take place as before her illness. To-day, thirty days since she was operated on, the wound is cicatrized; the artificial anus is closed, in the interval of the evacuations, by a bit of wax, and the position of the patient makes me hope that the operation will be productive of lasting benefit, since I have not as yet been able to discover any organic lesion capable of endangering her existence. Finally, this case confirms all that I have asserted in the different memoirs, already published on the subject, and it emboldens me, and ought likewise to embolden other practitioners, to perform this operation, instead of, as is often the case, allowing their patients to die unrelieved.

(To be continued.)

ON REFLEX NERVOUS ACTS AND THEIR DISTURBANCES, AND THE MORE PROBABLE PARTS OF THE DOCTRINE OF SYMPATHIES.

By T. WILKINSON KING, F.R.C.S.E.

(Continued from page 344.)

Merit of Generalizing Reflex Acts.—Views of Whytt, Mayo, Hall.—Simple Reflex Acts, and Obscure, Direct, Crossed, Retrograde?—Medulla oblongata.—Spinal Cord excluded.—Indices of its various Functional Columns.

It was a happy and a prime generalization to describe the system of excito-motory acts—all, as of one order—and the expression of so much, no doubt, also declared the facts of excited reflex function much more distinctly and forcibly than had previously been done. The credit of this is exclusively due, I think, to Dr. Marshall Hall.* The simple narrative of disorder in the various reflex acts will, of course, follow, when the normal course of each act is duly understood. Dr. Hall readily admits that very much must remain for careful investigation.

None can decide at once the durability or the praise of any fresh discoveries. It is the province of time to rectify error and to settle the value of what is real; it prunes some shoots, tears away many leaves, and should teach patience. It is in vain for an author to crown himself, or snatch a *gilded* crown, rather than yield decent submission to the course of justice. They who should pay homage can only smile to see the unreal wreath suffer violence. Fama was reputed mighty and free as air; she had her temples and her votaries, but her rewards were for others. The young laurel gave its first brightness to the fountain of light; the *enduring* green became the crown of the worthy.

To myself it appears that in a manner, individually, I am concerned to shew that Dr. Hall has gone too far in ascribing some obscure morbid phenomena to the reflex function; or, at least, I would endeavour to prove, that explanations which I have before advocated, though opposed to his views, may still be tenable, and useful in practical matters.*

It is not the less appropriate, at this time, to suggest limits and amendments to the reflex doctrines, since the *British and Foreign Quarterly Review* has lately (January, 1844) signified its acceptation of the whole system, almost without reserve. It will be my endeavour to approach by degrees the less uncertain limits of reflex acts in health and in disease, without pretending to any thing like a regular or systematic detail.

We yet need to know how far it is always voluntary to set the ear, or even to smell, to arrange the mind for thought, to scratch, or to transfer a weight from a weary hand to the other—as in a long walk, when the mind is totally abstracted. Anæmic syncope occurring in one erect, seems at once to seal the senses—reflexion and volition.

Life fails most at the surface of the body; blood accumulates towards the right heart, an excito-motory sigh follows, and the circulation increases.

One trembles, another totters, and a third sinks, in that fearful, brief, walk from the cell to the scaffold. This seems not only loss of volition, but of muscular tone—the effect of the reflective brain on the motor tracts. Does not resolution seem to nerve itself unconsciously? Each particular sense, both for its own conduct and that of the body, possesses more or less of involuntary and unconscious excito-motory resource.

The balancing of the body is, at least, so involuntary, that it needs peculiar resolve to contrive to fall. To understand the agency of progressive experience in the different kinds of nervous processes requires especial reflection. The "besoin de respirer" may stand for the conscious want of breath, or it may include also the irresistible impulse to inspire, or prepare for exertion. All brain above the *roots* of the excitor *vagus*, and all the cord below the origin of the motor *phrenic*, may be for a while dispensed with.

Every thing seems to shew that the nervous centre, to which are referred all the impressions above hinted at, is the medulla oblongata; that it is the grand supra-œsophageal ganglion of man—the seat of sympathies—reflex arcs, or excito-motory acts, and whence all voluntary and involuntary co-ordinated movements are determined.

It is tolerably plain that irritating a muscle, its nerve, the main motor nerve of a limb, the marrow itself, and an excitor nerve, produces more and more definitely regulated movements, very much in the order in which the parts have just been named. We must, however, make due allowance for the grade of the animal experimented on; and further, not infer too hastily or precisely, that such motions are those co-ordinated by nature. The effects of tickling the sole, in imperfect paraplegia, are almost infinitely various, rather than always the same, and not less indicating the existence of disorder, than an useful object.

Whytt remarked, that, after decapitation, frogs and serpents performed movements of the limbs or entire body, consequent upon the application of a stimulus to the skin; and he further proved, that these motions were dependant on the spinal cord, ceasing when that organ was destroyed. Similar effects were noticed by Haller, as occurring in warm-blooded animals.

It is essential to distinguish between the contraction induced in a muscle, or muscles, by the application of a stimulus to the skin, and that irregular contraction, or twitching, which is caused by immediately pricking, or otherwise exciting, the fibres of the muscle itself; in which case, as Whytt has accurately stated, the fibres which are irritated are only affected with a weak tremulous motion—the neighbouring muscles remaining at rest. It is also necessary to notice, that the reflex action has nothing in common with the contractions induced by pricking a divided nerve: for, whilst, in the latter case, there is merely a convulsive action of the muscles supplied by the nerve that is touched, in the former, definite and combined contractions are produced, varying according to the part in which they occur, but either being *of a preservative character*, (as where a part of the body is withdrawn from a source of irritation,) or *resembling the motions which the function of the organ requires.**

Mr. Mayo (Outlines of Pathology, 1835, p. 154) observes:—"In some cases of privation (?) of sense and motion in the legs through disease affecting the middle of the spinal cord, I have seen so much independent power remain in them, that pricking, or tickling the foot, which yet excited no sensation, and was unknown to the patient, was nevertheless followed by its retraction."

In setting down the general views I entertain, I have hardly thought it well to go far into the especial proofs with limited data; and, indeed, I would prefer to be considered as intermeddling in nervous matters only so far as my own case appeared to demand.

The following cases† seem almost spontaneously to point out a more confined seat of reflex arcs than the length of the medulla:—

A man, æt. 43, had imperfect paraplegia, with excito-motory phenomena. "Once or twice, while the left leg was thus excited, (pinched, &c.) the two larger right toes were simultaneously drawn towards the sole." We know no decussation below the medulla oblongata!

A young lady had caries in the neck and reflex signs in the legs, &c. Twice during defecation and micturition "the right arm was convulsed," though feebly.

A man, æt. 26, recovering from injury at the bottom of the neck, had many curious excito-motory symptoms. "At first, tickling one sole excited to movement that limb only which was acted upon; afterwards, tickling either sole excited both legs, and on the 26th day, not only the lower extremities, but the trunk and upper extremities also." Irritating the pubes, the urethra, the scalp, and space under the chin, did the same. "No convulsions in the upper extremities could ever be excited by irritating their integuments."‡

It is curiously against excito-motory (spinal) function, that Dr. Hall§ admits a remark of Mr. Earle—"that priapism exists in injury of the spinal marrow only when that injury is in the neck." The symptom is only *more* common to the higher injuries of the medulla: thus indicating the site of the arc of reflexion. It is scarcely necessary to remark, that it may depend on a direct spinal excitation or on a reflex act.

This symptom is fairly recorded in each of the following five cases from Olivier:—

Obs. 14. (from Bell.)—Æt. 29, with injury of, and total paralysis below, the 6th and 7th bones of the neck. Death on the 7th day.

Obs. 15.—Æt. 27, the 6th and 7th neck bones

---

* Dr. Hall says expressly: "I have never claimed either to have been the first to observe the facts of the reflex action in experiments, or to have been the first to use the term reflex." 4to. 1843, p. 5.—One excuse for a different supposition on the part of the critics may, perhaps, be found in the *Lancet*, (Jan. 1839, p, 584), and the last page of the first 4to. Memoirs.

* See papers on Angina, Asthma, Palpitation, &c., *Medical Gazette*, 1841; and recent papers on Irritation in the same Journal.

* Observations on the Structure and Functions of the Spinal Cord, by R. D. Grainger.

† Dr. Budd's admirable cases, *Med. Ch. Rev.*, v. 22, pp. 76, 161, 170-2.

‡ The experiments of M. Flourens *may* seem here available (vide Dr. Hall, 4to. 1843, p. 20.) The irritation of one lateral half of the medulla oblongata *or* spinalis always determines convulsions on the same side. So a lateral mutilation only palsies its own side. I cannot pretend to give the import of these facts. In a recent experiment, one half of the medulla was divided above, and the other below, the origin of the brachial nerves; yet sense and will were *not* cut off,—(l.c. p. 93.)

§ 4to. 1837, p, 93.

were disunited, and the medulla here severely injured. Death in 36 hours.

Obs. 17.—A carpenter, æt. 23, had the last bone of the neck luxated from the first of the back; spinal abscess followed. He died on the 15th day.

Obs. 23.—Æt. 26, had fracture of the 7th and 8th dorsal (!) vertebræ. He died in 34 days. Three inches of the cord were lost.

Obs. 27.—Æt. 55, had fracture of the last dorsal vertebra (!) and paraplegia; lived 9 weeks. Bones found reuniting; the medulla softened internally.

The symptom in question was followed by material recovery, in more than one of Mr. Busk's excellent cases,* the injuries being severally in the middle of the neck (fatal), the bottom of the neck, and at the 9th dorsal vertebra (!). We must again return to this subject amongst especial reflex acts.

Mr. Mayo early pointed to the reflex action in numerous transverse sections of the spinal cord of animals, and indicated, as a general rule, that the sentient cord,† and the motor cord of a given function seemed gathered towards the same part, or segment, of the nervous centre. Dr. Hall advances a true spinal system of reflex arcs, "viewed as segments, or as disposed longitudinally," i.e., as both. Now, all this I can only apply, i. e., for man, to the medulla oblongata.

Dr. Hall, in his second memoir (*Med. Chr. Tr.*) has a section on retrograde actions in spinal affections, e. g.: where "disease seated in the lower part of the dorsal region affected the upper extremities." At present I cannot admit that any grounds exist for *supposing* man comparable to turtles in this respect.

It is needless to shew that the spinal marrow of man never evinces all the reflex phenomena, which are manifested so readily in the cord of lower vertebrates. Some points of the differences, however, require to be borne in mind. For example, we have as yet no real idea of lesion in the middle dorsal region causing spasm in the arm as well as the leg of man, so freely as in the young pigeon.

It is evident, that a host of cases as little defined as the following, would not establish the fact of retrograde actions in the spinal marrow proper. After severe injury, a man (l. c, p. 161) had complete paraplegia below the fourth lumbar vertebra; the arms were rigidly flexed and numb. We should here naturally ask for the fullest assurance, that the ordinary causes of such disorders of the brachial nerves were not present in the cervical medulla.

There is also a total want, as far as I know, of experimental evidence of reflex *spinal* acts in adult mammalia. In a rabbit, 20 days old or less, Legallois divided the medulla at the lowest dorsal vertebra (*Œuvres*, Paris, 1830, tome 1 p. 80); Mr. Grainger, from a "rabbit about three parts grown," removed a segment of medulla at the middle of the back (*On the Spinal Cord*, p. 54); and both elicited reflex signs. The rabbit, however, has peculiar development of the hind legs; it is said to be grown at the seventh month, but still continues to fill out much. New born mammalia are excito-motory all over nearly alike, but this gradually disappears.

"It is also worthy of special observation, that in the very young animal, and in the cold-blooded animal, the phenomena of the excito-motor power are far more vividly manifested than in the older and more warm-blooded. In the very young kitten, even when asphyxiated to insensibility, every touch, contact, or slight blow, every jar of the table, any sudden impression of the external air, or that of a few drops of cold water, induces at once energetic reflex movements and acts of inspiration. The nostrils, the tail, the soles of the feet, the general surface, are all extremely susceptible, and, in degree, in the order in which I have mentioned them. Hence, nature's provision for the primary establishment of the first acts of inspiration, and of extra-uterine life. Hence, the principle of resuscitation from congenital asphyxia.

"In addition to the sources of excito-motor phenomena, already noticed, I must now add another; in irritation of any or all of the internal membranes and tissues, serous, mucous, cellular, &c., by means of the scalpel or forceps, in the kitten or the dog, (these were the animals in which I have witnessed these results), various spasmodic movements are observed."—Hall, 4to. 1843, p. 30.

Reflex acts vary indefinitely in the series of vertebratæ, and in the successive stages of human development.

The nervous currents would seem almost to become changed, as those of the ductus arteriosus,* foramen of Botal, and ductus venosus, are known to be.

A bird flies without a head, but no motion is excitable in man below a division of the medulla spinalis, although unconscious movements, excito-motory or even emotional, may attend incomplete sections of the marrow.

Division of the spinal marrow in man cuts off *all* sense and *all* motion below the specific lesion, and death ensues speedily, in proportion as the division is near the head; other varieties of paralysis and nervous disorder from *partial* affections of the medulla, including those having excito-motory signs, I take to be so many different indications of separate functions, and of distinct organs, in the cord. These we may take up distinctly at our leisure.

36, Bedford Square.

* *Med. Chr. Tr.*, vol. 22, in the conclusion of Dr. Budd's paper.

† One may reasonably complain of the use of the word *sense*, as implying a function of the spinal marrow and posterior ganglia in lower animals; but can it be said, that the first experimenters considered the spinal function in frogs as equal to the perception of the brain in man. Perception is a very gradational affair in animal physiology, and I am not aware that any one has yet attempted to define its forms on any solid principle.

CASES OF CHOREA.

(For the "Medical Times.")

A young girl, fifteen years of age, of lymphatic temperament, enjoyed good health until the last few months, when she was suddenly seized with irregular and involuntary movements of the left upper extremity, which her parents ascribed to the effects of a severe fright. The catamenial period had made its appearance when she was fourteen, but since this attack it had completely ceased. The involuntary movements of the arm having considerably increased, and a dragging of the left side of the mouth showing itself, the parents became alarmed, and sought medical aid in different hospitals, with little or no benefit. On the morning of the 9th of April, 1843, she was brought to my house. Intelligence appeared unimpaired, irritability considerably increased; the expression of countenance most variable, at one time frowning, at another grinning, and then giving way to uncontrollable bursts of laughter. The left arm is agitated by involuntary motions, occasionally confined to the shoulder-joint. On my interrogating her, these movements, of muscular madness, if I may so call them, became very violent, and more or less continuous, occasionally weak, and again strong—the arm was pulled in different directions, and could not be directed to touch any object; in the endeavour to make her drink a little water, the effort of raising the arm was attempted several times, without success, but when the glass was brought to the lips, it was rapidly emptied; when the arm was raised, it was as suddenly depressed; the facial contortions were not so prominent, but the muscles of the whole left side of the face were sometimes contracted, and in a short time relaxed, and the dragging of the lip was *constant*. She complains of pain in the occiput; pulse slow, and regular; appetite good; lower extremities and body never had been affected; does not feel fatigue or pain in the left arm from this perpetuity of movement, which even continues during sleep, but in a much less degree. I alternately tried the arsenal of antispasmodics, excitants, strychnia, belladonna, hydrocyanic acid, &c., but with little advantage; blood was taken from the nape of the neck by cupping, blisters were applied to the same region, which removed the pain complained of in the occiput. On the 20th June, I should have recommended the sudden immersion in cold water, often repeated, until respiration was partially impeded; but this method not being able to be put in force, we substituted the sudden effusion of cold water, thrown over her as continuously as possible: this was persevered in for ten days each morning, for about as many minutes, and the effusion was so kept up as to almost take away her breath. After the second or third morning, the movements lost much in their frequency and violence, sleep not at all disturbed, and in a few days they completely ceased, the mouth nearly regaining its normal position. I then prescribed the ammonio-citrate of iron in large doses, which she continued to take for three weeks, when I saw her again; and she informed me that there had been no return of her complaint, the natural expression of countenance being restored.

A boy, twelve years of age, who had enjoyed good health, was observed to walk lame, and no cause being perceptible in the legs, little or no attention was paid to it, as it was not continuous, and was supposed to be the result of a bad habit which he had contracted, and which the father of the boy attempted to correct by intimidation. One day, having considerably excited the boy, the lameness became much more manifest, and irregular: involuntary starting now came on: he could not walk in a straight line, but described angular movements, at one time stopping suddenly, again, throwing himself on the ground, and rolling in every direction, without being able to raise himself; sometimes he appeared to dance, or rather bound from place to place in the most singular manner; the irregularity was more marked in the left extremity than in the right; progression was sometimes impossible, and he was obliged to lie down; the arms were not affected. The expression of countenance was natural, no dragging of the lip, but subject to hysterical bursts of laughing and crying; understanding dull since his illness: he has been subject to these eccentric movements for the last four months, and a few days before I saw him, he began to stammer; voice much altered, and sometimes producing peculiar sounds, not unlike the barking of a dog; in other respects his general health is good. I prescribed gentle aperients to be used during a few days, and remembering my success in a former case, I had again recourse to the immersion, or rather effusion, of the cold water, which was applied as above described, and without any other remedial means, at the expiration of a fortnight, the involuntary irregularity in his walking had nearly ceased—stammering considerably diminished; the sudden effusion being continued for a few days longer, these unnatural contortions finally ceased.

Remarks.—I have treated five cases altogether by this method, which was first used by Dupuytren; and in all, before the expiration of a month, the affection was completely removed; offering, thus, a very striking contrast to the cases treated by the usual remedies, such as iron, morphia, &c. The treating of hydrophobia by the same method, until the powers of life are nearly extinct, may offer greater chances of success against this foe to medical science, than the remedies usually used. The essential character of chorea consists in irregular and irresistible movements of a certain number of organs, which are under the influence of the will. This species of neuralgia, which appears to be confined to the muscular system, may be not inaptly compared to certain forms of mental alienation. The lesion of motion which characterises chorea differs very much; generally speaking the affection is confined to the extremities of one

* The superposition of a brain looks like the superadding of a heart, &c. By what a curious mode must the roots of the accessory nerve gradually travel in amongst, or intermingle, with the nerve roots of the base and neck! A widely disproportionate evolution and lengthening of cords must occur here, and doubtless *elsewhere*. Functions are lost, transmuted, and transposed, if only in correspondence with changes without the cerebro-spinal cell.

side. Louis says more frequently in the left arm, and according to his experience, the disorder first appears in the upper extremity, and extends to the lower, some-time after. In the five cases which came under my own immediate care, it commenced in four with the left upper extremity. According to the authority of M. Rufz, it is not uncommon to see chorea in very young children; he says that out of 32,976 patients that were admitted during 10 years into the Children's Hospital, 189 only were affected with chorea; among this number there were 51 boys, and 138 girls: this disproportion between the sexes has been remarked by all writers. From the age of six to fifteen is that in which the affection is most frequent; it is rarely seen before six years, and it has been doubted if it exhibits itself in early infancy, but on M. Rufz's authority, who has studied this convulsive disorder with his usual clearness of observation, it is not uncommon: adult age is not exempt from it, but I do not know if it has been seen among the diseases of the aged. A nervous and irritable constitution seems to be a predisposing cause to the disease. The "*heredity*" of chorea has been admitted by authors. The influence of puberty on the development of chorea does not appear to be rigorously shown; for on the authority above cited, chorea is not much more frequently met with from the age of 10 to 15, than from 6 to 10; now, menstruation does not very often come on before 15, so that it is not very logical to trace to a cause, the manifestation of an evil, three or four years before the existence of this cause. It would appear from the writings of some medical historians that chorea has sometimes appeared as an epidemic, but little reliance can be placed on this point. Among the occasional causes of chorea, fear is perhaps the most powerful: the two cases I have just detailed were distinctly traced to this cause. However, in a certain number of cases, its influence is not so evident, for it seems to me, it is not fear which causes chorea, but it is the predisposition to this disease which renders children easily frightened. Almost all observers have traced "*imitation*" to be a determining cause of chorea, principally among children; however it has never been seen according to M. Rufz, to be produced by this cause, at the *Enfans Trouvés*. The duration of this affection is variable; M. Rostan relates the case of a woman, who died at the age of 50, and who from her infancy had a choreic affection of the whole of the left side of her body; her extremities were atrophied, but no appreciable organic alteration existed in the cerebrum. It often assumes an intermittent type.

The symptoms of this disease are so remarkable that it would be difficult to mistake it; the absence of fever, of coma, of delirium, of tetanic rigidity, are sufficiently characteristic to separate chorea from every other affection of the spino-cerebral axis. The discontinuance of the choreic movements, their intermissions, the superior extremities being more frequently affected than the lower, their singularity, their changeable nature, &c., &c., necessarily point out the absence of a permanent alteration, which nothing indicates in this disease: pathological anatomy does not furnish us with facts which will permit us to trace chorea to any essential or special organic lesion, and until new observations reveal its nature, it should be ranked among the Neuroses, to which we cannot assign an appreciable anatomical character; so that the alteration of the brain, which produces chorea, is not known:—undoubtedly like hysteria, and epilepsy, the alteration is a general one, that is to say, it occupies all the encephalic portion, which presides over motion, an obstacle not easily to be discovered! However, if we consider that one of the fundamental characteristics of chorea consists in the impossibility of regulating the movements of progression, of standing, and of prehension, and as we know from the experiments of Magendie and Flourens, that the cerebellum presides over the power of motion, should we not be induced to assign the seat of this disease to some derangement of that organ?

JOHN WATERS M.D., M.R.C.S. (E.)

62, Torrington Square, August 11th, 1844.

OBSERVATIONS ON NEURALGIA.

To the Editor of the "Medical Times."

SIR,—You did me the favour, in the last number of the '*Medical Times*,' to advert to some opinions, I had expressed in a contemporary journal, on the subject of Neuralgic Affections. What I wish more particularly and strenuously to impress upon the notice of practitioners, is, the fact that we possess, from a careful tracing out of symptoms, evidence of the *source* of these disorders. In the foremost rank of these manifestations, is the "*process of alternation*" (as I have termed it), which I deem almost an essential characteristic of neuralgia: indeed, so constantly is it present, as to afford one of its most unerring pathognomonic symptoms. In the next, are the decided indications of *visceral derangement*, by which the majority of cases are accompanied throughout their course. Authors scarcely dare to touch upon the proximate cause of neuralgia, and when they *have* ventured to overstep the limits of their reserve, what crude and indigested notions have they broached! And all this, because they have disregarded the most palpable evidence afforded by the crowd of witnesses, which they have neglected to interrogate. In the phenomena of the universe, Nature acts, and is guided, by unerring and uniform laws; and what need have we to grope about for a thousand diversified causes *here*, if one cause can be proved to be efficient to produce a specific effect?

Our *sympathetic* authors, too, with their "*ob communionem et similitudinem generis, tum obviciniam*," have laboured strenuously to mystify and confound, by substituting a visionary and an unsubstantial hypothesis for a plain and practical doctrine; and it is this theory which, beyond all others, has led to the empirical, multiform, and opposing practice, adopted in the present day. Let us but carefully trace the history of cases as they present themselves: examine diligently, impartially, and minutely, into symptoms as they arise: endeavour to seek, from tangible effects, their hidden and remote causes: discard obsolete theories for plain matters of fact: and I do not despair of seeing the day when the treatment of these disorders, divested of its present empiricism, shall be reduced to a simple, scientific, and uniform standard.

I am, Sir.
Your most obedient servant,
R. H. ALLNATT, M.D.

Parliament Street, Whitehall.—Aug. 12th, 1844.

SINGULAR CASE OF MONSTROSITY.

To the Editor of the "Medical Times."

SIR,—Should you think the following case worthy of a place in your valuable journal, I shall feel obliged by your inserting it. It appears to me to be remarkable that the child should have lived so long as thirty hours, owing, I presume, to the integrity of the medulla oblongata. I met with a case somewhat similar in 1837, but the general development was there very imperfect, and the child only gasped once or twice, and died. The woman, in the present case, was much frightened, three months ago, by her husband, and, I believe, received some blows from him at that time. Whether this had any connection with the malformation of the child, I leave others to conjecture. I am, Sir,

Your obedient servant,
ARTHUR TIBSON.

1, Spring Street, Sussex Gardens, Paddington, Aug. 6, 1844.

On the evening of Sunday, August 4th, I was sent for to attend Mrs. Singleton, in labour, with her 4th child. I found that the membranes had ruptured previously to my arrival. On making an examination, per vaginam, I felt what I at first took to be the scrotum, and concluded that it was a breech presentation, but, on passing my finger round the presenting part, I found out my mistake, as I soon felt the ear in its ordinary position. I was puzzled to know what it could be, but as labour appeared to be steadily progressing, I resolved to wait the result. After rather a severe labour, the child was born, and I then found that what I had mistaken for the scrotum, was the brain covered by its membranes, the upper portion of the skull being unossified, the deficiency being in the parietal, and upper portion of the frontal, bones. The anterior lobes of the brain were apparently wanting; the eyes, which were hid by the enormously swollen lids, being on a level with the vertex. The entire head was not more than half the usual size of an infant, at the full period. The neck was very short, but the rest of the body was well developed in every respect. The tumour, formed by the brain, was nodulated, very vascular, and feeble pulsatory movements were perceptible in it. The pulse at the wrist was very feeble, and the temperature was low. It made a sort of guttural noise, and breathed irregularly, its respiration being increased by blowing on the surface. The nurse told me that it had swallowed, but I tried to give it some thin gruel, without success. The countenance resembled that of a baboon, more than of a human being. It was born at ¼ past 11, on Sunday night, and lived till past 5, this morning (Tuesday.) The father would not allow me to make any examination.

OBSERVATIONS ON A WORK ENTITLED "CHEMISTRY IN ITS APPLICATIONS TO AGRICULTURE AND PHYSIOLOGY," BY PROFESSOR LIEBIG M. D. PH. D.

(*From a Correspondent.*)

(Continued from page 383.)

THE object of the First Principles of Philosophy is to explain the method of discovering the laws of Nature by observation of phenomena; and the real duty of the chemist is to collect the fruits from the varied branches of the tree of knowledge, to analyse and compare, and thereby assist in tracing *Effects* to their *first Causes*. The discoveries of other branches of science are the sources from whence chemistry derives its power to generate and superinduce a new nature, or new natures. Both chemistry and physiology embrace the elements of their respective sciences, but the elements of each are still in their chaotic state; the basis, the foundation, of each is yet wanting, and permanent order cannot, therefore, be expected to spring from disorder, until the true fulcrum is found, and foundations be built thereon.

Physiology is a science of observation, chemistry is a science of induction; the induction, therefore, to be correct, must harmonize in all its parts with facts of observation. The chemist of the present day moves in the narrow circle marked out by those who have gone before him; all the most recent discoveries tend to shew the increasing power of the human mind, rather than the increase of knowledge. Many attempts have been made, before the days of Liebig, to discover the elements of the animal and vegetable economy. Has Liebig been more successful? Certainly not! He, also, forgets that the delicate matter elaborated by vital action, becomes changed by his processes. The flesh, the blood, the bones, the sinews, bear no analogy in composition or character, to any known products of chemistry: all of them, in unity of parts, the one with the other, are compounds surpassing chemical art to imitate, their elementary or ultimate parts disappearing on natural decomposition or analysis: there is no intermediate state, re-combination following decomposition, and the result depending upon the accident or force of association. The emanations from the dead embrace many combinations not previously existing within the body, such as sulphuretted and carburetted hydrogen, carbonic acid gas, &c., the exact nature of which depends entirely upon local action and association. Liebig would convert the animal body into a mere machine for generating heat and action—a chemical laboratory, in which vital action is not absolutely required; this is, indeed, to compare great things with small: he takes for granted that the second condition of animal life is a continued absorption of oxygen from the atmosphere, which being received into the arterial system, converts the arterial into venous blood, by a definable chemical process.

Vital action and vital results, and chemical action and chemical results, exhibit phenomena widely different from each other. Chemical action is palpably inimical to vital action, and the struggle of vital action to preserve an equilibrium of powers within its fluid menstruums, is productive of vital phenomena, such as medullary and nervous matter, fat, bones, and sinews, hair and nails, all of which are mechanical combinations. The arterial blood is a mechanical mixture of saline water, holding in solution lime, soda, nitrogenous and carbonaceous matter, &c., united together by the force of cohesion: it consists of the red thin blood and serum returned to the heart, and of the chyle, merely elaborated,—the introduction of this not yet animalized blood being the means whereby an equable temperature is preserved, as it absorbs the excess of caloric. In this state it is a dark, thick fluid, consisting of bodies mutually disposed to unite with each other, cohering in its parts, incapable of separating into globules on account of the resistance offered by the viscid medium: as one whole, it is perfectly neutral, possessing, during health, neither acidity nor alkalinity, the slightest appearance of the one or the other being productive of disease. In this state, the globules of the spent blood have lost much of their rotatory force of action, nor can they recover it when ejected from the heart in union with chyle, until they enter the lungs, for the mechanical greatly exceed the vital powers, and the sensible hoat evolved by the blood-globules is taken up by the chylous matter.

On entering the lungs this arterial blood becomes attenuated; the enlarged globules of blood, which have already passed through the system, are broken down, the molecules of matter unite as fibrine, and the evolved heat carries off the liberated hydrogen and carbon which is evolved with atmospheric air, deprived of its stimulating fluids, as breath. It is laid down as an established fact by Liebig, that vital air is absorbed by the arterial blood in the lungs; but, encouraged by example, I do not hesitate to doubt this presumed fact. "*Animal cui aër in sanguinem inflatur*," says Haller. There is no manifestation of air in the blood —there is no want of oxygen in arterial blood; but, on the contrary, a very great excess of it, as is manifest by respiration and perspiration: the experiments of Dr. Gitanner prove that oxygen or nitrogen gas, injected into the blood, destroy life almost instantaneously. Bichat also observes, that air, thrown into the vascular system, quickly brings on agitations, convulsions, and death. Again, the introduction of any chemical agent into the blood, in sufficient quantities to overcome the just balance of action in the vital fluid, is always attended with spasmodic contractions, inflammatory or corroding diseases, and death. An excess of nitrogen, for instance, is productive of scrofulous disease and leprosy, by inducing alkalinity; and acidity is equally productive of disease and local decomposition.

The dark colour of the arterial blood may be attributed to separate or conjoint causes,—excess of carbon, excess of hydrogen, or excess of both united; for, unless the acidifying powers of the hydrogen were not immediately neutralised, the consequences might be fatal. Excess of carbon is given forth at every secretion; it not only goes to the increase and sustenance of the body, but it is given forth by secretion from every excretory duct. On the other hand, common sense dictates to us that, deprived of excess of impurities, and broken down into finer particles, the resistance to its advance being withdrawn, and increased acceleration communicated, the phenomena must be identical with venous blood.

Dr. Priestley considered respiration to be owing to the disengagement of phlogiston from the blood in the lungs, and its combination with the air; and Crawford, regarding hydrogen as the phlogistic principle, and supposing it to exist in the blood in that state in which it is disengaged from vegetable substances by heat, as carburetted hydrogen; he supposed that this compound is communicated to the blood in the extreme vessels, by which the conversion from arterial to the venous state is occasioned; being given out in the lungs, and combining with the oxygen of the air in its nascent state, or its transition to the elastic form, forming carbonic acid gas, or watery vapour expired; while the blood, deprived of its hydrocarbon, returns to the arterial state. Lavoisier's opinion approximates still nearer to my own. It is true, that these hypotheses have been rejected, as being incompatible with the laws which appear to regulate the chemical actions that proceed in the animal system. What, then, I ask, are these chemical laws?

The phenomena of vital action exhibit a series of results produced by the several digestive processes, in all of which we find chemical action subservient to, and guided by vital action; such is the condition of health, the exhibition of chemical action, such as the introduction of mephitic vapours or metallic poisons, being symptomatic of disease and death. The animal or vegetable food similates in its composition, in elementary constituents, with the substance of the living being, and the results of the digestive processes are, separation and re-combination of the compounds of those bodies, by which means, alone, the body can acquire uniform increase, and maintain uniform action. The food received into the stomach, is brought into contact with the gastric juice, a *mechanical* mixture, or menstruum, prepared by the inner membrane of the stomach, embracing in solution the ordinary correctives of alkalinity or acidity, and being a powerful antiseptic retarding putrefaction. The change of the food into chyme is more truly mechanical than chemical, the solids being resolved into a more fluid state by the process of maceration in a heated saline solution, which effects decomposition or separation of parts, as a necessary preliminary to the re-union of the elements and compounds in other forms and combinations: so far, we have mechanical action, and the product is a mechanical compound termed chyme, which is also a saline menstruum, holding in solution the liberated products of the food, the products of the gastric juice, and products resulting from the interchange of elements and consequent combinations,—the latter combinations, which may as truly be termed mechanical as chemical.

The passage of the chyme through the intestines; its union, during its passage, with bile prepared by the liver; with pancreatic juice, which is of a saponaceous nature, and prepared by the pancreas; and with the intestinal secretions, aided by animal heat, giving incessant motion to all its parts, is productive of further separation, and recombination; and of an uniform result, termed chyle, which is also a mechanical mixture; the several matters which form its constituents being held together by the cohesive force of the medium in which they are disposed, and uniting, by the force of cohesion, as compound molecular bodies, and not as chemical precipitations, for any manifestation of chemical action is productive of disease, and denotes a tendency to acidity, or alkalinity, in the vital juices.

Every portion of the organic body is a mechanical compound, and every fluid of the body is a mechanical compound—the one and the other being held together by some cementing base, uniformity of action, uniformity of material, producing an uniform result, which, by separation, forms albumen, gelatin, soda, lime, carbon, hydrochloric acid, and sulphur. Every atomic particle uniting with bone is united by vital action, and not by chemical precipitation; and every portion abstracted therefrom during healthy action, is vital, and not chemical. Every molecule of calcium being combined with matters analogous to it, and which preserve it in the neutral state, every organ being a compound, bodies united in definite proportions of each, and held together by some one common cementing base, such is fibrin, flesh, horns, hairs, nails, &c. Serum contains sulphur in solution, it contains the earths also, to which sulphur has no affinity; it cannot exist therein in the form of sulphuric acid, for, in this state, it would be a powerful precipitant, and produce death as surely as when received into the lungs in the form of sulphuretted hydrogen gas: nor is it a manifest constituent of the body, but under circumstances of decomposition: the truth is, that its elements only exist within the living system; it is a compound generated by chemical action, on the cessation of vital action. The organic body increases by the multiform acts produced by the vital processes; its vital currents have power to neutralize the destructive forces of acids or alkalies introduced into the system through the medium of their food, by inspiration or absorption, but the vital powers are limited in their powers of resistance; the animal fluids have neither acidity nor alkalinity, and in the maintenance of this neutrality throughout the body its healthy action consists.

Even the bones are supplied with blood-vessels, as well as the fleshy parts: they have their depositing and absorbing vessels, and maintain their general expansile power until the animal body reaches its matured state, they then gradually become more dense and rigid in structure, but never, during life, lose their vital circulation, and are at all times a mechanical compound of carbon, lime, soda, phosphorus, and saline matter. Cartilage has also its circulation, and the existence of vital fluids in the one or the other is sufficient evidence that, during life, they are permeable and permeated throughout,—that they are, in fact, a system of vessels in the interior of which, the earthy matter and mucus is deposited; they are also supplied with nerves, which, when laid open by abrasion or decomposition, are very susceptible of pain. While the body progresses towards maturity, every portion thereof is flexile, and every portion increases by expansion of parts; such is the law of increase up to the matured state. On the force of resistance overcoming the force of vital action, the body ceases to expand, but the bones, the muscles, the sinews, and the capillaries go on increasing in density of structure and in rigidity: thus, the cartilage is often converted into bone in old people; and the stimulating action withdrawn, the earthy matter concentrates, and the bones become brittle; the sinews lose their elastic powers, and the nervous fluid its stimulating healthy action; then the eye no longer communicates form and objects to the mind, the ears convey no sound, the palate no taste, the back becomes bowed, the lungs fixed and useless; and the spark of life is gradually extinguished.

Dr. Barry truly observes, that "most authors who have endeavoured to explain the digestion of the food in the stomach, have been so fond of a particular hypothesis as to reject entirely that of others, which, though not entirely, has been perhaps partly true. Thus, the Galenists have ascribed the cause of digestion to the heat of the stomach, the chemists to a dissolving ferment, and the mathematicians to a mechanical action." How many wheels are set in motion in this human machine of ours! how varying are the processes carried on by them! how complicated their movements! and how apparently contradictory are their results!! The mechanical action calls into existence chemical action, and this, ere well developed, is deprived of the power of doing mischief by vital action. Liebig would concentrate all the powers of life in the blood; physiologists would more wisely dispose them in the *muscular* and *nervous* systems. The air, so necessary to our existence, is received into the lungs, it communicates accelerated action, and assists to attenuate the blood—so far it is mechanical: the electric fluid, which is ever united with oxygen, and present in varying quantities in common air, as the true vital air, is absorbed by the muscular and nervous fluids, and transmitted to all parts of the system, giving tonicity to the arteries, and enabling them, by unintermitting but varying action, to perform their varying functions. It is by this means every power of the body is awakened and called into action. The circulation of the blood affords no impulses, passing to and fro through the body, without our being the least sensible to its amazingly rapid progress: not so the muscular and nervous systems, which are so intimately united as to be considered by many eminent men as identified with each other, for in these all sensibility exists, and through them all communications with the mind take place.

Liebig and other physiological chemists and physiologists, maintain, that in the normal state there is an equilibrium between the manifestations

of the causes of waste and the causes of supply; and that each part of the bone, and of other solid parts of the body, is gradually removed by the abrading action of the circulating fluids, and as constantly replaced during life: but the notions of these learned men, although founded on truths, are of too generalised a character to admit of universal adoption. The waste and reproduction of the animal organic body is confined to the secretions alone, thus the animal gets fat or lean, by the loss or gain of flesh, but this manifest increase or diminution of flesh is no proof of a corresponding increase or diminution of the bones, sinews, and other solid parts of the body, nor does the occasional decrease denote an abrading action of the circulating fluids. Serum, which shows no tineture of acid or alkali is a mild, soft, glutinous disposition, similating in qualities with the fibrous portions of the body through which it circulates, and these fibrous parts as I have previously observed, are continually increasing during the whole period of life, being the passive agents of reception, or increase, and consequently of their own destruction. Admitting that a tonic action is incessant throughout the body, this does not involve the necessity of a tonic replacement, nor does the natural replacement of fibrous matter removed by disease or accident demonstrate a perpetual change in those parts which are sound.

In the infant, the force of impulsation from the heart is greater, and much more general, than in the adult, and, consequently, were this doctrine true, the abrading form is greatest in the child; but how are we to reconcile this with the constant increase of size and power of the skeleton frame-work; and how are we to reconcile it with the phenomena of youth, manhood, and old age? The anatomist finds no proofs of abrasion, but is enabled to distinguish the age of the human body, or the stage of life, by a very slight examination of the skeleton frame-work. Again, it is truly ridiculous to talk of a cessation of increase during what is termed the prime of life, for continuous increase is that inseparable condition of life which renders old age and death certain. The animal body is a system of complicated processes varying from each other in their uses, but existing and increasing by the vegetative process, and who is there can contend for this atonic displacement and reparation in the two?

But the objection most fatal to this theory is the gradual development of the pulpy matter of the brain, and the gradual reception and permanent retention of ideas, types, notions, and imagos of things; every organ of the body has its uses, and every portion of the brain must have its appropriate class of sensations. Exposed not only to intense accelerated action, but also to constant disturbance, the waste and reproduction of the brain must be even greater in extent than in the body; but is it possible to remove any portion of the matter to which our ideas are attached without injury to our received notionss? The incidents of our childhood, the boyish delights of our youth, the reminiscences of our introduction and career in life, are all more or less faithfully preserved, and knowledge increases as we increase in years, remembrance failing only, when the membranes from increased rigidity refuse to perform their functions. Were these notions of displacement and reparation correct, what a proud opening would there be for man, a spring day of perpetual youth, an unfurrowed brow bidding defiance to the ravages of time: man might then hope to discover the elixir of life, realising thereby the fondest dreams of alchemy.

The law of life is a positive and progressive increase which can only be stayed by disease or starvation, and the loss of flesh, or the fall of the leaf, is positive waste of the superfluities of the body, and not, when proceeding from natural causes, injurious to the body. The correct tone of the digestive faculties and harmony of organic action is productive of increase of flesh and extension of portions of the fibrous structure; but this increase of flesh if not carried to excess is not injurious to the body. Again, excess of nutriment is not only carried off in the solid and fluid states by the excretory ducts, but also in the volatile form from the whole surface of the body, by the ordinary process of perspiration, carrying off those compounds which have escaped the ordinary processes of organic filtration, or there are compounds generated in the vital fluids, as gums, resins, and oils are generated in the vegetable system by the digestive processes.

HOSPITAL REPORTS.

ROYAL WESTMINSTER OPHTHALMIC HOSPITAL.

There have been several operations for cataract, of great interest, performed lately. This morning there were four for strabismus. A young woman presented herself on Monday, who had been operated upon nearly four years back for strabismus of one eye, with such perfect success that it was impossible to tell on which eye the operation had been done; and several have lately shewn themselves after two and three years quite well, and not recognisable by their friends who have not seen them before. Mr. Dasent performed four operations, two for soft, and two for congenital cataract; Mr. Charles Guthrie two for hard cataract, by extraction, with that coolness, precision, and dexterity, which he has shewn in the preceding operations of a similar nature. He makes the incision always upwards; generally holds and secures the lids himself, which, when it can be done, is better than making use of an assistant, and has shewn himself to be an able and dexterous operator.

Mr. Guthrie, after the operations were over, expressed his regret that he had not been able to give the lectures he had promised on the operations for cataract, having been so much engaged the last four months as to have no time at his disposal. The Medical Poor Relief Committee of the House of Commons, he said, had ended its labours only with the last week of the session, and the absence of the principal part of the members of the committee, and the quantity of matter to read over, had precluded the possibility of any report being made, although the evidence had been reported, and had been ordered to be printed. Three goodly blue books he supposed would appear in due time, and he trusted the efforts he had made would be satisfactory to the profession. More evidence could have been readily produced, but it would only have been a useless repetition of facts so fully established, as to require no further support.

Mr. Guthrie then adverted to the effects of the argentum nitratum, when too long used, in turning the tunica conjunctiva of a dark olive colour, and rendering the eye very disagreeable to look at. This, he said was more often seen some six or eight and twenty years ago, when the hospital was established, than now, in consequence of the greater care adopted in its use. Some bad cases of discolouration had been lately in attendance, and he was glad to be able to draw attention to the fact of the cyanuret of potassium, at from three to six grains to the ounce of distilled water, applied by drops, every other day, being an admirable remedy for removing this olive colour, left after the long continued use of the nitrate of silver, and restoring the conjunctiva to nearly, if not quite, its natural appearance, which had hitherto been a desideratum in ophthalmic surgery. It was equally effective in removing the stain made by iodine on the skin.

[The employment of the cyanuret of potassium for this purpose was first proposed by Mr. Broch, the present house-surgeon.]

Mr. Guthrie concluded by promising a lecture weekly from the first week in October, as far on in the session as his time would permit; adding, that he should intersperse them with observations on such parts of surgery generally, as should seem to him likely to be most acceptable to them.

ST. BARTHOLOMEW'S HOSPITAL.

Death, from the absorption of animal poison into the circulation, probably that of small pox.—John Meechum, ætat 20, a strong, muscular, young man, who had followed the occupation of a lucifer-match maker, was admitted about 12 o'clock, on Thursday, the 13th of June, 1844, into Luke's ward, in the following condition;—The face was highly flushed, almost livid in appearance; general surface of the body of a deep-scarlet colour; the respiration was extremely hurried, inspirations being between 40 and 50 per minute; the eyes were blood-shot; lips covered with sordes; there was slight œdema of the face, arms, and chest, which pitted slightly on pressure; the pulse was 120, and rather full; tongue covered with a dry, brown fur; he appeared likewise in a half comatose state; consequently, little of his previous illness could be learnt from him: when questioned, the only symptoms he complained of were: intense pain across the lower part of the back, great difficulty of breathing, and thirst. He was seen by Dr. Roupell, who directed him to be bled to ℥xij,, which reduced the pulse in power, but not in frequency.

When seen at 3 o'clock, the pulse was much weaker; respiration more laboured; lips and face quite livid; and he died about four hours after admission, to all appearance asphyxiated.

His mother, who came to the hospital after his death, gave the following account of his illness:—He had always, previously, enjoyed good health. On the Monday morning, having been exposed to cold, sleeping in a stable on the Saturday and Sunday nights, he was attacked with violent shivering, and expressed himself as feeling very unwell; he, however, partook of breakfast, and went to work, but, on returning home in the evening, complained of intense pain across the small of his back; at the same time, slight vomiting came on; he continued extremely ill all night, and, on Tuesday morning, was observed to be of a vivid scarlet colour: he was seen by a medical man, who prescribed medicines for him, but without any benefit, the pain becoming excruciating, so much so, as to make him scream out violently; during the night, he was extremely restless and delirious: on the Wednesday, his face changed to almost a livid colour; dyspnœa became most distressing, appearing as if "fighting for breath;" he was likewise extremely delirious, and required force to be restrained in bed: he became easier towards the Thursday morning, when he was sent into the hospital. She likewise stated, she had two children at home, at the present time, ill with the small-pox.

On the *post-mortem* examination, which took place twenty hours after death, it was found that putrefaction had already commenced, green patches being visible on the lower part of the abdomen, and the cuticle in various parts of the body peeling off; on opening the chest, both lungs were found to be tolerably healthy, being only slightly emphysematous; the pericardium contained about two ounces of bloody serum; the blood contained in the heart was quite fluid; the heart itself was healthy, but the interior of it, throughout, was stained of a deep-red colour, which was not removed by washing; the spleen was healthy in appearance, but extremely soft; both kidneys quite healthy; the stomach was dotted through out with minute ecchymoses, but, with this exception, was, with the intestinal canal, perfectly natural in appearance. On examining the blood which had been drawn during life, in place of the clear serum usually found, a jelly-like mass, of a light-grey colour, was observed floating on the red globules of the blood, which remained liquid, with the exception of a few small clots at the bottom of the measure; on being pressed, this mass gave out a quantity of tolerably clear serum, leaving a tissue of fibrine remaining, presenting very much the appearance of a false membrane.

PARISIAN INTELLIGENCE.

(FROM OUR OWN CORRESPONDENT.)

Paris, August 8, 1844.

On diseases of the Eye, by Professor Velpeau.—*Conjunctivitis purulenta*—In describing the different inflammations to which the conjunctiva is subject, this variety must be studied with the greatest care, as it may, from the rapidity with which it developes itself, and the danger which accompanies it, be included among the most serious affections of the eye. With the exception of ophthalmia

blenorrhagica, it is often very difficult to attribute the disease to any particular cause. The symptoms, in general, are those of conjunctivitis simplex, differing, however, in the rapidity with which the several stages succeed each other; thus, the conjunctiva assumes a yellowish-red tint; sight normal; in the space of 24 hours, a purulent liquid, of a greenish hue, is secreted; the mucous membrane is so swoln, that the organ appears to be the seat of a phlegmon; the cornea is covered by a layer of a greenish yellow colour; and very soon after, the eye is irretrievably lost.

Varieties.—Though there are some symptoms common to the different varieties of conjunctivitis purulenta, still they offer certain peculiarities, and have, therefore, been divided into:—1° *Egyptian ophthalmy;* 2° *Ophthalmy of new born children;* 3° *Blenorrhagic ophthalmy.*

1° *Ophthalmia Egyptiana.*—Though anciently known, it is only since the Egyptian campaign, that it has been studied and described with the attention it deserves, and it is to this variety—called, likewise, Asiatic ophthalmy, oriental ophthalmy, that the two following belong: epidemic purulent conjunctivitis, and that which ravages the troops. The former was observed in Paris in 1832, and was known under name of *cocotte;* it presented all the characteristic symptoms of the Egyptian ophthalmy, with the exception that, instead of being contagious, it was epidemic; the latter, remarked among the British soldiers in India, and the Belgian troops, resembles so much this variety, that several authors think it the same, but many doubts remain to be cleared up; thus, how comes it that it does not always propagate itself to healthy soldiers in communication with those affected? This it was that made me say that the ætiology of conjunctivitis was far from being clear.

2° *Ophthalmia infantum.*—This variety commences, in general, with conjunctivitis palpebralis, and may even be limited for some time to this part, and it is in this that it differs from the other two varieties; inasmuch as, in ophthalmia blenorrhagica, the inflammation commences in the conjunctiva ocularis, and the cornea may be affected and destroyed without its extending to the lids; and in the ophthalmia Egyptiana, both conjunctivæ are affected at the same time, and the rapidity with which the phlegmasia developes itself is such, that the eye may be destroyed in 24 hours; cases have even been recorded in which this occurred twelve hours after the commencement of the disease. This variety, to which erroneously the term *infantum* has been given, since it attacks children until the age of fifteen, and even adults,—developes itself with less rapidity than the two others: for some time, it is limited to the palpebral conjunctiva, and on this account it may be called *blepharitis purulenta*, or rather, *blepharo-conjunctivitis purulenta;* soon after, the lids become swoln, followed by the secretion of a thick, greenish matter; they adhere to each other, and are sometimes turned outwards, or inwards, offering the aspect of a vast suppurating fungus; finally, and this is remarkable, in this stage, on examining the cornea, it is found perfectly normal, and sight, consequently, is not impaired. The third and last stage is characterised by the extension of the inflammation to the conjunctiva ocularis; it is then that the disease attains the gravity of the Egyptian ophthalmy; the cornea is soon affected, and the eye is lost. To resume: there are three stages in ophthalmia infantum:—the first, from its appearance to the commencement of the purulent secretion; the second, to its extension on the conjunctiva ocularis; and the third, rapid and dangerous, from this latter to the loss of the eye, or the formation of spots on the cornea. The first stage may perplex the medical attendant, not because he does not recognise the affection, but because it is impossible to assert whether it be conjunctivitis simplex, or purulenta; you must, therefore, never omit watching over your little patient, seeing him every day during the first week, in order to ascertain the precise nature of the disease. This is the more needful, as, in the first and second stages, the eye may be saved, whereas in the third, in the space of one, two, three, or four days, it is irretrievably lost.

3° *Ophthalmia blenorrhagica.*—In addition to the distinctive characters just indicated, its cause is sufficient to indicate its nature.

Having thus enumerated the different varieties of conjunctivitis ocularis, I will now proceed to the prognosis and treatment.

Prognosis.—Uncomplicated conjunctivitis ocularis presents, like that affecting the lids, three varieties:—conjunctivitis simplex, conjunctivitis granulosa, and that with chemosis; but what you must never forget, is the distinction between them and the purulent; this latter offering also three varieties:—infantum, Egyptiana, and blenorrhagica. This division is important:—1° Because uncomplicated conjunctivitis is seldom followed, as in purulenta, by loss of sight; 2° because the former often disappears spontaneously, and yet it must be watched over, as it sometimes produces serious accidents; 3° because it may last from a week to a fortnight, or a month and more, and notwithstanding,—unless when chemosis, or some other complication, exists,—the eye is restored to its normal condition; this is never the case with the purulenta, for, as I have already stated, it runs through its various stages with rapidity; 4° because they differ in their mode of development; thus, conjunctivitis simplex presents three stages: increasing, stationary, decreasing; the first is characterised by vascularity, secretion, &c.; in the second, the disease remains in *statu quo;* finally, in the third, it decreases gradually, or is complicated with some other disease of the eye, mostly keratitis. Sometimes, it leaves after it vascular spots, which afterwards may produce pterygium and other disorders, formerly considered to be of a peculiar kind. Conjuntivitis purulenta offers, as before stated, particular characters, according to the variety; 5° because the purulent form is frequently complicated with keratitis or ophthalmitis, followed by loss of sight, or of the organ itself; this never occurs in conjunctivitis simplex; and if, perchance, the cornea becomes affected, it is only the outer layer which is attacked, and it is rarely dangerous. Now, is it not evident that these two species of conjunctivitis ought to be considered as different from each other, since they are not alike in their diagnosis, their prognosis, their mode of development, their duration, and, as will presently be shown, in their treatment?

Treatment.—Conjunctivitis Simplex.—The remedies here employed may be comprised under two heads: general and local.—*General remedies:* They differ according to the age, the sex, the strength, the constitution, the mode of living, and the position in the world of the patient; the intensity, and duration of the disease, as also of the other causes, which act here as in all other affections. These remedies are: bleedings, purgatives, revulsives.—Thus, if the patient is young, strong, robust, the disease intense, blood must be drawn from the arm, and repeated if necessary; if, on the contrary, the patient is not strong, or plethoric, and yet complains of cephalalgia, drowsiness, tinnitus aurium, &c., leeches and cupping must be had recourse to. If, instead of the foregoing symptoms, you remark other signs, such as: tongue foul, slimy, loss of appetite, accompanied with cephalalgia, purgatives are indicated. Finally, after these remedies, revulsives (dry cupping or friction, sinapisms, blisters) may be employed. These means, so useful in conjunctivitis, fail completely in keratitis and iritis, whilst the tinctura colchici, preparations of mercury, and other things, so efficacious in the latter, are without effect in the former; indicating evidently that their nature is not the same.—*Local remedies:* They are deserving of our most serious attention, for it often happens that their application produces changes almost miraculous; thus, a patient affected with intense conjunctivitis, may be cured in the course of three or four days with the remedies about to be described. Now, let me ask, does this ever take place in any other species of ophthalmia, save conjunctivitis? Could keratitis be cured thus? Could an iritis be made to yield and disappear in the course of two or three days? Evidently not. Is not this, therefore, sufficient to prove the utility of the divisions I establish among the different diseases with which the eye may be affected? But this is not the only reason, however important it may appear, that I have to adduce in favour of this opinion; there is another far more weighty, viz.: that, without these divisions, the treatment of diseases of the eye will never advance a step. For instance, suppose a remedy *really* efficacious in conjunctivitis, but without effect in keratitis or iritis; now, if all the affections of the eye are considered as identical, it may be ordered in the two last, and failing, the fault is attributed to the remedy, whereas it is owing rather to its having been prescribed injudiciously. In my opinion, inflammation differs according to the tissue which it affects; and this division ought to be adopted in studying all diseases of the various organs, otherwise we run the risk of seeing science remain stationary. But to return: local remedies cannot be called those which, applied to the eye, act after producing a modification in the whole system; thus, belladonna, opium, and such like, are useless. The specics really efficacious in conjunctivitis, are direct topical remedies, or those which act on the part with which they are in immediate contact. They are stimulants and astringents; and it was not without some objections that this opinion was received when I proposed it twenty years ago,—an epoch at which all inflammations were treated by emollient remedies alone. The principal astringents employed are: hydrargyri oxymurias, sulphas zinci, sulphas cupri, sulphas ferri, plumbi acetas, plumbi acetatis liquor, *pierre divine*, oxydum zinci, &c.—But all these are inferior to the azotas argenti. I have now prescribed it in upwards of ten thousand cases; in some, to ascertain if it be useful in all the diseases of the eye; in others, if only in certain affections. The conclusion at which I have arrived is, that the nitras argenti ought to be considered one of the most efficacious remedies in conjunctivitis. The two following cases are proofs: a patient, now at No. 23, women's ward, came to the hospital, a month ago, affected with conjunctivitis on one side. She was bled, purged, and made to bathe the eye with a collyrium composed thus: ℞. Nitrat. argent. gr. ij. aquæ distillat. ℥j.; under which treatment, she soon got well, and went home. The day before yesterday, she returned; both eyes are now affected; the collyrium is now employed alone, and though only two days have elapsed, there is already an evident amelioration. At No. 5, same ward, is a patient affected with a double conjunctivitis, which threatened to become purulent; the same collyrium was prescribed, and, four or five days after, the conjunctiva was in its normal condition. Its efficacy has likewise been proved by other practitioners; and, perhaps, the only ones who deny it are those who consider all the diseases of the eye as identical; for my part, I can affirm, that the nitrate of silver cures conjunctivitis ocularis, not only when chronic, but likewise when acute, and even when very intense. The proportions are, from gr. ij. to gr. iv. in ℥j. of distilled water, if the disease is severe, and developes itself rapidly; gr. j. in ℥i. of distilled water, when it is less intense. These doses must be increased or diminished according to the effect produced, for though very efficacious, still, like all powerful remedies, it must be carefully administered. Finally, when the disease is very tenacious, you must cease employing it from time to time, as, by exciting thus, by intervals, you may often succeed in curing very difficult cases. In my next lecture, I will describe the treatment of conjunctivitis purulenta.

On Fractures of the Neck of the Femur, complicated with Penetration of the Lower Fragment into the Spongy Substance of the Trochanter Major.—Analysis of a Memoir, read before the Academy of Medicine, on the 23rd July, 1844, by Dr. Robert, surgeon of Beaujon Hospital, agrégé at the Faculty of Medicine. The penetration of the neck of the femur into the spongy tissue of the trochanter is not only a curious anatomo-pathological fact, but likewise presents peculiar symptoms, and is so different from the usual fractures of this part of the femur, that the treatment there employed cannot be had recourse to without giving rise to serious accidents. This circumstance drew the attention of the author to this species of fracture, which, though mentioned by M. Hervez de Chegoin, upwards of twenty years

ago, is still but little known. Dr. R. begins by studying the mode in which, in general, fractures of the neck of the femur are produced, and his theory is very different from those hitherto adopted. He indicates, first, that almost all the fractures of the neck of the femur are produced by a fall on the trochanter; after which, in order to explain the manner in which these accidents act on the neck of the femur, he shews that the trochanter is united to the base of that part only in the anterior half of its extent:—that, in extending, outwardly, the axis of the latter, it ends, not in the centre of the external surface of the trochanter, but on the line which separates the anterior from the external surface of this apophysis;—finally, that in supposing a line tangent to the centre of the external surface of the trochanter, and a second, perpendicular to the first, and passing by the point touched, this last forms, with the axis of the neck, an angle obtuse posteriorly, and it crosses the axis at the base of the neck. From this remarkable disposition, which had not previously been pointed out, the following conclusions may be drawn:—1°. That a fall on the trochanter tends to push the neck backwards; that is to say, to diminish the angle formed by the axis of the neck with the perpendicular to the tangent.—2°. That it ought to fracture this part oftener at its base than elsewhere.—3°. That it causes penetration of this base into the spongy tissue of the trochanter, when the force of the fall has not spent itself in producing the fracture.—4°. That the penetration ought to be deeper posteriorly than anteriorly, and consequently give rise to the rotation of the foot outwardly.—5°. Finally, that in the generality of cases, in these falls, not only the trochanter, but likewise the whole extent of the external surface of the thigh, touches the ground, which causes the penetration to be deeper posteriorly than superiorly, diminishing thus the angle formed by the neck and body of the bone, and shortening the limb. — This theory is confirmed by the anatomical characters peculiar to these fractures: in fact, penetration complicates very frequently extra-capsular fractures; especially in old men and in robust individuals, the neck of whose femur has not yet acquired the degree of fragility which predisposes it to break near the head of the bone.

The author distinguishes two degrees: in the first, the penetration is partial, limited to the posterior and inferior part of the neck, and yet so marked, that sometimes the neck is forced backwards against the posterior edge of the trochanter major, and downwards on the minor; in a case, related by Adams, the neck was found only partially fractured, the bone remaining entire superiorly. In the second, the penetration is entire; the base of the neck of the femur is driven completely into the spongy tissue of the trochanter; it may even produce a fracture of the latter, and separate the fragments, so as to touch the bursa mucosa of the gluteus maximus. In both, the trochanter is fractured, sometimes comminutively; as if crushed, at others—and this is the most frequent—in its posterior half, which is detached from the bone.

Notwithstanding the extent of the lesions which the bone has undergone, its consolidation takes place with rapidity; there is formed, first, by means of the periosteum, osseous productions which envelope the trochanter more or less, and surround the neck of the femur like a collar; but this is but a temporary callus, which disappears gradually as the surfaces of the two fragments become united.

The symptoms of this species of fracture are:—1° A slight shortening of the limb (about an inch).—2° Moderate rotation of the foot outwards. Mr. Smith recorded a case in which it took place inwardly, but this ought to be considered as an exception to the general rule, and was produced, probably, by a fall on the anterior and external part of the trochanter.—3° A smart pain on the part corresponding to this apophysis, and persisting much longer than that caused by a contusion of the soft parts.—4° An ecchymosis on the external portion of the thigh.—5° A notable increase in the size of the trochanter, produced sometimes by the crushing or separation of the fragments of this apophysis, at others, by the osseous concretions which form themselves around it.—6° The possibility of the patient's walking after the accident, when the neck has penetrated deeply, and is firmly fixed.—7° The possibility of raising the limb, as soon as the pain has somewhat subsided.—8° The resistance offered when extension is employed: the author observed a case in an old man, aged 85, which was taken for a luxation, and in whom the limb could not be lengthened, though very powerful means were employed to effect the reduction of the supposed luxation. Of all these symptoms, the only characteristic ones are: the shortening of the limb, the rotation of the foot outwards, and the pain produced on pressing on the trochanter; and they suffice to diagnosticate a fracture with penetration, because,—in intra-capsular fracture, though the shortening and rotation exist, still it differs, from the pain being less intense, and seated in the groin:—in extra-capsular fracture, without complication, the pain is produced on pressing the trochanter, but the shortening and rotation are greater than when they are complicated with penetration.

The prognosis is not so serious as in the other species of fractures of the neck of the femur; the patients, it is true, will limp for ever after, on account of the shortening of the limb, and the deviation of the foot; but the fracture is consolidated with greater rapidity and certainty, because the fragments are placed in contact by the cause which produced the lesion.

As to the treatment, it is very simple, and consists in avoiding every attempt at reducing the fracture, and at lengthening the limb, attempts which do nothing more than separate the fragments, and render the consolidation impossible. The patient must, therefore, be placed on his back, a small cushion under the ham, so that, if the trunk be raised, the whole weight of the lower extremity will not correspond to the seat of the lesion: a large band must likewise surround the hips, and be kept in place by another passed under the pelvis. Finally, about the fourtieth or fiftieth day, the patient may be permitted to rise and stand on the injured limb.

On a Case of Cancerous Cachexia.—Catherine Guillot, ætat 49, was received in the wards of Professor Gerdy, at the Charité, and died there in the last stage of cancerous cachexia, having presented during her life-time a series of very remarkable accidents. Thus, in 1832, after an accouchement, abscess occurred in the right breast; in 1835, without any known cause, phlegmon developed itself in the same, and yielded only after two months' treatment; in 1841, amputation of this organ, on account of a cancer produced by pressure; in 1842, extirpation of a small cancer, which had developed itself in the neighbourhood of the cicatrix, and of several axillary glands: a relapse, three months after; in 1843, intense lancinating pains in the right arm, which became swoln and fusiform, the bone being flexible, and, on pressure, crepitating, as if the seat of an osseous cyst; pain and numbness in all the extremities; soon after, development of a lancinating tumour, on the right side of the sternum, on a level with the third rib; characteristic tint; constipation. On the *post-mortem* examination, the body of the humerus was found to be replaced by a medullary carcinoma, which had destroyed the bone from without inwards: the tumour on the sternum was of the same nature; it penetrated through that bone, into the interior of the chest, and adhered to the lungs. (The parts affected were, after removal, presented before the Academy of Medicine, Sitting of the 9th July, by Professor Gerdy.)

New Mode of Reducing Exomphalus.—Dr. Pasquier was called to see a patient affected with strangulated hernia umbilicalis, against which every attempt at reduction had failed; and the symptoms increased, in intensity, to such an extent, that notwithstanding the danger, the operation seemed indispensable. In this dilemma, Dr. P. succeeded by the following novel expedient:—he seized the parietes of the abdomen, above and below the umbilicus, raised the patient, and gave him several jerks. The hernia disappeared, and with it the dangerous symptoms. This method ought never to be had recourse to, but in recent cases, because, if the strangulation had existed some time, the pressure of the stricture on the intestine might have so weakened it as to cause it to burst.

Academy of Sciences; Sitting of the 5th August.—M. Elie de Beaumont, V.P., in the Chair.—The President informed the Academy of the losses it had experienced in the deaths of M. Darcet, and Dr. Dalton, of Manchester, the former a resident, the latter a foreign member.

Researches on the Volubility of the Stems of certain Plants, and on the Cause of this Phenomenon, by M. Dutrochet.—From a series of experiments on the convolvulus sepium, convolvulus arvensis, phaseolus vulgaris, cuscuta Europea, humulus lupulus, lonicera periclimenum, tamus communis, solanum dulcamara, &c., the author concludes: 1° that the rotatory movement exists towards the summit of all volubile stems; 2° the direction of this movement is constantly similar to the volubility of the stems; 3° the direction of the twisting of the volubile stems, on themselves, is the same as that of the rotatory movement of their summit, and that of their volubility; there exist, it is true, some exceptions relative to this latter fact, but they proceed from the circumstance, that a stem rolled in a spiral on a tree, being directed towards the light, produces in the stem a twisting, in a contrary direction to its normal one; 5° the direction of the spiral produced in the stem, by the insertion of the leaves, is the same as the rotatory movement on the summit of the stems.

On the Compounds of Phosphuretted Hydrogen, by M. P. Thenard.—If, on a portion of lime in an incandescent state, phosphuretted hydrogen gas is directed, the weight of the combination increases in proportion to the quantity of gas employed, and this takes place not only superficially, but likewise to the very centre. In calculating, by the increase of weight, the quantity of oxygen which combines with the phosphuret of lime, to convert it into phosphate, and in determining the nature of the latter, it was found to be composed of one equivalent of phosphorous, and two of lime; whence the formula—$P\,Ca^2\,O^2$. Eminent chemists have asserted, that phosphate of lime is a compound of phosphate of lime and phosphuret of calcium; thus, in mixing lime with phosphorus, the former was partly decomposed; its oxygen, combining with the phosphorus, forms phosphoric acid, which, with the rest of the lime, gives rise to phosphate of lime; the calcium, set free, forms, with the phosphorus, phosphuret of calcium. To ascertain the truth of this assertion, the author performed several experiments, and observed, that in throwing, by degrees, phosphate of lime into concentrated chlorhydric acid, the former was partly dissolved, and partly decomposed into phosphuret of calcium, phosphuretted hydrogen gas not spontaneously inflammable, solid phosphuretted hydrogen, and chloruret of calcium; when the reaction is ended, on filtering the liquid, and on adding some ammonia, the phosphate of lime is precipitated; and it is impossible, from the presence of solid phosphuretted hydrogen, and hypophosphorous acid, that phosphoric acid could have been formed; consequently, it must have existed previously. In order to know the exact quantity of solid and gaseous phosphuretted hydrogen generated, the preceding experiment was repeated; but, instead of filtering the liquid, to separate the former, it was converted into phosphoric acid, by means of nitric acid, and when saturated with ammonia, twice as much phosphate was precipitated; shewing, that seven equivalents of phosphuret of lime contain two of phosphoric acid, and five of phosphuret of calcium, and these last, by means of chlorhydric acid, are converted into two of solid phosphuretted hydrogen, and three of gaseous phosphuretted hydrogen. Thus, of the fourteen equivalents of lime, which are contained in seven of phosphuret of lime, ten are decomposed; their oxygen unites with two equivalents of phosphorus to form phosphoric acid, and the calcium unites with the rest of the phosphorus to constitute phosphuret of calcium; whence the formula: $2\,PO^5\ 4\,Ca\,O + 5\,P\,Ca^2 = 7\,P\,Ca^2\,O^2$. The phenomena presented by the phosphuret of lime, when placed in contact with an aqueous solution of chlorhydric acid, are: 1° decomposition into phosphuretted hydrogen, solution very alcaline;

2° decomposition of the liquid phosphuretted hydrogen into solid, and spontaneously inflammable, gaseous, phosphuretted hydrogen; 3° as the decomposition proceeds, and as the quantity of lime increases, the gas becomes less and less spontaneously inflammable, and contains more and more hydrogen. The solid phosphuretted hydrogen disappears under the influence of the alcali; and, then, the solution which contained before but little, if any hypophosphite, presents a considerable proportion, and it may be collected by evaporation. The action which takes place between phosphuret of lime and concentrated hydrochlorie acid, is as follows: the liquid phosphuretted hydrogen is decomposed, as formed, into solid, and non-spontaneously inflammable, gaseous, phosphuretted hydrogen; the former is not decomposed, the liquid being acid, not alcaline. If the acid is diluted, the liquid phosphuretted hydrogen is not decomposed so rapidly, and the gas is spontaneously inflammable.

Academy of Medicine. Sitting of the 6th of August. M. Ferrus in the chair.—The assembly was numerous and animated at the commencement of the sitting, on account of the election for the vacant seat in the section of *Medecine Operatoire*, each member being at his post to support his favourite candidate. The nomination presented greateri nterest from two of the candidates having been among the principal actors in a recent trial, and from the memoir presented on this occasion by one of the same. Without wishing to disparage the talent of any of the candidates (so well known by their publications), still it must be admitted that the choice of the Academy—and that, if rumour speak true, notwithstanding the secret wish of several of its members—is judicious, as it shows that, in order to obtain a seat there, scientific subjects are preferred to those in which the slightest personal allusions are perceptible. The gentlemen presented by the commission were: Drs. Denonvilliers, Huguier, Laugier, Malgaigne, Robert, and Vidal (de Cassis).—Number of members present, 99; majority, 50. Dr. Laugier obtained 52 votes; Dr. Malgaigne, 21; Dr. Robert, 10; Dr. Vidal, 7; Dr. Huguier, 7; and Dr. Denonvilliers, 2. Consequently, the first-named is proclaimed member of the Academy of Medicine; his nomination must, however, be approved by his Majesty.

Dr. Bally read a memoir on the Asiatic cholera which he calls Indian malady (*maladie Indienne.*)

On Varicocele.—Professor Velpeau read a report on the memoir of Dr. Vidal (de Cassis), on this subject. After analysing the memoir—published entire in the '*Medical Times*'—the distinguished reporter stated, that he had recently operated on a patient by the method recommended by Bransby Cooper, but as yet it was impossible to say what would be the result, and concluded by proposing: 1° that the author be thanked; 2° that his memoir should be sent to the *comité de publication.* Adopted.

On spontaneous separation of the uterus.—Professor Velpeau communicated the following curious fact, addressed to him, by Dr. Estevenet, Assistant-Surgeon at the Hotel Dieu, Toulouse:—Mrs. ——, aged 36, married at 17, the mother of several children, suffered from severe pains in the hypogastrium, accompanied with frequent metrorrhagia, and in the intervals, leucorrhœa; emaciation; skin of a yellowish tint. Examination *per vaginam* having increased the pain and hæmorrhage, it was abandoned. Called one day in great haste, M. E., on his arrival, found that a fleshy mass had been expulsed, which, on examination, proved to be the uterus: five days after, peritonitis declared itself, and carried off the patient. A symptom remarked was, that, when the woman was erect, the urine, mixed with pus, escaped abundantly all at once, as if it was ejected, after accumulating in a cavity. At the autopsy, the vagina was found to be inflamed throughout its whole extent; superiorly, it was separated from a large cavity, occupying the place of the uterus, by a circular swelling; bladder sound; the urine came from the kidneys, was collected in the abnormal cavity, and expulsed as just stated.

Lusus Naturæ. Presented by Dr. A. Berigny, Physician to the Hospital of Meulan.—The little girl, aged 22 days, is, with the exception of the deformity, in its normal condition, and, apparently, offers no organic lesion. Both father and mother are strong and hale, the former, aged 27, the latter, 21; this is their second child; the first, a fine boy, is now four years old. Nothing extraordinary occurred during gestation, which went through its different phases as usual. The child presented in the left occipito-cotyloidian position, and the delivery at first proceeded in the customary manner, but it was somewhat retarded as the body descended, on account of the supernumerary inferior extremities. The child was single superiorly, and double inferiorly; to its loins, the lower extremities of a second fœtus, perfectly developed, were adherent, but the sacro-pubic diameters of the two individuals, as they increased, became too considerable for the uterine cavity; the additional parts were therefore deviated to the left, which circumstance permitted the corresponding limb to pass round the hip, and develope itself on the abdomen of the other fœtus; the right, on the contrary, doubled up, was smaller than its fellow. The natural openings, in the supernumerary parts, were merely indicated. The author concluded by saying: 1° that he considered it ought to be placed among the *diplogenesiæ* of Professor Breschet, although double only from the lumbar region; and 2° should the child live, he proposed, as soon as he had attentively examined it, to present a memoir, requesting the nomination of a committee, in order to see if any operation may be performed, so as to remove the superfluous members.—Dr. J. Guerin stated, that he possessed a similar case, which is complicated with *pied-bot*; that the two deformities coincide with some lesion of the spinal marrow; and that it might throw some light on the present subject, to adopt the plan proposed by M. Berigny.

Professor Gerdy presented a man affected with paralysis of the facial nerve.

GARLAND DE BEAUMONT, D.M.P.B.L., & S. &c.
Honorary Physician to the Spanish Embassy.

REVIEWS.

The Diseases of Children; their Symptoms and Treatment, &c. By GEORGE AUGUSTUS REES, M.B. 2nd edition; London, 1844.

Though aware of the high mortality which occurs at the Hopital des Enfans Malades, with the other unfavourable circumstances arising from the accumulation of children in the wards of an hospital, we must yet deplore our inability to cope with our continental brethren in obtaining that practical knowledge of the pathology of infantile diseases which is, beyond doubt, afforded by such an institution. With all its defects and attendant drawbacks, the establishment of an hospital for sick children we earnestly desire; not only for the sake of ourselves, but for that of others—for the student, as well as the practitioner of medicine. When such an institution exists, we probably shall find that future treatises upon the diseases, which it will tend to illustrate, will be marked by higher characteristics than (we feel called upon to assert,) are exhibited by any work upon this subject yet published in Great Britain. We admit that the works of Underwood, Evanson, and Maunsell, and the one before us, are good in their way, and safely to be recommended to the student and junior practitioner; but when we call to mind the treatises of Becquerel, Barrier, Rilliet and Barthez, Berton, and others, and reflect that the latest writer upon the subject in our own language—Dr. Rees—in publishing a *second* edition, has found himself able to add only nine pages of new matter in the form of an introduction to the first edition published in 1841, we are, perforce, led to deplore our comparative poverty of knowledge and experience upon this important subject. We do not believe a greater benefit could be conferred upon the advanced student than the affording him means for attending a course of clinical instruction upon the diseases of infancy and childhood; in which case, we should be disposed to recommend him Dr. Rees' work, as a text-book, until a treatise based upon the results of more opportunities than are, or, at least, seem to be possessed at present, should make its appearance. We have always regarded the hygienic portion of the Dublin book as most worthy of acceptation, but that relating to the eruptive fevers, and some other affections, as very deficient,—and as a whole, as a work for the student, we prefer Dr. Rees. There are several points on which we would beg leave to offer a little advice, however. The article on Pneumonia should have been re-written, and the Memoir of Dr. West upon the subject, carefully perused. The relationship of scrofula to hydrocephalus should have been examined; in fact, we regard the method of treating the latter affection under the heads of Inflammation, Irritation, and Congestion of the Brain, alone, as faulty in the extreme. Under what head, also, may we ask, is remittent fever discussed? In speaking of anasarca following scarlet fever, our author uses the following words:—

The urine, if tested, will be found generally loaded with albumen.

The treatment, in nine cases out of ten, must be strictly and rigidly antiphlogistic.

The first measure is to take away some blood, and this may be by bleeding from the arm, or more easily, by leeches over the region of the heart. But should the means adopted fail to relieve, they must be assisted by the application of more leeches, &c.

In our judgement, there is error and wrong practice in the above. From the investigations of Becquerel, at the Hopital des Enfans Malades, it is to be deduced,—that following scarlatina, acute dropsy, with fever, and albumen in the urine, is rare; that dropsy produced by Bright's disease is not so common as is supposed,—but that dropsy, with œdema of the kidneys, is the most frequent. Out of 31 cases of scarlatina, all of unusual severity, 16 died; 6 were complicated with dropsy, in two of which Bright's disease existed to a marked amount. Albumen was far from being constantly discoverable in the dropsy with serosity of the kidney, and when found, it was but small in quantity and at a late period of the disease. When albumen is met with early, constantly, and of large amount, Bright's disease exists, and from our author's statements we infer he would imply that this is most frequently the case, or, if the affection is allowed to go on, undoubtedly will be so; but in the latter opinion we must differ, seeing that this particular renal complication is comparatively rare, and that the relations of albumen are not generally as above stated. With regard to the treatment of scarlatinal dropsy, we believe that the antiphlogistic method has been pushed a great deal too far; we know that our author expresses, however, in the words we have quoted, the general opinion; but, from considerable experience, we consider it to be wrong. As far as our own practice has been concerned, we can affirm that removing the blood from the system forms the exception instead of the rule; and since results warrant the continuance of the practice, and theory also, seeing that congestion of the kidneys is far from being a constant condition in scarlatina, we would beg leave earnestly to draw the attention of others to a reconsideration of so important a point. We have found that acting freely on the bowels, and then administering diuretics, in a great mass of cases accomplishes all that is desired; in many

ers we have employed the iodide of po-ium, either alone, or combined with qui-e, with great success; in fact, the adminis-ion of tonic remedies plays a very important in treating this complaint. When the oval of blood *is* necessary, we prefer cupping the region of the kidneys, if practicable.

Present State of Ophthalmic Surgery, &c. By OHN HARRISON CURTIS, Esq. 2nd Edition; Whittaker, 1844.

his work, Mr. Curtis presents his readers a neatly written epitome of the progress of thalmic surgery, and introduces to the ce of the profession certain new remedies, nowledge of which he obtained when visit-the hospitals of Berlin and Vienna. Some ful remarks on spectacles conclude the k, in the course of which he condemns the ll-sized glasses at present in ordinary use, ch he considers to be injurious, and recom-ds large circular glasses to be worn ead. Several cases are detailed, the treat-t of which appears to have been judicious. *coup d'œil* of the present state of ophthal-ogy, it will be useful to many of our lers.

ern Surgical Instruments, chiefly of France and ermany.—Illustrated. Renshaw, 1844.

descriptive catalogue of the principal sur-l instruments in use on the continent, trated by numerous lithograph engravings. y of these are comparatively unknown in country, and the clear account given by compiler will prove of considerable service English practitioners, by enabling them to erstand the operative proceedings of their hren on the continent, whether recorded by nselves, or alluded to by English authors.

NOTICES TO CORRESPONDENTS.

r. Ghrimes *sends us a short notice of Mr. Waite's r, published in our last number. He joins issue that surgeon on the pivoting of teeth, insisting in proper cases, with the six front teeth in either pivoting is a safe operation.*

veral communications, among others, from Dr. llo, Dr. Knox, Dr. Sutro, Robert Rigg, F.R.S., are unavoidably postponed till next week.

r. Von Horn *is thanked, but the offer declined. Ve have been sent a case of law, being an action, Exeter, by Mr. Rudall, a surgeon, against a pa-. The debt was clearly proved; but the defence that Mr. Rudall had not the apothecaries' ma. The answer was, that Mr. Rudall was an hecary—that his name was in the authorized list—ugh he had had the misfortune to burn the li-, and finally, that the case was not medical, but ical. The latter fact being proved, Mr. Rudall he verdict.*

Correspondent, with the euphonious name of herumskoite, *sends us a* verbatim *report of a nterian" Oration on a political subject in some less assembly. It will not suit our pages.*

.—We should prefer nitrate of silver.

Poor but Toiling Assistant.—*A good vete-y manual is that of White, by Spooner, published Longman.*

r. Taylor, (*Balymany*) *will have his queries ded to.*

Subscriber *referring to the Cambridge case of slaughter by a surgeon, implies similar malprac-against physicians. We hope and think better gs.*

r. Holmes *has our thanks. His case of Mesmer-presents no unusual points of interest for* our *ers, and is, therefore, declined.*

uæsitor.—*We hope to oblige our Correspondent.*

r. Downer.—*Foreign diplomas are not recog-l by English laws. They are worth exactly what le will take them for. For our part we know of worse method of investing English money. If id Pro Quo" were not distasteful to British ears, we should like to see an English mock College or University, mulcting the Germans or French, in the shape of diploma money.*

Mr. Carkie—*Prof. Kane's work is, perhaps, the best.*

Chirurgus *came late; but it is highly seasoned enough to keep a week.*

A Surgeon *writes to us on the death produced at Ely by the rupture of the vagina, and violence done to the intestines, which protruded through the opening. His statement of facts is scarcely correct.* Dr. Carter, *of Reading, also writes under a similar misunderstanding, the natural consequence of the very meagre reports the daily papers enabled us to give of the case. The truth shortly given is this. Mr. Garland was called in to attend a woman four months pregnant, who from moving a heavy load had produced pain in the lower part of the body, and expected to miscarry. Mr. G. examined her, placing his hand within the vagina. She complained of pain; cried out that "her entrails were being torn out—that she could feel her bowels come away from her stomach all the way to her throat." The entrails were in a moment after, or then seen, by the nurse protruding on the bed; and when Mr. Jones, Surgeon, was called in, he found, as he says, one end of the small intestines completely torn through, and lying loose, and the other end, that nearest the vagina, hanging only by a small portion, as wide as his finger-nail, and its* whole length separated from the mesentery. *He, therefore, thought it right to apply a ligature to the intestine near the vagina, and cut off the parts below it, viz., nineteen feet and a half. He then left her, and in the course of the day the nurse found a fœtus in the bed. She suffered little pain subsequently but died on the seventeenth day after. On the post-mortem, a ragged opening was found at the back part and right side of the vagina, large enough to let in two or three fingers. Without wasting any words on a case so very unfortunate, and we may add so singular in all its details, we may mention that, the evidence on the trials as we have seen it in the Cambridge papers, went all one way;—to the crimination of Mr. Garland, and the exoneration of Mr. Smith. Mr. Garland is not a M.R.C.S., or Licentiate of the Hall.*

Toujours Perdrix.—*We wish not to interfere with our Medical Schools. To us it is ungracious: to them, it is usually something worse; for our notices can rarely do justice and be eulogistic. Our correspondent, however, invokes our interposition in favour of the Professors and Pupils of the Charing Cross School. He assures us that our "favourable report of a private school, and unfavourable notice of a public school (St. Thomas's), secured the first the largest number of students, after King's College,—and punished the second with the smallest selection of pupils of any in London." He hence argues, that the "same attention directed to the improvement of the schools generally, might effect some valuable changes," and places before us a few facts regarding the Charing Cross School, which, "duly attended to, may relieve that institution from the obloquy of deserving a severe stricture." He complains, first, of the illiberal system adopted with the Lecturers—so that Risdon Bennet and Fownes found other marts more to their advantage and comfort: he insists that introductory lectures are not placed in hands which can make them unvaryingly interesting; "the changes being everlastingly rung on Shearman, Chowne, Hancock—Hancock, Chowne, and Shearman, to the exclusion of such men as Wharton Jones," &c. But, perhaps, we have extracted enough to teach the authorities that pecuniary interests are at stake, if the gratification of a personal feeling (however respectable) prevent a large and liberal outlay of courtesy to all Lecturers, and attention to all Students.*

J. S.—*An Irish or Scotch Physician, being in England as a General Practitioner, may be prosecuted by the Apothecaries' Company. By the law, as it now stands, he is an illegal practitioner.*

We have received a New Brunswick paper, "The Weekly Observer," *containing brief remarks on the Canadian Leprosy, from the pen of Dr. Alexander Boyle. We hope to notice the paper in our* "Periscope."

Inquirer.—*We have the police reports. We do not propose to use them.*

Veritas.—*The precaution was quite unnecessary.*

Vindicator *writes urging a law to restrain and punish quacks. He thinks the power of the "Society" useful* "in terrorem."

J. H.—Milo—A Non-Reformer—A Late Member—Mr. H. J. H.—A Provincial Friend, *declined for want of space.*

[*We have been favoured with so many communications, which we have felt anxious to insert, that the additional duty of reprinting* verbatim *the Government Bill, has this week excluded some of our usual editorial articles, among which are unfortunately most of our Periscopic Notices. We shall make atonement next week.*]

THE MEDICAL TIMES.

SATURDAY, AUG. 17, 1844.

A BILL FOR THE BETTER REGULATION OF MEDICAL PRACTICE THROUGHOUT THE UNITED KINGDOM.*

Preamble.—Whereas, it is for the good of all Her Majesty's subjects, that the knowledge of Physic and Surgery should be promoted, and that means should be afforded, whereby those who have been examined, and found skilful by competent authority may be known from ignorant and unskilful pretenders to the same knowledge: And whereas the laws now in force concerning the Profession of Physic and Surgery require to be amended; Be it enacted, by the Queen's most Excellent Majesty, by and with the Advice and Consent of the Lords Spiritual and Temporal, and Commons, in this present Parliament assembled, and by the Authority of the same,

Repeal of Statutes.—That an Act passed in the third year of the reign of King Henry the Eighth, intituled, "An Act for the appointing of Physicians and Surgeons;" and also another Act passed in the fifth year of the same reign, intituled, "An Act concerning Surgeons to be discharged of Quests and other Things;" and also another Act passed in the Session of Parliament holden in the fourteenth and fifteenth years of the same reign, intituled, "The Privileges and Authority of Physicians in London;" and also two Acts passed in the thirty-second year of the same reign, respectively intituled, "For Physicians and their Privilege," and "For Barbers and Surgeons;" and also another Act passed in the Sessions of Parliament holden in the thirty-third and thirty-fourth years of the same reign, intituled, "A Bill that Persons being no common Surgeons may minister Medicines, notwithstanding the Statute;" and another Act passed in the first year of the reign of Queen Mary, intituled, "An Act touching the Corporation of Physicians in London;" and also an Act passed in the Session of Parliament holden in the sixth and seventh years of the reign of King William the Third, intituled, "An Act for exempting Apothecaries from serving the Offices of Constable, Scavenger and other Parish and Ward Offices, and from serving on Juries;" and so much of every other Act as continues the last-recited Act; and also an Act passed in the tenth year of the reign of King George the First, intituled "An Act for the better viewing, searching, and examining of all Drugs, Medicines, Waters, Oils, Compositions, used or to be used for Medicines, in all places where the same shall be exposed for Sale or kept for that purpose, within the City of London and suburbs thereof, or within Seven Miles circuit of the said City;" and so much of another Act passed in the eighteenth year of the reign of King George the Second, intituled, "An Act for making the Surgeons of London and the Barbers of London two separate and distinct Corporations," as does not relate to the separation of the said Corporations, or to the Master, Governors and Commonalty of the Mystery of Barbers of London; and also so much of an Act passed in the fifty-fifth year of the reign of King George the Third, intituled, "An Act for better regulating the Practice of Apothecaries throughout England and Wales," as relates to the examination of Apothecaries, or to the qualifications of persons intending to be ex-

* The words printed in *Italics* are proposed to to be inserted in the Committee.

amined or to qualify themselves under that Act to practise as an Apothecary, or to the fees to be paid by Apothecaries for the Certificate of the Court of Examiners, or to the penalties for practising as an Apothecary without having obtained such Certificate; and also so much of an Act passed in the sixth year of the reign of King George the Fourth, as enacts, that all Members and Licentiates of the Royal College of Physicians in London actually practising; all Surgeons being Members of the Royal Colleges of Surgeons in London, Edinburgh, and Dublin, and actually practising; all Apothecaries certified by the Court of Examiners of the Apothecaries' Company, and actually practising, shall be freed and exempt from being returned, and from serving upon any Juries or Inquests whatsoever, and shall not be inserted in the lists to be prepared by virtue of that Act; and also so much of any Act or Charter granted before the *passing of this Act* as prohibits any person from practising Physic or Surgery in any place without such license as is mentioned in such Act or Charter respectively; or as imposes any restriction on the practice of Physic or Surgery other than is contained in this Act, shall be repealed and annulled.

Council of Health and Medical Education.—And be it Enacted, That a Council shall be established, which shall be styled "The Council of Health and Medical Education;" and that One of Her Majesty's Principal Secretaries of State shall be a Member of the said Council, in right of his office as Secretary of State; and that the Regius Professor of Medicine in the University of Oxford, the Regius Professor of Physic in the University of Cambridge, the Regius Professor of Physic of the University of Dublin, the Regius Professor of Clinical Surgery in the University of Edinburgh, and the Regius Professor of Surgery in the University of Glasgow, shall be Members of the said Council in right of their several Professorships; and that the other Members of the said Council shall be *One* Physician and *One* Surgeon, to be chosen by the Colleges of Physicians and Surgeons of England respectively; *One* Physician and *One* Surgeon to be chosen by the Colleges of Physicians and Surgeons of Scotland respectively; *One* Physician and *One* Surgeon to be chosen by the Colleges of Physicians and Surgeons of Ireland respectively; and *Six* other persons whom Her Majesty, with the advice of Her Privy Council, shall deem fit to be Members of the said Council.

Appointment of First Council.—Provided always, and be it Enacted, That it shall be lawful for Her Majesty, with the advice of Her Privy Council, to appoint all the Members of the first Council of Health and Medical Education, other than those who will be members thereof in right of their several offices; and that at the end of the *Third* and each of the *Two* next following years after the first constitution of the said Council, *One* Physician and *One* Surgeon of those first appointed on behalf of the said several Colleges of Physicians and Surgeons, shall go out of office, in such order as Her Majesty, with the advice of Her Privy Council, shall direct.

Tenure of Office by Official Members and Nominees of the Crown.—And be it Enacted, That those Members of the said Council who are Members in right of their several offices, shall continue to be Members thereof so long as they hold the same offices respectively, and no longer, and the *Six* Members of the said Council, appointed as aforesaid by Her Majesty with the advice of Her Privy Council, shall continue to be Members of the said Council during Her Majesty's pleasure, and upon every vacancy among the last mentioned Members of the said Council, and their successors, it shall be lawful for Her Majesty, with the advice of Her Privy Council, to appoint another fit person to be a Member of the said Council during Her Majesty's pleasure.

Tenure of Office by Members chosen by the Colleges.—And be it Enacted, That upon every vacancy among the Members of the said Council appointed on behalf of the said several Colleges of Physicians or Surgeons, and their successors, the Royal College of Physicians or Surgeons of England, Scotland, or Ireland, as the case may be, shall appoint another Physician or Surgeon, as the case may be, to supply such vacancy, subject to the approval of Her Majesty; and every Member of the Council so chosen shall be entitled to be a Member of the said Council for *Three* Years, and shall then go out of office, but may forthwith be re-chosen, subject to Her Majesty's approval: Provided always, that no President, Vice-President, or Examiner of any of the said Colleges, shall be qualified to be so appointed.

Details of Election to be settled by the several Colleges.—And be it Enacted, That the manner of choosing the last-mentioned Members of the said Council shall be determined in each case by orders or bye-laws to be made from time to time by the said several Colleges, subject to the approval of the Council of Health and Medical Education.

Substitutes in Cases of Extraordinary Vacancies.—Provided always, and be it Enacted, That it shall be lawful for any Member of the said Council appointed by Her Majesty, or chosen by any of the said Colleges, at any time to resign his office, or for Her Majesty at any time, with the advice of Her Privy Council, to dismiss any such Member of the said Council for notorious misbehaviour or unfitness, and upon any vacancy in the said Council by death, resignation, or dismissal, another Member of the Council shall be appointed in the same manner and for the same term as the Member by whom the vacancy shall have been made.

Secretaries, Clerks, and Messengers.—And be it Enacted, That it shall be lawful for the said Council, with the approval of One of Her Majesty's Principal Secretaries of State, to appoint a Principal Secretary for the said Council, and also Local Secretaries for Scotland and Ireland, and so many Clerks and Messengers, as the said Secretary of State shall deem necessary, and also with the like approval to remove at their pleasure any of the said Secretaries, Clerks, and Messengers, and appoint others in their room.

Salaries and Expenses,—And be it Enacted, That there shall be paid to the Members of the said Council, and to the said Secretaries, Clerks, and Messengers, such Salaries as shall be from time to time allowed by the Lord High Treasurer or Commissioners of Her Majesty's Treasury, who may also allow such reasonable travelling expenses which may have been incurred by any Member of the said Council, or any Secretary, Clerk, or Messenger in the performance of his duties under this Act, and such other reasonable expenses of putting this Act into execution, as the said Lord High Treasurer or Commissioners of her Majesty's Treasury shall think fit.

President.—And be it Enacted, That the said Secretary of State shall be President of the said Council, and shall be empowered from time to time to nominate one of the Members of the Council appointed as aforesaid by Her Majesty to be Vice-President of the Council, and to act as President in his absence, and at every meeting of the Council in the absence of the President and Vice-President, some other Member to be chosen by the Council from the Members then present shall be empowered to act as President.

Time and Place of Meeting.—And be it Enacted, That the said Council shall be holden in such places and at such times as the Secretary of State from time to time shall appoint; and that all acts of the Council shall be decided by the votes of the majority of the Members present at any meeting, the whole number not being less than *Seven*; and at all such meetings the President for the time being shall have a second or casting vote in all cases of equality of votes.

Minutes of Proceedings.—And be it Enacted, That minutes of the proceedings at all meetings of the Council shall be drawn up and fairly entered in books, to be kept for that purpose; and such minutes shall be at all reasonable times open to the inspection of any person or committee appointed for the purpose of inspecting them by any of the said Universities or Colleges.

Register to be Kept and Published.—And be it Enacted, That a Register shall be kept and published from time to time, under the direction of the said Council, of all persons who shall have been examined, and shall have received, and shall exhibit before the said Council, Letters Testimonial as hereinafter mentioned of their qualification to practise as a Physician, or as a Surgeon, or as a Licentiate in Medicine and Surgery; for which registry the Council shall be entitled to have from the person requiring to be registered a fee of *Five Pounds* in the case of a Physician or Surgeon, and a fee of *Two Pounds* in the case of a Licentiate, which fees shall be applied towards defraying the expenses of this Act; and every person whose name shall be so registered, who shall be desirous that his name shall be continued in the published Register, shall in the month of *January* in every year send to the said Council his name and place of abode, with the date of his Testimonials, and the Council shall verify the returns so made by them by comparison with the Register kept by them, and shall forthwith cause the names of all persons duly registered and so returned to be to be published in alphabetical order in the several classes, with their several places of abode and dates of their Testimonials.

Licentiates in Medicine and Surgery.—And be it Enacted, That no person, except such Graduate in Medicine and such other legal practitioners as are hereinafter mentioned, shall be entitled to be registered by the Council as a Licentiate in Medicine and Surgery unless he shall have attained the age of *Twenty-one* Years, and shall have been examined by the Colleges hereinafter named (that is to say) if in England, examined by the Royal College of Physicians of England, assisted by the Court of Examiners of the Apothecaries' Company, and also examined by the Royal College of Surgeons of England; and if in Scotland examined by the Royal Colleges of Physicians and Surgeons of Scotland: and if in Ireland, examined by the Royal Colleges of Physicians and Surgeons in Ireland; and in every case shall have received Letters Testimonial from each of the bodies by which he shall have been examined, of his being duly qualified to practise as such Licentiate.

Surgeons.—And be it Enacted, That no person except such legal practitioners as are hereinafter mentioned, shall be entitled to be registered by the Council as a Surgeon unless he shall have attained the age of *Twenty-five* Years, and shall have been examined by One of the Royal Colleges of Surgeons of England, Scotland, or Ireland, or the Royal College of Physicians and Surgeons of Glasgow, after such proof as shall be satisfactory to the Examining College that he has applied himself to surgical studies during at least *Five* Years; and shall have received Letters Testimonial from the Examining College of his being duly qualified to practise as a Surgeon.

Physicians.—And be it Enacted, That no person, except such legal practitioners as are hereinafter mentioned, shall be entitled to be registered by the Council as a Physician unless he shall have attained the age of *Twenty-six* Years, and shall have graduated in Medicine in some University of the United Kingdom of Great Britain and Ireland, or, subject to the restriction hereinafter contained, in some foreign University, and shall also have been examined by one of the Royal Colleges of Physicians of England, Scotland, or Ireland, or by the Royal College of Physicians and Surgeons of Glasgow, after such proof as shall be satisfactory to the Examining College that he has applied himself to medical studies during at least *Five* Years, or if he is not a Graduate in Medicine of any such University, unless he shall have attained the age of *Forty* Years and shall have been examined by the Royal College of Physicians of England; and in each case shall have received Letters Testimonial from the Examining College of his being duly qualified to practise as a Physician; and no person shall be entitled to be received for examination for the purpose of being so registered as a Physician upon a foreign Degree in Medicine, unless the Royal College of Physicians of England, Scotland, or Ireland shall give him a special certificate, to be laid before and approved by the Council of Health and Medical Education, that they have made inquiry into the manner in which such degree was conferred, and have ascertained that it has been granted after residence within the precincts of the same University during at least *One Year*

nd after due examination and upon satisfactory ertificates of previous study.

Physicians and Surgeons may be Registered on Double Testimonials.—And be it Enacted, That it hall be lawful for the same person, if possessed of he necessary Testimonials, to be registered as oth Physician and Surgeon, and for a registered Physician, or a person applying to be registered s a Physician, to offer himself for examination as Licentiate in Surgery by one of the said Royal Colleges of Surgeons, and for a registered Surgeon, or a person applying to be registered as a Surgeon, to offer himself for examination as a Licentiate in Medicine by one of the said Royal Colleges of Physicians, assisted in England by he Court of Examiners of the Apothecaries' Company; and every such Physician or Surgeon hall be entitled to be also registered upon the Testimonials granted to him upon such additional Examination, in such form and manner as shall be etermined by the said Council.

Physicians and Surgeons to belong to a Royal ollege of the country in which they practise.—And e it Enacted, That every person registered after xamination as a Physician or Surgeon under this ct, shall be admitted as an Associate of the oyal College of Physicians, or as a Fellow of the oyal College of Surgeons from which he shall ave received his Letters Testimonial as Physician Surgeon, or if he shall have received the said estimonials from the Royal College of Physicians nd Surgeons of Glasgow, then as a Fellow of the st mentioned Royal College; and every such hysician and Surgeon who shall afterwards move from that part of the United Kingdom which he obtained his Letters Testimonial, all be required, if he shall practise as a Physian or Surgeon in any other part of the said nited Kingdom, to enroll himself as an Associate the Royal College of Physicians, or as a Fellow the Royal College of Surgeons, of that part of e United Kingdom to which he shall so remove, r the purpose of practising there, according to e nature of his Testimonials, and in each case all be entitled to be so admitted without further amination, and on payment of the like fees of mission, and on complying with the same conions as are required of other persons who have ssed their examinations for the purpose of being mitted Associates or Fellows of the said Colleges spectively.

Qualifications and Fees.—And be it Enacted, at the said several Colleges shall, from time to e, when required by the said Council, prepare d lay before the said Council a scheme or schemes the course of study and particulars of the amination to be gone through by all persons plying to such Colleges respectively for Letters stimonial as Physician, or Surgeon, or Licente, and of the Fees to be taken for examination d admission into the said several Colleges reectively; and the said Council shall be empwered to make from time to time such changes any of the schemes so laid before them as to the d Council shall seem expedient; and the said uncil shall endeavour to procure, as far as is acticable and convenient, that the Qualifications d Fees for the said Testimonials shall be unim, according to the nature thereof throughout said United Kingdom.

Restriction on Medical Degrees.—And be it acted, That after the *passing of this Act* it shall be lawful for any University of the said ited Kingdom to confer any Degree in the culty of Medicine upon any person, unless he ll have been matriculated in the same Unisity, and shall have duly attended the courses of blic Lectures prescribed by the same University to dents in Medicine within the precincts of the e University, or of some Medical School rnised by and in connection with the same iversity, during at least *Two* Years next before granting of such Degree, and shall have been mined at some time before granting such gree by the proper Examiners of such Unisity, and found by them to possess competent l and knowledge of Medicine, and of the sciences nected therewith, and of the English and Latin guages at least; and every Diploma or Certifi of a Medical Degree granted by any such University after the *passing of this Act*, shall set forth distinctly the time which has elapsed since the matriculation of the person to whom such Degree shall be granted, and the time during which, and place at which he shall have actually studied as aforesaid, and the fact that he has passed such examination as last aforesaid.

Declaration concerning Bachelors of Medicine at the age of Twenty-two.—And be it Declared and Enacted, That it shall be lawful for any University of the said United Kingdom to grant the degree of Bachelor in the Faculty of Medicine, subject to the restrictions hereinbefore contained concerning Medical Degrees, to any student of the same University who shall have attained the age of *Twenty-two* Years; and that every such Graduate in the Faculty of Medicine, being also examined and having received Letters Testimonial of his qualification in the manner hereinbefore prescribed in the case of Licentiates in Medicine and Surgery, or examined and furnished with the like Letters Testimonial by the Royal College of Physicians and Surgeons of Glasgow, if the said degree shall have been granted by the University of Glasgow, shall be entitled to be registered by the said Council of Health and Medical Education as a Licentiate in Medicine and Surgery, subject to such general regulations as shall be made by the said Council concerning the registry of Licentiates.

Restriction on Bye-Laws.—And be it Enacted, That no bye-law to be made by any of the Royal Colleges of Physicians or Surgeons of England, Scotland, or Ireland, respectively, or by the Royal College of Physicians and Surgeons of Glasgow, shall be of any force until a copy thereof, sealed with the seal of the same College, shall have been laid before and approved by the said Council of Health and Medical Education.

Registry of Students.—And be it Enacted, That it shall be lawful for the said Council to make regulations for ensuring the registry of all Medical and Surgical Students by the proper officers of the several Hospitals or Medical or Surgical Schools, at which they shall study, and to authorize such officers to take a fee for such registration, not being more in each case than *Ten Shillings*, and for requiring all such fees to be remitted to the Secretary of the said Council, and returns to be made to them of the registration of all such Students, in such manner and form as the Council shall think fit; and no Hospital or Medical or Surgical School shall be recognized by any of the said Colleges, which shall neglect or refuse to give due effect to such regulations, after notice of such neglect or refusal shall have been sent by the said Council to the said Colleges, until the default of such Hospital or Medical or Surgical School be amended to the satisfaction of the said Council, and all such fees shall be applied towards the expenses of this Act.

Constitution of the Examining Bodies.—And be it Enacted, That where by this Act it is provided that the concurrence of more than one body is required for qualifying any person to be registered by the said Council, the examination before such bodies for his Degree or Letters Testimonial, or both, may be conducted either separately before Examiners appointed by each body, or before a joint board of Examiners, to be appointed by each body separately or conjointly, who shall be appointed in such number, manner and form, and shall hold their examinations at such times and places as such bodies shall, with the approval of the said Council, agree from time to time among themselves, or as shall be determined by the said Council with respect to any point in which they shall not be agreed; and where there shall be separate examinations before Examiners appointed by each body, the subjects and fees of examination shall be divided among such bodies as they shall from time to time agree among themselves, or as the said Council from time to time shall determine with respect to any subject on which they shall not be agreed.

For Securing Efficiency of Examination.—And be it Enacted, that the said Council may from time to time require returns to be made in such form, and including such particulars, as they shall think fit, respecting the examinations to be conducted as aforesaid, and it shall be lawful for any Secretary of the said Council, deputed by the Council for that purpose, or for any Member of the said Council, to be present at any of the said examinations; and if the Council shall be of opinion that the regulations prescribed by them for the examination and grant of Letters Testimonial as Physician, Surgeon or Licentiate, have been infringed, evaded or neglected by any of the said examining bodies, it shall be lawful for the said Council to refuse to register upon the Testimonials of the body so in default, until the same be amended to the satisfaction of the said Council.

None but those Registered to be Appointed to Public Situations.—And be it Enacted, That subject to the reservations hereinafter contained, no person after the *passing of this Act* who is not registered by the said Council shall be appointed to any medical or surgical office in any public hospital, prison, infirmary, dispensary, workhouse, or other public institution in the said United Kingdom, or to any medical or surgical office in Her Majesty's Army or Navy, or in the service of the Honourable East India Company, except in India, natives of India duly qualified according to such laws or regulations as are or shall be made in that behalf by the Governor-General in Council; and wherever by law it is provided that any act shall be done by a Physician or Surgeon, or Medical or Surgical Practitioner, by whatever name or title he is called, such provision shall be construed, after the *passing of this Act*, to mean a person qualified to be appointed to such medical or surgical offices as aforesaid; and the Council of Health shall be empowered from time to time to make regulations for specifying what institutions are to be considered public institutions within the meaning of this Act, and which form of Testimonial shall be necessary to qualify the holder thereof for every such situation.

Privileges of Persons Registered.—And be it Enacted, that all persons who are registered by the said Council as Physicians, Surgeons or Licentiates, shall be exempt while practising as such from being summoned or serving on all Juries and Inquests whatsoever, and from serving all corporate, parochial, ward, hundred and township offices, but, subject to the reservations hereinafter contained, no person shall be entitled to such exemption, on the ground of his practising Medicine or Surgery, who is not so registered, nor shall the Certificate of any such unregistered person, given after the *passing of this Act*, be received as the certificate of a Medical or Surgical Practitioner in any court of law, or in any case in which by law the Certificate of a Medical or Surgical Practitioner is required.

Persons now Practising may be Registered.—Provided always and be it further Enacted, That it shall be lawful for the said Council, on the application, within *Twelve* calendar Months after the *passing of this Act*, of any person legally practising as a Physician, Surgeon or Apothecary, at the time of the *passing of this Act*, in any part of the United Kingdom of Great Britain and Ireland, or on the application within *Two* Years of any person so legally practising in any of her Majesty's Colonies and Foreign Possessions to cause the name of such person to be registered as a Physician, Surgeon or Licentiate in Medicine and Surgery, as the case may be, on production to the said Council of his diploma, license, or certificate, or such other proof as shall be satisfactory to the said Council, that at the time of the *passing of this Act* he was legally entitled to practise as a Physician, Surgeon or Apothecary, as the case may be in some part of the said United Kingdom, and on payment of a fee of *Two Pounds* in the case of Fellows or Associates of the said Colleges of Physicians and Surgeons respectively, and of *Five Shillings* in every other case, which fees shall be applied towards the expenses of this Act; and during the said period of *Twelve* calendar Months every person legally practising as a Physician, Surgeon or Apothecary, at the time of the *passing of this Act* in the said United Kingdom, and during the said period of *Two* Years, every person so legally practising in any of Her Majesty's Colonies and Foreign Possessions, although not registered, shall continue to enjoy the same privileges and exemptions, and be qua-

lified to be appointed to the same offices, and to practise in the same manner as if this Act had not been passed, and no farther or otherwise, unless registered under this Act.

Penalty on Unqualified Persons for Practising in Public Offices.—And be it Enacted, That every person appointed after the *passing of this Act* to any Medical or Surgical Office for which he is not qualified according to the provisions of this Act and the regulations of the said Council, and who shall act or practise in such Office, shall for every such offence forfeit the sum of *Twenty Pounds*, to be recovered by action of debt or information to be brought in any of Her Majesty's Courts of Record at Westminster, or in the Court of Exchequer in Scotland, or in Dublin, within *Six calendar Months* next after the commission of the offence, and to be recovered in the name of Her Majesty's Attorney-General in England or Ireland or of the Lord Advocate in Scotland.

None but registered persons or those already practising may recover charges.—And be it Enacted, That after the *passing of this Act*, no person shall be entitled to recover any charge in any court of law for any medical or surgical advice, attendance or operation, or for any medicine prescribed or administered, unless he shall prove upon the trial either that he is registered under this Act, or that he was legally practising in the capacity in which he claims such charge before the passing of this Act

Penalty for falsely pretending to be on the Register.—And be it Enacted, That every unregistered person who shall wilfully and falsely pretend to be, or take or use any name or title implying that he is registered under this Act, shall be deemed guilty of a Misdemeanor in England and Ireland, and in Scotland of a crime and offence, and being convicted thereof, shall be punished by fine or imprisonment, or both, as the Court before which he shall be convicted shall award.

Act may be Amended or Repealed.—And be it Enacted, That this Act may be amended or repealed by any Act to be passed in this Session of Parliament.

ON THE PRESENT STATE AND PROSPERITY OF THE PROFESSION.

Sir,—Some weeks since you invited me to make some observations of the kind I now enclose. The paper has been written a considerable time, but unavoidable circumstances have prevented my forwarding it you before.

Yours, obediently,
JAMES BORRETT, M. D.

Great Yarmouth, Aug. 12, 1844.

Whoever expects, after all that has been written on the *vexata questio* of Medical Reform, that his observations will be read, is not unlikely to be disappointed. I shall, however, venture upon a few general reflections on the present state and prospects of the profession.

Why, I ask, have the changes that have been effected in the College of Physicians, and more recently by the grant of a new Charter to the College of Surgeons, why, I repeat, have they proved unsatisfactory? For the plain and obvious reason that they are both partial and niggard, that they were grudgingly conceded, and are wholly unsuited to the feelings and wants of the profession at large. It would indeed be a matter of deep regret if those institutions, by any organic change, should become so damaged as not hereafter to comprise in their body, men distinguished alike for classical and scientific attainments, and for high and honorable bearing; and it is, I believe, from a conscientious fear lest reform should be attended by such a result, that the heads of these institutions cried aloud, looking down from the high ground of chartered rights and privileges. "Leave us alone—preserve what is good—you will not gain by changes—you attempt an impossibility—you cannot elevate the profession to our high ground, but will drag us down to a lower level—we will ward off the suicidal blow—we will stand by our order. Would you have physicians as thick as blackberries? How could they live? Only by conjoining the practice of medicine, surgery, and midwifery; in fact, by becoming *general practitioners*, and taking such fees as would lower the *status* of the profession." And here I come to the point I desire to press earnestly on the consideration of the profession, namely, that the physician should have the option, according to his own inclination, or the wealth and populousness of the locality in which he may reside, of practising one or more of the tripartite division of physic, without exciting the jealousy or ill-will of the general practitioner, or having a mark set on him by the *pures* as degrading their order. The mental and physical constitutions of individuals operate naturally to establish and maintain this divisional practice of physic. I admit that the mind of the practitioner may be advantageously directed to the study of a part of a system or even of an organ; but it ought first to be enlarged by a comprehensive acquaintance with physic, as a whole, and be well stored with its principles. And in physic there will always be men who will find "ample room and verge enough" in the laborious pursuit of one only of the three branches of medicine, surgery, or midwifery, and who, in consequence of their residing in the metropolis or in a wealthy and populous city or district, will reap a golden harvest from what in a small town would afford only genteel starvation. In my view, to divorce, as far as can be, medicine from pharmacy, and to rid its pursuit of apprenticeship, and its practice of dispensing the materia medica, would be the first step to a higher and more healthy state of the profession, and one more beneficial to the public. Far be it from me to disparage the general practitioner. He is the natural growth of situation and circumstances. From him the public get, in the trying time of sickness, the advice and medicines they need; but say what you will, hide it, and gloss it over, as you may, there is something in his mode of serving the public that smacks more of the tradesman than of the gentleman. In so saying I do not wish to be thought "more nice than wise." I am persuaded it operates prejudicially against the profession. Notwithstanding the outward civility to the general practitioner, there is often a secret contempt for him evinced by the lofty and supercilious bearing of the aristocratic peer, and even of the well-to-do-in-the-world tradesman. The very appellative of "Doctor," carries with it a sort of man-of-all-work meaning. An unfair advantage is apt to be taken of the Doctor's good qualities. There is not, perhaps, the slightest intention of hurting his feelings, but with the patient, self operates, and the Doctor's very usefulness damages him; it smacks of servility. The general practitioner is, as I observed before, the growth of English soil. We have never yet had pharmacians licensed and registered, and as the public would not risk being poisoned by druggists, the general practitioner being the surgeon-apothecary combined, became indispensable. But now we have our Pharmaceutical Society, and we shall soon have our Pelletiers and Caventons. To them will be confined the supervision and supply of the materia medica. I would say to the general practitioner, turn over whenever you can pharmacy to the pharmacist, and the handicraft of leeching, tooth-extracting, cupping, and clystering, to other hands. What you may lose in pocket you will gain in self-esteem, which is above all price.

The one thing needful is to divorce medicine and pharmacy: accomplish this and a great step is made in the right direction. Those practitioners who are compelled to dispense for country patients residing at an inconvenient distance from the pharmacien, must comfort their qualms with the philosophic panacea—"What can't be cured must be endured." They must not quarrel with their bread and butter, though unpalatable, but stomach it.

We want our faculties of physic in London, Edinburgh, and Dublin, elected from the general body of practitioners, with their senate and examining council, granting degrees of bachelor and doctor in medicine and surgery to young men prepared by a preliminary examination in classics and physics. We want a corporation of pharmacis with examination and registration of its membe Then shall we have the general practitioner, M B., sending in his account for visits—the physici M.D. or C.D., taking his fees whenever he c finger them, not in base silver, but in the nob coin. With this change will necessarily com corresponding change of feeling in the professio a higher tone of mind and a more honorable be ing one towards another. Less of creepi cringing, flattering, blustering, slandering, wi hatred and uncharitableness. We shall see less the big brass-plate and cockade-lackey syste fewer makers of books, advertised with *ad capt dum* titles—mere scribblers—who write more their pocket, than for posterity, more for t "æs in presenti" than for the execution of "monumentum ære perennius."

Thus will the practice of medicine become noble and honourable calling, which the high-br and ingenuous youth, the gentleman and scho may readily embrace. Then will the mark whi is now set upon the profession be taken from us

J. B.

Great Yarmouth, July, 1844.

P.S.—Since this paper was written, Sir Jam Graham has introduced his long-promised Medi Reform Bill. To much of this bill, the writer the above paper is strenuously opposed, m particularly to the proposal to legalise quackery allowing anybody who pleases to practice with a license: not only ought a license to be a *sine q non* for practising, but no *foreign* diploma wha soever ought to confer a license.

FRAUDULENT ASSUMPTION OF MEDICAL HONORS.

To the Editor of the 'Medical Times.'

Sir,—In the Edinburgh newspapers of the p week, the Senatus Academicus of that city h according to annual custom, published a list those gentlemen upon whom, after due examin tion, it has thought proper to confer the degree Doctor of Medicine.

Appended to this list, is a document or ma festo of the Senators, strongly condemning, a threatening to expose, the too common practi amongst the dishonest part of our profession, assuming the title of M. D. of that Universi without having either studied in conformity w its curriculum, or subjected themselves to exa nation by its Medical Faculty.

This practice, which, to my own knowledge, become much too prevalent, cannot be too stron condemned, both by the titled and untit members of our profession (if I may so call the Not only does it, in the words of the manife "tend to lower the estimation in which Doct of Medicine of this University (Edinburgh) h long been held," but it is calculated to sink us, a profession, in the eyes of the public, which these days of discernment, will easily detect fraud attempted to be put upon it, and will the fore be too apt to regard us as nearly akin quacks and swindlers.

In the document referred to, the Senatus exposed the case of one person who, under pretence of having purchased a Medical deg from the University of Edinburgh, obtained licence, from the Minister of Public Instruction Paris, to practice at Pau in the Pyrences; wh licensee, however, he was obliged to surrender the representation of the fraud by the Sena Academicus to Her Majesty's Secretary of St for Foreign affairs, and by him to the Fre Minister. The document then goes on to s "that the Senatus may probably find it necess to expose some other instances of similar dec tions, which have recently been reported to th In the mean time, they take this opportunity stating, that, during the whole period of the istence of the Medical school in this Univers the Senatus have never once conferred the deg of M. D., except on candidates, who, after p ducing satisfactory evidence of having comple a regular course of study in all the branches medecine, either here or in other Universit have submitted to strict and careful examinati

by the members of the Medical Faculty, and have, in presence of the assembled Senatus, subscribed the *Sponsio* Academica, solemnly binding them to uphold the honor of the University, by the faithful observance of its rules, and by the pure and correct exercise of their professional duties."

I am at a loss, Mr. Editor, to conceive what end, either of honor or advantage, such persons can propose to themselves, since a little reflection should satisfy them, that their professional brethren, at least, must soon detect the wolf in sheep's clothing; and, as no terms are to be kept with dishonorable persons, exposure to the utmost of their power is sure to follow. I imagine that it is well enough known to the profession, and that the public is fast becoming aware, also, that the diploma of any of the Royal Colleges of Surgeons, and latterly even the licence of the Apothecaries Company, ensure, probably, as high *medical* attainments as do the degrees of most of our Universities, and much higher than those of foreign ones. If then, any one is ambitious of the superior privileges and social rank which the degree of M. D. is supposed to confer, there are avenues enough open to him to attain it at any age.

But the title of "Graduate of Edinburgh," or "M. D. Edin." is, to my knowledge, assumed by those who hold what is generally thought to be an inferior title, viz: a licence to practise as physician from the Royal College of Physicians of London, under its late regulations, or a bought diploma from some foreign University. It is these men, who, in consequence of a deficient education in youth, are calculated seriously to lower the Edinburgh School in the eyes of the public, and to injure its efficiency, by diverting the afflux of Medical Students from a University, which, to its honor be it said, has reared in late years a vast majority of the brightest ornaments of our profession.

I am. Sir, Your obedient Servant,

WILLIAM STRANGE, M. D. Edin.

Ashton under Lyne.

[We have omitted one sentence in Dr. Strange's letter. It contains a charge of a personal kind, which we think must be made under some mistake. Perhaps Dr. Strange will further explain his reference in a private note.—ED.]

THE COLLEGE CHARTER.

To the Editor of the "Medical Times."

SIR,—Every day brings fresh evidence of the mode in which the Council of the Royal College of Surgeons of England have adopted, in carrying out the provisions of the recent Charter, and which shews that they have been influenced by motives, less in accordance with all principles of justice, than their worst enemies would have given them credit for.

Never did a set of men more childishly commit themselves, or more recklessly expose their reputation to the mercy of those enemies they have so righteously acquired, through a series of years, under their bygone, and now nearly totally exploded system of self-election, monopoly, and favouritism, than they have.

In this attempt of the Council to assimilate the constitution of the College to the rest of the institutions of Britain, how clearly do they expose their old habits still clinging to them, sticking, as it were, like wax, and visible in almost every item of the Charter. For instance, the clause, perpetuating the whole of the former self-elected Council for life, without submitting them to the ordeal of an election, like those that are to succeed them. Again, in the first election of three hundred Fellows, what are the motives that actuated them (for it would be a misnomer to call them principles)? Strictly and fairly, they had only two modes—examination, or seniority of standing in the College, Which have they adopted? Neither! No; the old self-elected Council for life—now confirmed by the Charter, and still adhering to their old habits—have selected their own friends, favourites, and protegés, with, of course, some eminent names, which they could not fail to do on equally selfish grounds, and have had the arrogance to hold them up to the Profession, and the world, as that higher grade which the Charter empowers them to make: and from this body of three hundred, only, are annually to be elected a certain number to fill up vacancies in the Council. Is this number to be elected by the whole body of the members? No! by the three hundred themselves; the old principle, then, of self-election over again, only in a more extended shape; and leaving it utterly impossible for the great body of the Profession to become Fellows, seeing that no one will submit to the indignity of an examination, and payment of heavy fees, after such a gross act of injustice.

Army Surgeons have suffered more than the rest; and in the Foot Guards, the Junior Assistant Surgeon is senior in standing, in the College, to Fellows created in the list of Three Hundred.

Hoping, Mr. Editor, you will find space to give publicity to this letter in your ably-conducted Journal,

I am your very obedient servant,

A LOVER OF FAIR PLAY, AND ONE UNJUSTLY EXCLUDED.

Aug. 12th, 1844.

THE TRUTHS AND FALSEHOODS OF THE THEORIES OF LIEBIG,

WITH NEW VIEWS ON SOME IMPORTANT POINTS OF ORGANIC CHEMISTRY AND PHYSIOLOGY.

(Prepared expressly for the "Medical Times."

In the winter of 1841-2, when treating of the physiology of breathing, it appeared to me that air must act the same part to the animal, that it does to the electrical machine and galvanic battery. In causing movements by the machine, or by an electro-magnetic apparatus, it was observed that oxygen was one of the factors of force, *i. e.*, that oxygen, in combining with the zinc plate of the battery, and with the amalgam of the machine, causes the activity. Now it had not been demonstrated, as far as I was aware, what was the cause of vital activity or organic activity in animals, though many had stated it to be electrical. The presumption, that the strength of the body is an electrical force, was greatly strengthened by observing that the animal machine was constantly supplied in the oxygen of the air with *one* of the materials out of which is commonly generated electricity. The question now stood thus: if the animal body be an electro-motive machine, in oxygen we have one of the requisites for its production, i. e. of the electricity. But in movements, caused by the electrifying machine, or electro-magnetic apparatuses, in addition to oxygen, there is required a base with which it may combine, namely, the zinc plate of the galvanic battery and the amalgam of the electrifying machine. Now, if this base, or its equivalents, is provided for animals, the probability of the animal body being an electro-motive machine is greatly heightened. This base appeared to me to be some of the materials of the venous blood. In 1842, works of Liebig and Dumas, fell into my hands, proving that the greater part of the food was not for the purpose of nourishing the body, but was of a chemical nature that could not form textures, and which they denominated respiratory food, the chemical nature of which is that of hydrocarburets. Now, the greater part of the food of man being hydrocarburets, which cannot compose textures, and hydrogen and carbon being remarkable for their affinity for oxygen, it was now certain that if the human body be an electro-motive machine, it is supplied with the requisites for the production of that force, *mutatis mutandis*, the same as the machine and galvanic battery. Now, the analogy between electro force and nervous energy in their effects is so striking that many distinguished scholars had pronounced them identical. The question would now stand thus: Move a body by the electric machine, and another by the galvanic battery, and at the same time move your arm and ask yourself what reason is there to believe they have a common origin:—1st, each of the three pieces of mechanism is supplied by the same requisites, namely, oxygen and a base, the bases are the amalgam for the machine, the zinc plate for the galvanic battery, and respiratory food for yourself; so that there is a provision for a common causation. 2ndly, apply wires from the machine or from the battery, and you shall find the electricity produce movements in the circle identical with those excited by the will. 3rd, When the vital force fails to effect some of its natural secretions, as the menstrual or urinary, apply the electrical, and you shall often produce the secretion; the three forces have thus not only a common provision for causation, but have a common effect; for that the sensation of light, of sound, of taste and smell, are capable of production by the electric stimulus is incontrovertible.

Towards the establishing of this conclusion, Liebig has done much—

1st. He has boldly asked the question, what produces animal movements.

2nd. He has shown oxygen to be one of the factors of the force or strength that does so, and thereby has removed the obstacle presented in previously assigned uses of oxygen.

3rd. He has set an example to other physiologists who sneer at chemical physiology, to endeavour to deduce the physical phenomena of man from the food and air with which he is supplied, and this is, at least, pointing out the *line* of discovery.

4th. He has shown that the strength of the body is a constant quantity which, if employed for one purpose, cannot be employed for another, which is the foundation of much, practically useful, both in medicine and education, and, indeed, in everything relating to the management of the human subject.

His great failure is mistaking the use of respiratory food, and in denying nervous energy to be electrical. But how can Liebig or his pupil, Mr. O'Sullivan, who say that strength is a force generated in oxydizement, exclude the action of respiratory food in that process, since hydrocarburets form a more oxydizable base, and are, therefore, more suitable for the purpose than previously existing muscle. Since the hydrogen of butter, brandy, &c, and carbon of the farinacea, and air in the blood, are exposed to mutual action, what reason can be shown (since it is admitted that they combine) that their combination does not produce strength or force? Had Mr. O'Sullivan answered this question his reply would have been a defence, but till he does, no reply can be any. Again, how can Liebig, or Mr. O'Sullivan deny nervous energy to be electrical since *they* admit it to be a force generated by oxydizement? What other force but that of the electrical machine and galvanic battery is generated by oxydizement? Why should the oxydizement of disintegrated muscle produce a force, and the oxydizement of bread, butter, wine, &c., produce no force, but heat only? When Mr. O'Sulivan answers these questions, the physiological public will say he has defended Professor Liebig, but they cannot till then.

In Mr. O'Sullivan's remarks on the electrical eel, &c., &c., he takes for granted that the electrical apparatus is for the purpose of generating the electricity. This is not proved, but on the contrary, it is more probable the animal generates it, as other animals do, and is provided with an especial apparatus, because it makes an *especial* use of it, namely, using it to act on objects *without* its body. for purposes of aggression and defence. Mr. O'Sullivan is not correct when he says it is *independent* of the nerves, as even so early as the time of Hunter, it was shewn to have a greater supply of nerves than was necessary for the nutrition of the organ. If we suppose with Mr. O'Sullivan that the electric apparatus is for *generating* the electricity, then the apparatus by which it makes the especial use of it, is as yet to be discovered. Let me call Mr. O'Sullivan's attention to the opinion of philosophers on this subject by the following quotation from the excellent paper of Mr. H. Letheby.

"And first, Do the organs themselves originate the power? The advocates of this opinion found their arguments upon the analogy which the mechanical arrangement of the battery furnishes to a voltaic pile, it being composed of alternate layers of dissimilar substances; in such a point of view there ought not to be a single square inch throughout any animal frame but should be a galvanic battery. But the principle itself, namely,

that of *contact*, is, in all probability, erroneous, and every day brings fresh facts to overturn Volta's theory. But again, the careful consideration of the elements, and their arrangement in a voltaic pile will show, as Schönbien has asserted, that the living organ does not possess even an indeterminate resemblance, much less identity of circumstance under which the electric phenomena are produced in the two. But for argument's sake, were we to admit that the experiments of Humboldt, of Pfaff, Bruntzen, Prevost, Dumas, Kaentz, and others, have proved that the *contact* of dissimilar animal substances is capable of producing electricity, and even admitting that the arrangement of the pile exists in the organ, what do we explain? Merely a generation of power which we have means of accounting for much better. It gives us no idea how it is to be accumulated, why it should be at the voluntary service of the animal, why its action does not go on at all times like that of a constant battery, and its discharges, therefore, be regular and constant, and why, if it be due to the physical arrangement, we do not get shocks directly after death, or when the nerves are divided: in this case, the elements of the battery, for a short time at least, must remain the same. To my mind, this is a most unsatisfactory explanation, and we must rather look to the brain and nervous centres for the force which accumulates in the battery in the same manner as electricity does in a Leyden phial. Experiments on mutilated animals also tend to support this view. Thus we find, in the first place, that the shock is only manifested while the nerves are entire. Todd found that on making a division of the nerves which go to the battery (and this he did without injury to the other parts), the animal, though it lived as long as the uninjured torpedo, and seemed equally lively, yet it ceased to give shocks when irritated; and Matteucci found that the intensity of the shocks diminished exactly in the ratio of the number of nerves which he divided. Moreover, Matteucci has further observed that irritation of the brain would produce shocks after the animal had otherwise ceased to exhibit them. And Davy remarked, that when a small portion of brain was left attached to the nerves of the battery, it shocked an assistant who held it. Humbolt, also, cut a gymnotus transversely through the middle of its body, and found that the anterior portion alone was able to give shocks. Dr Todd has divided all parts around the organ, except the nerves, and with the organs thus insulated he was able to get the shocks just as usual. Now if it had been dependent on circulation and secretion, the battery should have ceased to act. Spallanzani too, found that the extirpation of the heart did not diminish the shock until the great loss of blood had reduced the vital powers generally, and therefore it could not have been dependent on circulation or secretion.

"Again, the evident nervous exhaustion which is manifested after repeated discharges or, as Dr. Faraday expresses it, "the apparently equivalent productions of electricity in proportion to the quantity of nervous force consumed," would favour this view: it was also observed, that the animal which he experimented on at the Adelaide Gallery appeared fatigued and exhausted after an evening's illustration; and this fact is made still more evident by the Indian method of capturing the fish. Todd also noticed the same fact relative to the torpedo: he took, for instance, two of these fish of the same size and vigour, and while one was allowed to remain quiet, the other he irritated to give repeated shocks, and it soon became exhausted and died, though the former lived three days; and this he found was generally the case. Dr. Davy also noticed that with a great expenditure of the electrical force has resulted a want, as it were, of nervous energy in other parts: some torpedos on which he experimented were found, after several days, with fish in their stomachs not in the least digested. Let us look, again, at the voluntary nature of the discharge, and it would seem as if the animal was capable of knowing when the shock was effective, for it will not repeat it except with advantage.

"Lastly, we cannot but be struck with the great amount of nervous supply which each organ possesses: it was this circumstance, indeed, which attracted the attention of Mr. Hunter, who says 'that the magnitude and number of the nerves, bestowed on these organs, in proportion to the size, must, on reflection, appear as extraordinary as the phenomena they afford." Nerves are given to parts either for sensation or action: now, if we except the more important senses of seeing, hearing, smelling, and tasting, which do not belong to the electrical organs, there is no part, even of the most perfect animal, which, in proportion to its size, is so liberally supplied with nerves, nor do the nerves seem necessary for any sensation which can be supposed to belong to the electrical organs; and with respect to action, there is no part of any animal with which I am acquainted, however strong and constant its natural action may be, which has so great a proportion of nerves. If, then, it be probable that those nerves are not necessary for the purposes of sensation or action, may we not conclude that they are subservient to the formation, collection, and management of the electrical fluid, especially as it appears evident, from Mr. Walsh's experiments, that the will of the animal does absolutely control the electric powers of its body, which must depend on the energies of the nerves. Taking all these points, then, into consideration, it appears far the most probable that the electric fluid is derived from the brain, to be sent along the nerves, and concentrated in the battery, whence it is discharged through the water in a determinate direction."

And farther—

"From these propositions we are warranted in assuming that it is the force of common nervism; and there are many who entertain a similar opinion. Dr. Watson, in his Lectures on Medicine, which were published last year, says, "I incline to the opinion that the influence which originates in the grey matter and is transmitted by the white, will be found at last to consist in, or be nearly allied to, electricity;" and Dr. Faraday observes "that from the time it was shewn that electricity could perform the functions of the nervous influence, he has had no doubt of their very close relation, and they probably are effects of one common cause." This was, moreover, Dr. Wilson Philip's opinion, as well as that of Wollaston, Treviranus, Carus, Prevost, and Dumas, Matteucci, Meissner, and many others. Nor should I forget to add the name of Sir J. Herschel, who says, that the present state of electrical science warrants the conjecture, that the brain and spinal marrow form an electrical organ, which is spontaneously discharged along the nerves at brief intervals, when the tension of the electricity reaches a certain point.

"But with all this we have yet to enquire into the origin of the electrical force, and, secondly, how it arrived at the brain to be at the voluntary service of the animal. In the inorganic kingdom the source of electricity is chemical action. It is the same without doubt in the living organism; indeed, the great element of existence seems to be chemical action; and the wonder would be, how these could be maintained without the development of electricity. Many of the principles of our food, as well as the old matters formerly components of our bodies, are undergoing, through respiration, combustion, and being converted into carbonic acid and water. The result of these changes must be a manifestation of heat and electricity. The former keeps up the temperature of our bodies; the latter, in my opinion, serves to maintain the vital functions; for we find, when we check respiration or oxidation, we check every outward evidence of life; while, on the other hand, if we increase it, either by the inhalation of a purer or denser atmosphere, or one containing more oxygen, as protoxide of nitrogen, for instance, we increase these evidences; and so also when we increase chemical action, by throwing into the system compounds which are easily burnt, as, for example, spirituous drinks; so that, to use the words of Professor Liebig: "all vital activity arises from the mutual action of the oxygen of the air and the elements of the food:" therefore, every phenomenon of life is dependent on chemical action; and there is sufficient of this going on in every organism to account for the expenditures which are incidental to the most active existence. There is, moreover, a constant ratio existing between this amount of expenditure and the activity of the respiratory changes; in cold-blooded animals, and in animals during hybernation, there is an apathy and want of energy in all their movements, while in the hot and actively respiring bird there is a proportional increased expenditure and exhibition of nervous energy. To look, then, at the phenomena of life, we see they are manifested by a something which originates from chemical action, traverses the nerves, and produces in the animal body combination and decomposition."

As replies to all Mr. O'Sullivan's arguments, to prove *disintegration*, were *anticipated*, it is needless to repeat them here. The cause why starved animals lose flesh, has been already shewn to appertain to starvation, or a state of disease equivalent to it, and not to exist when an animal is regularly fed. Yet Mr. O'Sullivan states, "and what occurs in this respect where food is withheld *must* also take place where the natural quantity of food is afforded."

These names, opinions, and arguments, should induce Mr. O'Sullivan to "weigh and consider" before he dismisses as an "old idea," the fundamental fact in physiology that nervous energy is identical with electricity. Though my own lecture on that subject was published previously to Mr. Letheby's, yet I prefer quoting from his, to shew that Liebig, in denying nervous energy to be electrical, is opposed to many who have well considered the point at issue. But Mr. O'Sullivan thinks that if nervous energy be electrical, then a debilitated person may be resuscitated by the use of Armstrong's electrical machine. But this is clearly a *nonsequitur*, for the electric nervous energy must be in the natural way accumulated in the nervous system, before it can produce its proper effects. In the case of the electrical fishes, where all force is admitted to be electrical, the worn out and exhausted fish, wearied after experiments, cannot be recruited by other electricity than that which it generates from its own body. My argument, that if respiratory food and wine be to produce heat, then they might be saved by applying artificial heat, remains in its full force; because *heat* from fuel does, in point of fact, replace that generated within the animal, for heat requires no especial mechanism for its application, but the electricity generated in breathing does.

Professor Liebig's work must have been hailed with delight by every one that understood it. Hitherto, physiologists have proceeded like that geometrician who would attempt to solve the problem while he neglected the data. Physiologists have attempted to explain the phenomena of the animal machine, otherwise than by deducing them from the materials supplied by the mouth and the nostrils, namely, from food and air, which are the data to the medical philosopher. It is by their kind and quantity that much of their character is produced; it is by them that the people of one country mainly differ from those of another. It is by breathing a greater quantity of air (if the digestion be good) that one man in the same country rises in energy above another. How much of the influence of those who move the people as "roll the waters to the breathing wind," arises from expanse of the chest, has not yet been generally understood. How much of the power of Mr. O'Connell, and others, who powerfully impress their hearers, depends on the *chest*, has not yet been taken into account by educationists, else we should have had as much attention given in the education of political characters, barristers, &c., to expand the chest, which does most in making the *impression*, as to develope the thought which only instructs. The indomitable spirit, the person who can sway his followers—the actor, or singer, who can captivate,—is to be found among those whose chest is well developed. For want of knowledge of this, parents and teachers try in vain to torture youth into greatness by studies, which, without ample chest, have no power to accomplish the end proposed.

A vacancy has occurred in the Surgical Staff of the Bristol Infirmary, by the resignation of Mr. Nathaniel Smith.—Mr. Smith held the situation upwards of twenty-seven years.

PERISCOPE OF THE WEEK.

Pistol shot traversing the brain.—Drs. Lieven and De Moor relate the case of a woman, fifty-four years of age, who received, on the 25th of January, 1842, a pistol-shot in the head. She was discovered shortly afterwards in a deep lethargy. Four or five ounces of blood had flowed from two wounds. One was at the posterior and inferior part of the right side of the cranium, at the point of insertion of the right trapezius muscle, of a circular form, about one-third of an inch in diameter, the edges jagged and depressed; the other, whose edges were more even, was situated at the upper and right side of the forehead, a third of an inch from the median line, presenting an elongated form, and measuring one-third of an inch. A buttoned probe inserted cautiously into the wounds proved that the cranium had been perforated through and through. The symptoms observed were a complete suspension of the sensorial and locomotive functions; considerable diminution of heat in the body; paleness of the face; involuntary emission of urine and fæces, and extreme flaccidity of all the limbs; pulse almost imperceptible; respiration stertorous. After the lapse of three hours the brain began to be sensible to external impressions; the patient replied slowly but clearly to questions addressed to her, but could not give an account of what had occurred, she not knowing that she had been wounded, or complaining of pain. Voluntary motion now returned on the left side; the pulse slow; the respiratory and digestive functions unimpaired. On the following day these symptoms continued without change. On the 27th a probe was again introduced with care into the wound at the back of the head, to the extent of two inches, and at this moment the patient made a slight movement of expiration, as in the act of sighing; she then stretched herself out as if lifeless, and her features collapsed. The probe was immediately withdrawn, and these symptoms disappeared. On the 28th, to these symptoms were added traumatic fever, severe pain in the back of the neck and in the limbs; contraction of the fingers of the right hand; throbbing pains, resembling electric shocks in the right side of the face; contraction of the orbicularis muscle and pupil; vision confused; dread of light; tongue white; intense thirst, and accelerated pulse. To relieve this state, she was ordered low diet, cold water for drink, and cloths dipped in a cold infusion of arnica applied to the head, and renewed every quarter of an hour. A mixture, containing two grains of aconite in six ounces of distilled water, was given every two hours. Two days afterwards, tetanic rigidity of the back and cervical region followed, with lancinating pains of the latter: the wound in front had closed—extract of belladonna prescribed. This state continued till the 3d of January, when a diminution of the symptoms took place. On the 28th of February the patient asked for food; some bread and milk and light broth were ordered. From the 1st of March to the 9th of June a progressive improvement was observed in all the functions of the brain. The integrity of the intellectual faculties was first established; then the sense of smelling and sight resumed their normal condition. Motion, as well as sensibility, was now restored to the limbs, with the exception of the right arm, and the patient was shortly able to walk with the aid of a stick.—The only effects of her wound remaining, in September, were partial paralysis of motion and sensation of the right arm, and a slight awkwardness in moving the lower extremity, which she still retains. In all other respects her health is excellent. This case appears to have been treated on homœopathic principles. It is of exceeding interest. The introduction of the probe, completely across the brain, was at any rate highly injudicious, and especially on the second occasion. The only advantage that could have been derived, must have been to ascertain whether there were any spicula of bone, or any foreign body present, to excite and keep up irritation, and that was fully ascertained in the negative by the first experiment.

Bronchocele.—In a short communication published in the *London and Edinburgh Medical Journal*, Dr. Morris traces the occurrence of bronchocele in some cases to rheumatism. He narrates three cases demonstrating at least the co-existence of bronchocele with rheumatism, the patients being of a strumous diathesis. He observes further that a large number of the cases of this disease occur in persons with fair skin, and other indications of a strumous habit.

Ipecacuana as a counter-irritant.—In the *London and Edinburgh Medical Journal*, Dr. Cormack states his experience of ipecacuana as a counter-irritant. He tried it in a great many cases, and even when made with half an ounce of the powder to an ounce of lard, it failed in producing an eruption in the proportion of ten cases out of twelve. In a few persons only, with a delicate skin or which had been recently blistered on the surface experimented on, did he succeed in bringing out an eruption, which in three carefully observed cases was vesicular. In those persons on whom no effect was produced by the ointment, a good crop of pustules was in every case brought out by one, two, or three frictions with a liniment composed of equal parts of olive and croton oils. Dr. Handysyde and Dr. Douglas Maclagan confirm this statement of Dr. Cormack's.

Carotid aneurism.—Dr. Duncan narrates in the *London and Edinburgh Medical Journal*, the case of a woman, 33 years of age, in whom he operated for carotid aneurism. The tumour was of very rapid growth, and the patient was subject to spasmodic attacks of dyspnœa and insensibility. Tracheotomy was first performed, and afterwards ligature of the carotid. Inflammation took place in the sac, ulceration into the pharynx followed, and the woman died on the fifteenth day. The cause of death was supposed to be spasm of the glottis, induced by irritation of the recurrent nerve, which was involved in the tumour.

Fractured superior maxilla.—Mr. Bate has published in the *Forceps* a case of fracture of the superior maxilla, by the key used by an unskilful tooth drawer. Upon looking into the patient's mouth he perceived a lacerated wound proceeding some way along the base of the external gum, uniting itself anteriorly to the second molar, with one which extended to the centre of the palate. Upon touching the second molar tooth he found a large mass quite loose, which he raised and passed the finger under into the very antrum. Under such circumstances, he thought there was but one thing to be done, and that was to divide the remaining integuments with a scalpel, and to remove the entire mass, which consisted of two teeth (the second molar and wisdom,) together with all that portion of the superior maxilla in which they are fixed, (about an inch and a half in length,) embraced within the internal and palatine alveolar plates and the floor of the antrum above. After its removal, the wound healed with simple treatment, granulations arose and united over the fractured orifice of the exposed antrum, so that not even a slight fissure was left.

Fistulous opening in the right cheek.—Mr. Robinson narrates, in the current number of the *Forceps* the case of a baker, who had an opening in the right cheek, opposite the first molar tooth, from which a fœtid pus had been discharged, at intervals, for the last five years. When the discharge ceased, which it did occasionally, he experienced acute pain in the whole side of the face, attended with swelling and deformity. His constitution also suffered from the irritation, so that he was frequently obliged to discontinue his employment. He had been treated for salivary fistula, and had had caustic and astringent injections, &c., repeatedly applied. On examining the mouth, not the slightest trace of a stump could be discovered. The gum was healed perfectly, neither were any of the adjoining teeth affected with caries or inflammation of the periosteum. The man stated, however, that ten years ago a tooth had been broken during an attempt at extraction, and that the fang was covered over by the gum Mr. Robinson, upon examining the external opening, and introducing a small, curved silver probe, ascertained that it took the direction of the alveolar process, and came in contact with a hard and unyielding substance. Pressure on this was attended with increased pain, and there was, consequently, no longer any doubt as to the cause of this troublesome affection. Some difficulty existed as to the best mode of removing the stump, without producing more disfigurement than the disease had occasioned. The integuments were carefully separated, and about a quarter of an inch of the external wall of the alveolar process was removed. This admitted of the introduction of a strong, curved, pointed elevator, for extracting it: with considerable difficulty the stump was dislodged, and the opening injected with a zinc lotion. By attention to the general health, &c., the man perfectly recovered.

Test for arsenic.—Dr. Baumann recommends, for detecting small quantities of arsenic, the suspected body to be triturated with from three to six times its amount of iron filings, previously exposed to a red heat, and known to be free from arsenic, and the mixture to be heated in charcoal in the reducing flame of the blowpipe. The peculiar odour is disengaged even with the smallest quantity of arsenic.

GOSSIP OF THE WEEK.

A public funeral was given at Manchester, on Monday last, to the remains of the late Dr. Dalton. There were no less than 100 private carriages, including that of the Corporation, and the various societies in the town formed part of the procession to the Ardwick Cemetery, where his remains were interred. The shops and warehouses in the line of road to the place of interment were closed, manifesting a marked desire to pay every respect to the philosopher's memory.

The grand jury of Clare, Ireland, have fixed the salaries of dispensary physicians at the uniform rate of £60 a year.

On Monday last, Mr. Elam, of Leeds, and Mr. R. B. Lewis, of Bingley, were appointed assistant apothecaries to the Leeds General Infirmary.

An English medical man, named Edmonds, was, on Thursday, arraigned before the Correctional Tribunal for practising his profession in France without sufficient licence or authority. Mr. Edmonds had previously undergone a prosecution for the same offence. His counsel, however, defended him so well, and produced so many favourable certificates, among the rest, one from M. Lisfranc, the eminent surgeon, speaking in the highest terms of his science and skill, that he was recommended to the consideration of the Tribunal. He was in consequence subjected to a fine of only 30 francs.

In the form of substantial food, Mr. Chadwick states, that in the week, the transported thief receives 330 oz.; the convicted thief, 239: the suspected thief, 181; the soldier, 168; the able-bodied pauper, 151; the independent labourer, 122.

Transactions of the Medical Protection Society.—(From a Correspondent.)—The recent meeting presented but one point of interest. The minutes being duly read, our friend, the epic poet, Blamey, demanded, in the open committee-room, one shilling, as the price of a book of poems recently bought from him by Mr. H. Hodson Rugg. Getting an unsatisfactory reply, he pulled the latter's nasal ornament, and struck him with a cane on his shoulder. Mr. Rugg, in return, to vindicate his title as Secretary to a Medical Protection Society, immediately directed a bludgeon at the weakest part of his opponent's body, which being fortunately covered by a thick, gossamer hat, and osseous structure, of "Medical Protection" density—was happily saved from being cleaved in two. The two other persons present, who formed, with the belligerents, the acting committee, now interfered, and prevented a meeting, called for the dispatch of business (not the publication of accounts), terminating in the dispatch of Dr. Blamey.—[We are assured, on good authority, that this narration is perfectly authentic—literally true.—Ed.]

Mr. W. B. Herapath was, on Monday, unanimously elected Honorary Consulting Surgeon-Accoucheur to the Bristol Infirmary, in the room of Mr. Hanson, resigned.

The Provincial Medical and Surgical Association held their annual meeting at Nottingham. Nothing transpired of important interest, except to the members, about 150 of whom attended. A peculiar scientific feature, however, was presented, in the perusal of an elaborate paper in favour of Mesmerism, by Mr. Newnham, of Farnham, and supported by Dr. Inglis, of Halifax. The fate of the Association's organ seemed to be the great *vexata quæstio*. Dr. Forbes led the opposition.

PROMOTIONS.—Asst.-Surg. James Allen (b 1837) of the Rattlesnake, to the rank of surgeon.

APPOINTMENTS.—Surgeons. J. A. Mould (1838) to be surgeon-superintendant of the convict ship, Sir R. Peel; J. Naulty, to be surg.-superintendant of the Tasmania convict ship.

Assistant-Surgeons.—G. Willes, and S. H. B. Collins, acting additional, to the Victory, for service at Haslar; P. Porter (1841) to the Virago, P. Stevin (1841) to the Savage; A. Mitchell, (1839) to the Lynx.

Died at Penrith, on the 5th inst., Thomas Bowman, Esq., Surgeon, aged 53.

Gentlemen admitted members of the Apothecaries' Hall, 8th August, 1844:—William Philpot Brookes, George John Rose, William Senhouse Kirkes, John Turner Caddy, Vertue Edwards, James Thomas Carr, Henry Marden, James Heaton Bennett, Frank Renaud.

UNIVERSITY INTELLIGENCE.—UNIVERSITY OF LONDON.—FIRST EXAMINATION FOR THE DEGREE OF BACHELOR OF MEDICINE, 1844—The following candidates have passed this Examination:—*First Division*: Joseph Carpenter Bompas, University College; William Cadge, University College; William Henry Colborne, University College; Arthur Charles Copeman, King's College; Peter Martin Duncan, King's College; Charles Elam, Leeds School of Medicine; David Peter Evans, King's College: Henry Isaac Fotherby, Guy's Hospital; W. Henry Greenwood, Guy's Hospital; Thomas Frederick Grimsdale, University College; John Braxton Hicks, Guy's Hospital; Thomas Peter Mason, Original School, Peter Street, Dublin; Charles Reeve Matthew, University College; John Ody, King's College; Charles Bland Radcliffe, Leeds School of Medicine; James John Ronghton, King's College; Henry Wiglesworth, University College.—*Second Division*: Charles Cowdell, University College; James Samuel Drury, Adjoining St. George's Hospital; John Alexander Elliott, Adjoining St. George's Hospital; Patrick Martyn, School of Physic in Ireland: John Mason, King's College; Stephen Monekton, King's College: John Griffith Morris, University College; Jabez Spence Ramskill, Guy's Hospital; John B. Ricards, College of Surgeons in Ireland.

Metropolitan Mortality for the Week ending Saturday, August 10.

Causes of Death.	Total.	Average of 5 Springs.	Average of 5 Years.
ALL CAUSES	934	900	946
Zymotic, or Epidemic, Endemic, and Contagious Diseases	288	191	178
SPORADIC DISEASES—			
Dropsy, Cancer, and other Diseases of uncertain or variable Seat	95	106	111
Diseases of the Brain, Spinal Marrow, Nerves, and Senses.	153	159	157
Diseases of the Lungs, and of the other Organs of Respiration	211	233	286
Diseases of the Heart, and Blood-vessels	20	19	21
Diseases of the Stomach, Liver, and other Organs of Digestion	82	88	69
Diseases of the Kidneys, &c.	4	5	5
Childbirth, Diseases of the Uterus, &c.	6	9	10
Rheumatism, Diseases of the Bones, Joints, &c.	4	5	6
Diseases of the Skin, Cellular Tissues, &c.	2	1	1
Old Age	47	56	71
Violence, Privation, Cold, and Intemperance	15	25	26

A SELECT PRACTICAL FORMULARY.

TRANSLATED FROM THE FRENCH OF M. FOY, PRINCIPAL PHARMACIEN OF THE HOSPITAL ST. LOUIS, AT PARIS.

(Continued from page 398.)

PLUMMERS' PILLS (London Pharmacopœia). four drachms of calomel, four drachms of the golden sulphuret of antimony, eight drachms of powdered guaiacum resin, mixed with one drachm or a sufficient quantity of rectified alcohol, and made into pills weighing two, three, and four grains each. Mode of exhibition—one every morning, in obstinate cutaneous diseases.

PILLS TO REPRODUCE THE CATAMENIA: two grains of the powder or extract of savine, two grains of powdered aloes, mixed together, and made into a pill, of which three or four are to be taken daily for a week.

PILLS TO REPRODUCE THE HÆMORRHOIDAL FLUX: two grains of powdered aloes, six to ten grains of sublimed and washed sulphur, mixed with a sufficient quantity of honey, to make two pills, of which from four to six to be taken daily for a week.

PILLS OF THE PROTO-NITRATE OF MERCURY: see Pills of Ste. Marie.

PURGATIVE PILLS (Rayer): forty-eight grains of powdered jalap, forty-eight grains of powdered scammony, mixed together, and made into twelve pills, with a sufficient quantity of simple syrup. Used in the treatment of the constipation attendant on colica pictonum. Mode of exhibition—from two to six in the course of the day, until free evacuation is produced.

PURGATIVE AND DIURETIC PILLS (Frank): fifteen grains of the compound extract of colocynth, fifteen grains of powdered gamboge, ten grains of calomel, mixed together, and made into twelve pills, with a sufficient quantity of syrup of ginger. Mode of exhibition—half the quantity to be taken evening and morning, in the treatment of dropsy.

PILLS OF CINCHONA AND CAMPHOR (Hotel Dieu): seventy-two grains of extract of cinchona, one grain of extract of opium, twelve grains of camphor, made into twelve pills, with a sufficient quantity of powdered bark. Mode of exhibition—one to be taken every three hours, as tonic and stimulant, in ataxo-adynamic fevers.

PILLS OF SAINTE MARIE: ten grains of the crystallized proto-nitrate of mercury, forty grains of extract of liquorice, mixed together, and made into sixty pills. Mode of exhibition—four or five daily, in the treatment of syphilis and certain cutaneous affections.

COMPOUND SOAP PILLS (Hospital La Charite): one drachm of resin of jalap, one drachm of calomel, one drachm of Castile soap, six drops of the essential oil of orange-peel, mixed together, and made into pills weighing four grains each. Mode of exhibition—one to be taken every half hour, until the bowels are opened.

SQUILL PILLS (Parmentier): four drachms of medicinal soap, two drachms of gum ammoniacum, two drachms of nitrate of potash, two drachms of powdered squills, mixed together, with a sufficient quantity of simple syrup, and made into pills weighing three or four grains each. Mode of exhibition—one to be taken every two hours, as a diuretic.

DR. SEDILLOT'S PILLS: three drachms of strong mercurial ointment, two drachms of medicinal soap, one drachm of powdered liquorice, mixed together, and made into pills weighing four grains each. Mode of exhibition—five or six daily.

PILLS OF STRYCHNINE (Magendie): two grains of pure strychnine, thirty-six grains of conserve of red roses, made into twenty-four pills. Mode of exhibition—one or two evening and morning, in paralysis.

POMMADE WITH THE IODURET OF ARSENIC (Hospital St. Louis): from two to four grains of the ioduret of arsenic, one ounce of lard, mixed together. Mode of exhibition—half a drachm to a drachm in frictions in some cases of corroding and tubercular dartrous eruptions.

POMMADE WITH IODURET OF BARIUM (Hospital St. Louis): four to six grains of the ioduret of barium, one ounce of lard, mixed together. Mode of exhibition—half a drachm to a drachm, in gentle frictions in the treatment of scrophulous swellings.

POMMADE WITH THE IODURET OF MERCURY (Hospital St. Louis, Midi, Lourcine, &c., Magendie): one drachm of the ioduret (proto or deuto) of mercury, an ounce or an ounce and a-half of lard, mixed together. Topical application, to accelerate the cicatrization of inveterate venereal ulcers. They are applied, thinly spread on pledgets of lint.

POMMADE WITH THE IODURET OF LEAD: one drachm of the ioduret of lead, one ounce of lard, mixed together. A topical application for venereal chancres and ulcers.

POMMADE WITH THE IODURET OF SULPHUR (Hospital St. Louis): fifteen to sixty grains of the ioduret of sulphur, one ounce of lard, mixed together. Used as a topical application, in dartrous ulcerations, complicated with scrophula, syphilis, &c., and especially in porrigo. It has also been employed in rheumatismal nodus.

POMMADE WITH THE IODURET OF ZINC: one drachm of ioduret of zinc, one ounce of lard, mixed together. One to two drachms, used daily, in frictions on scrophulous ulcerations.

POMMADE OF TURPENTINE: see Sedative Pommades.

POMMADE OF POWDERED GOLD, OR GOLD FILINGS, (Form. Montpellier): one drachm of finely divided gold, one ounce of lard, mixed together. Used in the same cases, and in the same manner, as the pommade with the hydrochlorate of gold.

POMMADES WITH WHITE AND RED PRECIPITATE No. 1.: forty-eight grains of white precipitate, one ounce of lard, mixed together. *** Only fifteen grains of white precipitate are used for young children.

No. 2.: fifteen grains of red precipitate, one ounce of lard, mixed together. *** These two pommades are employed, but more especially the first, to anoint the pledgets, which are introduced into the anus in cases of fissures, or elongated ulcerations, and in the dressing of flat tubercles, anal ulcerations, &c.

POMMADE OF RED PRECIPITATE: one drachm of red precipitate, one ounce of lard, mixed together. Used as a topical application, for venereal chancres and ulcerations.

POMMADE OF THE PROTO-CHLORURET OF MERCURY: see Pommade of Calomel.

POMMADE OF THE TANNATE OF LEAD: two drachms of dried tannate of lead, one ounce of lard, or rose ointment, mixed together. A discutient and dessicative topical application.

POMMADE OF VERATRIA (Turnbull): four grains of veratria, one ounce of lard, mixed together. Used in frictions in cases of neuralgia, gout, &c.

POMMADE, ASTRINGENT: one drachm of oxide of zinc, one ounce of simple cerate or lard, mixed together, on a porphyry slab. Used in fissures of the nipples.

POMMADE, ASTRINGENT (Cruveilhier): one drachm of balsam of Peru, one ounce of lard, mixed together.

POMMADE OF AUTENRIETH: five drachms of tartarized antimony, two ounces of lard, accurately incorporated. Mode of exhibition—a piece as large as a nut, used in frictions on the epigastric region, three times a-day, or at every fit of coughing, in hooping cough. These frictions produce, first, a local irritation which diminishes that which affects the gastric and pulmonary mucous membrane, and secondly, pustules, similar to those of small-pox. The pain it causes may be relieved by the application of emollient poultices.

POMMADE OF BELLADONNA: one, two, four, eight, or sixteen drachms of extract of belladonna, sixteen drachms of lard or cerate without water, mixed together. A topical sedative, used to remove spasmodic strictures or contractions.

POMMADE OF BELLADONNA (Campardon): two drachms of extract of belladonna, four drachms of wax, one drachm of lard, mixed together. A topical application, used in cases of rigidity of the neck of the uterus.

POMMADE OF BANYER: three drachms of calcined alum, three drachms of powdered calomel, four drachms of porphyrized litharge, carefully mixed together, and incorporated with eight ounces of lard, and two ounces of Venice turpentine. Used in cases of porrigo.

POMMADE, SEDATIVE (Pott): one drachm of powdered conium, one ounce of lard, mixed together. A topical sedative, used in scrophulous diseases, Pott's disease, &c.

POMMADE, SEDATIVE (James): two drachms of the essential oil of cherry-laurel, two ounces of lard, mixed together.

POMMADE, SEDATIVE WITH LUPULINE (Freake): one drachm of lupuline, three drachms of lard; after five or six hours' digestion in a water bath,—strained and run into a pot. Topical sedative, used to relieve the pains of cancer.

POMMADE, CITRINE: see Citrine Ointment.

POMMADE OF CUCUMBERS: pork or veal fat, charged with the aromatic principles of the fresh cucumber, benzoin, and rose-water. A cosmetic, which occasionally serves as a vehicle for medicated pommades.

POMMADE AGAINST ACNE INDURATA (Hospital St. Louis): seventy-two grains of extinct lime, twelve grains of pure camphor, one ounce of calamine ointment, mixed together. A topical application.

POMMADE AGAINST AMAUROSIS (Miquel): ninety-six grains of cerate, one hundred and twenty grains of epispastic pommade, four to ten grains of strychnia, dissolved in a few drops of alcohol. Mode of exhibition—a blister on the nape of the neck, dressed with twelve grains of this pommade, spread upon beet-root.

POMMADE AGAINST BALDNESS (Dupuytren): eight ounces of beef marrow, one drachm of crystallized acetate of lead, twenty-four grains of tincture of cantharides, fifteen drops of essence of cloves, one ounce of old brandy, mixed together. Mode of exhibition—a piece as large as a nut of this pommade is rubbed in every evening on the hairy scalp. *** The pommade of Dr. Schneider differs very little from that of Dupuytren; it is composed of lemon-juice, extract of bark, oil of cedar-wood, oil of bergamot, and beef-marrow.

POMMADE AGAINST THE FALL OF THE HAIR: six ounces of purified beef-marrow, two ounces of oil of sweet almonds, one ounce of powdered red-bark, mixed together, with heat, and stirred until it is cold. Mode of exhibition—the same as for alopecia or baldness.

POMMADE AGAINST ECZEMA (Biett): one ounce of lard, twenty-four grains of the yellow sulphate of mercury, twelve grains of liquid laudanum, mixed together. Used in inunction on the parts affected with chronic eczema.

POMMADE AGAINST ECZEMA, AND CERTAIN FORMS OF PRURITUS (Weinhold): six ounces of percarburet of iron, ten ounces of lard, mixed together, and applied twice a-day. The quantity used should always be subordinate to the diseased parts.

POMMADE AGAINST CHILBLAINS: eight ounces of yellow wax, one ounce of Goulard's extract, one ounce of camphor, eight ounces of laurel-oil, eight ounces of lard, made into a pommade according to art. Mode of exhibition—used in frictions on non-ulcerated chilblains, in the quantity of two or three drachms at a time.

POMMADE AGAINST FAVUS (Hospital St. Louis): eighteen grains of deuto-ioduret of mercury, twelve grains of camphor, one ounce of lard, mixed together. Used in frictions on the diseased parts.

POMMADE AGAINST THE ITCH: one ounce of pure sulphur, two drachms of powdered white hellebore root, ten grains of nitrate of potash, one ounce of black soap, five ounces of lard, mixed together. Mode of exhibition—this pommade, employed by Dr. Meyer, in the hospital of Minden in Rhenish Prussia, according to the plan of Dr. Gerson, all over the body where there are pimples, acts by exciting a strong rubefacient influence on the skin. Two or three frictions are sometimes necessary. After twelve hours' rest, the patient is put into a bath, and well cleansed with black soap, and pieces of woollen cloth.

POMMADE AGAINST THE ITCH (Emery): eight ounces of black soap, four ounces of sea-salt, four ounces of sulphur, one ounce of alcohol, two ounces of vinegar, half an ounce of chloruret of sodium, mixed together. Mode of exhibition—one ounce daily, in two frictions.

No. 257. **SUMMARY.** Aug. 24.

ON THE PHYSIOLOGY OF HEALTH AND DISEASE, BY M. RASPAIL:—
Antithermanic Precautions and Medications—Antitoxic ditto—Antitraumatic ditto—Antientomic ditto—Critical Observations on the Therapeutical Method sought to be Superseded—General resume of the foregoing 419

CLINICAL LECTURES ON MEDICINE; Delivered at the Great Charity Hospital, at Berlin, by DR. SCHONLEIN, first Physician to the King of Prussia:—
LECTURE XVII.—Tumours of the Abdomen, supposed to involve the Spleen, the Liver, and the Mesenteric Glands —No Functional Disturbances—Evening Exacerbation of the Fever—Limits of the Medical Art—Convulsions, Coma, Death—Sectio.. 421

ACTION OF AMMONIA UPON THE PROTOCHLORIDE OF PLATINUM, BY DR. MICHAEL PEYRONE, of Turin, late of the Giessen Laboratory 423

SECRETION OF CARBON BY ANIMALS, BY ROBERT RIGG. F.R.S. 424

ON AN OPERATION OF ENTEROTOMIA Successfully Performed without Opening the Peritonæum, followed by Remarks on the Pathological Anatomy of the Colon in the Lumbar Regions, by J. Z. AMUSSAT, M.D., Member of the Academy of Medicine, &c.. 425

THE PHYSIOLOGY OF MATERIA MEDICA, as Established by the Latest Researches in Organic Chemistry, Physiology, Pathology, &c., by PROF. T. F. SOBERNHEIM .. 426

SELECTIONS FROM GERMAN JOURNALS, BY SIGISMUND SUTRO, M.D.:—
Case of Poisoning by the Berries of Daphne Mezereum, at Lomnitz 427
Two Cases of Poisoning by Belladonna 427
Roisdorf, or Ems 427
The Efficacy of Calomel in Large Doses in Typhus Fever .. 427

TO CORRESPONDENTS 428

LEADERS:—
INTERRUPTIONS OF GROSS MEDICAL MEETINGS 428
LEGISLATURE AND LUNACY 428
OBSERVATIONS ON THE NEW MEDICAL BILL .. 429

MEETING ON MEDICAL REFORM 430

ELECTION OF COUNCILLORS, AND THE MEDICAL BILL 431

ACCURATE TEACHING, BY SIGISMUND SUTRO, M. D. 431

POOR LAW MEDICAL REFORM 432

ON A STATEMENT RELATIVE TO THE CASE OF SAML. ROGERS, a Pauper of the Parish of Shillingston, in the Sturminster Union 432

PARISIAN INTELLIGENCE:—
On the Treatment of Syphilitic Diseases, by Prof. Chomel 432
On Ranula, by Dr. Johert de Lamballe 433
Apparatus for the Radical Cure of Exomphalos 433
Hygroma, or Tumours of the Bursæ Mucosæ 433
Proceedings of the Academy of Sciences, Aug. 12th 434
On the Absorption of Certain Substances, and the Modifications which they undergo.. 434
On a New Organic Alcali-Amarine 434
Facts illustrative of the History of Phosphorus 434
Proceedings of the Academy of Medicine, Aug. 13th 434
Critical Examination of Vitalism, by Dr. Viroy, M.A.M. .. 434
On Artificial Anus.. 435
On a New Mode of Administering different Substances .. 435
Crural Hernia.. 435

PERISCOPE OF THE WEEK:—
Gonorrhœal Orchitis 435
Injury to the Spinal Cord during Hanging 435
The Urine in Dropsy.. 435
Rupture of the Heart 436
Relative Proportion of the Deaf, Dumb, Blind, and Insane, in the Races of European and African origin in the United States .. 437
Necrosis of the Long Bones 437
Transformation of Pus cells into a Mucous or Fibrous Tissue .. 437
On the State of the Blood in Morbus Brightii and various forms of Anœmia 437
Poisoning by Digitalis 437
Case of Molluscum 437

GOSSIP OF THE WEEK 438

The German Interpreter, by J. C. Moore 438

METROPOLITAN MORTALITY TABLE 438

ON THE PHYSIOLOGY OF HEALTH AND DISEASE.

APPLIED TO ANIMALS AND VEGETABLES, BUT MORE ESPECIALLY TO MAN.

By M. RASPAIL.

Antithermanic Precautions and Medications.—Heat being one of the elements of chemical combination, of which assimilation is the consequence, and organic development the product, we can neither augment nor diminish its proportion, without deranging the mode of combination, and without modifying and paralysing, as a consequence, the development of life, and that in a manner so much the more marked, as this condition is in itself more sudden. The whole hygienic precautions of clothing and of habitation are founded on this principle: to defend the body against the depression of temperature in winter and in cold countries, and against the abrupt changes of temperature in summer and in hot countries; that is, to maintain the equilibrium of the functions, and to favour the uniformity of organic development. Excessive heat exhausts, by evaporation, the products of the elaboration. Aqueous and aromatic drinks repair the loss, but do not suffice to re-establish the normal assimilation. Bodies are not organised with the aqueous element alone; one cannot live always by drinking; and, in very hot weather, the transpiration carries off quickly the ingested liquid, even before the solids have had time to imbibe the moisture. Excessive cold congeals the liquids, and produces sanguineous congestions, which assume the physical characters of erysipelas, without having its inflammatory nature. The limbs become tumefied by the accumulation of blood, and the circulation is unable to overcome the obstacles which block up the capillaries; extravasation opens to itself new routes in the interstices of the cells, and when the blood is pumped out strongly from the heart, the dermis cracks. The individual is, in this case, said to be attacked with chilblains. Our system of clothing and of habitation is very bad. We live in the summer in our parlours or our bed-rooms, and in the winter in our closets; and we pass twenty times a-day from one room to another, without taking any hygienic precaution. When we go into the street, we take care to cover the body well, but we at the same time respire an icy atmosphere, without any transition. Hence, *engorgements* of the lungs, pneumonic affections, which degenerate into catarrhs and colds of every description. And, in this view, we may distinguish two principal classes of pulmonary affections, which emanate directly from chill. The one arises from the respiration itself, and the other from chill of the less important organs. Cases of catarrh, complicated with pulmonary congestion, are quickly cured by the use of *cigarettes* of camphor, at the same time bathing the chest with the sedative water, and rubbing the back and chest with camphorated pommade, as often as convenient, and for ten or fifteen minutes at a time. The frictions give an impulse to the blood, which, being communicated from spot to spot, invigorates the circulation, and carries away the obstacle which had impeded its course. The aspired and absorbed camphor prevents the fermentation of decomposition which commences wherever the blood is stagnated. The sedative water, in its turn, assists in overcoming and liquifying the sanguineous congestions, and thus re-establishing the circulation. The theory of suppressed perspirations is readily comprehended according to our explanation of the laws of caloric. In fact, when it is hot, we absorb, by all our pores, the surrounding caloric, which combines with our liquids, and increases the volume of their atoms. The vessels are then turgescent, and become emptied by evaporation through their pores. But as soon as the surrounding air becomes chilled, a vacuum is created in the afferent canals of the caloric; the deferent vessels of the perspiration take on a retrograde action, aspire and draw inwards the liquids condensed by the cold ou the surfaces of the skin; and this icy liquid, becoming infiltrated into the internal organs, with the rapidity of impulsion derived from this newly-formed vacuum, introduces the disorder into the deeper-seated parts. Moisture being the most powerful conductor of caloric, low and damp places are necessarily the coldest for habitation. It would be better to live in the open air than in such localities, even were they not, as they undoubtedly are, constant focuses of putrefaction. Organized beings are impregnated not only with heat, but also with light. Light is free and uncombined heat, and which, consequently, traverses space, as well as bodies, with the rapidity of lightning, without our having time to calculate its variations; heat is a combined light, which enters our body only to establish its own equilibrium, and consequently slowly, gradually, and by means of the rotation of its atoms. We have as much need of light as of heat; we *hibernate* in the absence of the one, we are *etiolated* when deprived of the other; we sleep in the one case, we become degenerated in the other. The plant which we cover with stubble in the winter would be suffocated if, from time to time, we did not allow some rays of the sun or of light to reach it. Man is etiolated, like the plant, when deprived of the light of day. He may live, perhaps for a long time, in an obscure dungeon, but, eventually, he loses all trace of humanity. The same remarks apply, in a more mitigated form, to the sumptuously-decorated apartments, or rather dungeons, of our large cities. To preserve vegetables from excess of cold, and from excess of heat and of dryness, is an object, long sought for in agriculture, but which has not hitherto been accomplished. The following is the plan which I propose for this intention:—*Against cold.* Keep the tree or plant enveloped with smoke or vapour, which forms around it a protecting atmosphere. For this purpose, surround, at a distance, the trunk of the tree, with a line of manure, several feet in breadth, or else with damp straw laid over some ignited furze. This should be done every night.—*Against aridity.* Surround the plant with bricks or flag-stones, joined together with moist earth. This pavement will retain, during the day, the moisture with which it may have become impregnated during the night. I have seen hemp, sown between the crevices of a pavement of this kind, attain an altitude of fifteen feet, without the least watering. Sow your grain in lines, and lay down a series of stones, or flags, between each line, and you will thus preserve your crops from aridity.

Antitoxic Precautions and Medications.—Poisonous substances are destructive only in certain doses; the dose is relative to the size of the plant or the animal. Hence, every poison may act as an useful medicine, when given in a smaller dose than that necessary to produce poisoning. But, then, this medicine acts only by freeing us from parasites; it has no other action but that of an anthelmintic; it spares the animal of large size, to kill the infinitely small ones that are preying upon it. Having already spoken of the *asphyxiant* poisons, we shall now proceed to consider the *ingested* causes of poisoning.—*Stupifying and Narcotic Poisons.* If we arrive immediately after the ingestion of the substance, the first indication is to provoke vomiting; for, by expelling the cause, we prevent the subsequent effects. Then, make the patient swallow weak vinegar and water, or water containing acetic acid, sea-salt, and a little camphor. Bathe the head and the neck with this lotion, and then rub with camphorated pommade. The acetic acid neutralizes the narcotic action; the sea-salt, passing into the blood, restores to it a part of its vehicle. The same treatment is applicable to poisoning by mushrooms, and the ergot of rye.—*Acid Poisons.* Administer, immediately, milk, oil, and white of egg, beaten up with a little water; lime-water may, also, be given at the same time; create vomiting, from time to time, by artificial means. The milk and the white of egg becoming coagulated by the action of the ingested acid, take up large quantities of the poison. The lime-water saturates the portion that may remain on the surface of the stomach, whilst the oil forms a kind of protecting varnish upon the coats of this organ, and prepares the passages for vomiting. At the same time, bathe the head and body with *sedative water*, and rub with camphorated ointment, or turpentine. If symptoms of colic supervene, administer injections containing bicarbonate of soda.—*Arsenic and antimony.* Provoke vomiting: administer white of egg and milk, with carbonate of lime; give a small glass of brandy, or other spirits, if the patient be accustomed to them, or a little vinegar, so as to coagulate the ingested milk; then excite vomiting by oil, tepid water, &c. The milk, by its coagulation, will envelop the arsenical molecules in its substance; while the chalk will combine with the arsenic or antimony, and form an insoluble, and consequently harmless, salt (arsenite or antimonite of lime). The vomiting will then free the stomach from the whole mass. Lotions and frictions as above; diuretics and evacuants. Arsenic, as a medicine, ought to be rigorously banished from our formularies; so, also, should the preparations of mercury, silver, lead, and all the other metals capable

of substituting themselves, by a double decomposition, for the earthy bases of the organized tissues. To cure a disease, by means of disorganization of the tissues, is to substitute one disease for another, and sometimes a disease worse than the first. The constitution, after the cure, is never the same as it was previously. I cannot too strongly impress on young practitioners, to abandon totally all notions of treatment so contrary to sound ideas of organic chemistry, and to introduce into their prescriptions only such salts as are compatible with the various elements of the organization: salts of potass, of soda, of lime, of iron, hydriodates and hydrochlorates of these bases, &c. The following is the plan of treatment for poisoning by the metallic substances, of which we have been speaking:—1° against the ingestion of a mercurial salt, such as corrosive sublimate: first excite vomiting; then administer a mixture of gold leaf, or small pieces of gold, with bicarbonate of soda, or carbonate of lime; the gold precipitates the mercury, and the soda saturates the eliminated acid. Not to lose the quantity of gold employed, the alvine dejections should be carefully collected, and the metal separated from them by levigation, or by combustion of the animal matter, under an open tunnel or chimney, so as to preserve the gold from the mercurial vapours. As a remedy for mercurial salivation, we should place in the mouth of the patient a piece of gold, which should be subjected to the action of the fire each time that it becomes whitened; it is then to be cooled in water, and again given to the patient, and so on, until it ceases to be rendered white at all. 2° Against the ingestion of the salts of lead, I would advise a solution of sulphate of iron, and camphorated spirits, in water, given by the mouth, and also by lavement; frequent lotions of sedative water upon the back and the abdomen; and, some time after, a large dose of castor oil administered in broth. The sulphate of iron is intended to precipitate the lead, the iron becoming free, and in the state of hydrate being inoffensive, whether free or combined. The camphor allays the irritation, and checks the decomposition of the intestine. The castor oil not only evacuates all these products, but also takes up that part of the lead salt which might still be free. 3° Against salts of copper, verdigris, &c., the same treatment as for arsenic;—remedies which will cause the coagulation and reduction of the salt, metallic copper not being poisonous; then, its speedy evacuation. 4° Against the nitrate of silver: sea-salt, or hydrochlorate of lime, dissolved in a coagulable substance, so as to produce vomiting and evacuation; the hydrochlorates precipitate the silver, under the form of horn silver, which is insoluble, and consequently inoffensive, and the nitrates of lime and of soda act as evacuants. 5° Against the muriates of gold, or platinum: a solution of sulphate of iron, and of bicarbonate of soda or of potass, to precipitate the gold and the platinum in the state of oxide, or of metal, both of these forms being equally harmless. —*Poisoning by the caustic alcalies: ammonia, lime, potass, soda, magnesia, barytes, strontia.* A solution, in coagulable substances (white of eggs, oil, or milk), of sulphate of iron, the base of which is thrown down by the alcali robbing it of the acid; then excite vomiting, give an aromatic draught, and camphor in powder. Frictions and lotions of sedative water, to keep up the circulation, and prevent the congestions arising from the disturbance of the digestive functions, caused by the neutralization of the acid juices, and the consequent prevention of chymification.—*Poisoning by spirits, fermented liquors, and carburetted hydrogen.* Make the patient swallow a solution of white of eggs, rendered slightly alcaline with sedative water; the white of egg being intended to transform the alcohol into acetic acid, by the digestive fermentation, and the ammonia to redissolve, by passing into the blood, the clots coagulated by the absorption of the alcoholic principle. The head and body to be bathed with the sedative water, and the patient to be made to swallow oil, with a little camphor, or a few drops of oil of turpentine, to excite the urinary secretion, and cause the evacuation of a part of the alcohol this way. Oil is an excellent preservative against drunkenness.

Antitraumatic Precautions and Medications.—In every solution of continuity, whether resulting from accident, or from some surgical operation, which has for its object to free the general economy from some organ, or portion of an organ, which is an obstacle or a focus of infection, the end, proposed by the curative art, is: 1° to favour the re-union of the divided surfaces, when it is possible to bring them together; 2° to assist the transformation into dermis and epidermis of the denuded surfaces, when it is impossible to bring together the edges of the wound; 3° to prevent hæmorrhage from the arteries divided in the operation, the introduction of air into the veins, and the decomposition of the incised tissues under the influence of the atmosphere. The cure of this artificial disease is brought about by cicatrization. Cicatrization may be said to create a new organ out of the edges and residue of the old one. When decomposition of the wound takes place, it is either of a good nature and acid, and in this case it gives rise to simple febrile excitement, by occasioning congestions in the vessels; or the acid gases become introduced by absorption. When it tends to the putrid and ammoniacal fermentation, the evil may speedily become incurable and mortal, and the most superficial wound may be a general focus of infection. When the wound is cicatrized, why is it that we have no longer to fear any bad consequences? Is it not because there is formed a new dermis and epidermis, which protect the subjacent cells against the fermentative action of the atmospheric air? To protect the wound, then, from this influence, we must cover it with some layer, which, without causing infection, shall take the place of the epidermis of other surfaces, and thus permit a new dermis to be formed. The muscular movements oppose themselves to the constant adherence of whatever dressing we may employ; a little air will always enter between the wound and the apparatus, and, consequently, there will be a commencement of decomposition; hence, the necessity of frequently dressing the wound, and renewing the protective apparatus from time to time. But, from this moment, the medication carries within itself the poison which it is intended to combat; and the fact of changing the dressing, brings the denuded surfaces anew into contact with the external air. It is, therefore, necessary that this medication should be capable of preventing the effects of the cause which it carries along with itself. Fatty bodies form, in some sort, an impermeable layer, though not perfectly so; for fatty bodies absorb air, carbonic acid, and ammonia; they turn saponaceous, rancid, and thus, in their turn, form a focus of fermentation and infection; it is then necessary to associate them with antiseptics, to incorporate them with substances capable of paralysing, and, consequently, preventing, every species of decomposition. The mode which I adopt is the following:—I sprinkle the dressing or the cicatrix, directly that I can apply it immediately to the latter, with a thick layer of powder of camphor. Over this, I spread a very thick layer of camphorated ointment; then, pledgets of *charpie*, previously sprinkled with camphor, and over all some strips of plaister. I renew the dressing every twenty-four hours, after having well cleansed the wound with tepid water. To prevent excoriations from prolonged *decubitus* on the sound parts of the body, I make friction, four times a day, with the above ointment, upon all the surfaces on which the body habitually rests, and also, occasionally, upon other parts. The principles which we have to bear in mind may then be summed up as follows:—1° To bring together the divided surfaces immediately after an operation, so as to place the cells in contact while possessed of their full vitality, and capable, by their mutual aspiration, of becoming united in an intimate manner; 2° to be careful, in every amputation, to perform the section of the muscles, in such manner that, by applying the edges of the wound one against the other, there shall remain the least possible gap between them, during the healing process; for this purpose, we should pass by the same opening all the ends of the ligatures applied to the arteries, without knotting them or mingling them together, and in such a way that each one can be withdrawn, immediately that it becomes loose, without deranging those which resist; 3° to keep the edges of the wound protected from contact with the air and all impurity; 4° to maintain the limb in an equable temperature; 5° to prevent putrefaction by the employment of antiseptic medicines, especially powder of camphor taken several times a day, camphor laid between the sheets, and lotions of camphorated spirits to the sound parts of the flesh; 6° to combat excoriations by gentle frictions with camphorated ointment, and the fever by copious lotions with the sedative water; 7° to feed the patient, according to his appetite, with a strongly spiced diet, instead of debilitating him by antiphlogistic regimen and blood-letting; this is an almost infallible plan, provided disease arise from no other cause, of procuring the speedy cicatrization of the wound, in whatever manner amputation may have been performed.

Antientomic Precautions and Medications.—Every disease, whether internal or external, which does not arise from the foregoing causes, is determined by the action of some visible or hidden animated cause. Every disease of the skin, which is manifested by continued pruritus, a tubercular or vesicular eruption, and degeneration of the tissues, is the work of the erosion of an insect, or of the infiltration of its poison. Every internal or subcutaneous disease, accompanied by a sensation of *reptation* and *crosion*, by *bruits de craquement*, by lancinating pains in the bones, &c., is the effect of the presence and of the parasitism of a larva or perfect insect with mandibles. Every development of parasitic tissues, every form of elephantiasis, &c., is the effect of an insect armed with suckers, or of a larva possessing a proboscis. Every disease of the viscera which does not enter into one or other of these general rules, is the work of a worm. Every intestinal disease, which arises from no vice of the atmosphere, or of the diet, nor from any poisoning, is a verminous disease, and must, *ipso facto*, be treated as such. Our medicines are almost all anthelmintics, and owe their curative power to this property; I cannot cite a single one which does not poison worms. Now, if a medicine possessed the power of freeing us from some morbid principle, or preserving us from it; necessarily, instead of ridding us of our vermin, it would but favour their pullulation, by protecting them from the same disease; for life has the same rules and the same laws, from one end of the scale to the other. Medicines are, then, only poisons, which in the ordinary dose can kill but infinitely small beings; they are vermifuges and anthelmintics. Among vermifuges, we should choose only those remedies which destroy the insects, without proving injurious to the patient. To rid the patient of his worms, by means of a disorganizing medicine, is to free him of one disease, by giving him sometimes a worse; it is to replace one morbiparous cause by another. Out of the list of essential oils, which I have successfully employed, I have chosen camphor; first, because from its solidity, by sublimation, it is rendered more easy of use, and as it neither stains nor dirts the clothes; also, because it is one of our most powerful antiseptics; lastly, it is eminently vermifuge or anthelmintic. The whole novelty of my practice, consists in the manner of directing and aiding its employment, in addition to the appreciation of its action.

[M. Raspail then enumerates the different formulæ which he employs for this medicine, and which are chiefly: camphor in powder (for internal use), at the same time administering a few grains of socotorine aloes; cigarettes of camphor (for inhalation); camphorated spirits, camphorated ointment, camphorated oil, camphorated vinegar (for external employment); and his *sedative water* (principally used externally, but occasionally given internally, also). He then proceeds to describe the *application of these medications in particular cases*, and gives an alphabetical enumeration of the various diseases which he regards as produced by *human entozoa*.]

Critical Observations on the Therapeutical Method sought to be Superseded.—What is the system of treatment usually adopted in all acute and inflammatory diseases? 1° Blood-letting or leeching; 2° antiphlogistic diet; 3° ptisans, of which different kinds are adopted, but which are chiefly mu

cilaginous and diluent: three species of medication, which are as old as Hippocrates. 1° Bleeding and leeching tend partially to empty the congested vessels of their blood; in this respect, these two means must produce a momentary relief; they suspend one of the effects of disease; the patient respires. But he is not cured; the cause remains, which the bleeding does not eliminate; for, if we admit that the cause of the evil resides in some vice of the blood, it is not by withdrawing a little blood that we can correct that vice. This is certain, that, by diminishing the quantity of the blood, we diminish the powers of life; we weaken the functions of the organs, and induce a state of debility, which is one of disease. We have already shown that a state of debility predisposes to all kinds of maladies. Suppose the patient to be devoured by worms, unknown to the physician, as is commonly the case; if we abstract blood, we may allay the fever at the moment, by throwing the patient into a state of adynamia; but we shall augment his disease; for worms germinate most in a weak and broken down constitution. What more, in fact, is requisite to give to the verminous fever all the characters of typhus. Bleeding then is, of necessity, contra-indicated in such a case. But to profit by our warning, each one must be convinced, like ourselves, that every intestinal fever is a verminous disease. Undoubtedly, if the patient be threatened with cerebral congestion, where no other remedies are at hand, one should immediately bleed copiously; for the primary object is to prevent death. But, if other means of dispersing these congestions are attainable, blood-letting ought not to be employed. Now, experience has convinced me, that, within ten minutes, the *sedative water* will procure all the results that can be obtained by bleeding; it disgorges the vessels, redissolves the coagulations, quickly diminishes the inflammation, and that without any accompanying ill effects. In the greater number of cases, then, bleeding and leeches ought to be abandoned. 2° Antiphlogistic diet withdraws from the digestion the same power as blood-letting does from the circulation. Now, the digestion feeds the circulation; to suspend it, is to place man in a state of debility and disease, favorable to the pullulation of worms. One would think, from the practice of some of our physicians, in dieting their patients, that man, in a state of disease, was governed by other laws of development than when in a state of health; in fact, that he could live without eating. Without doubt, when the patient is not hungry, when he does not digest that which he has ingested, it would be absurd to force him to take food; restore his functions, by freeing his organs of the load which oppresses them, and do not encumber them with fresh indigestible matter. But, as soon as this effect is obtained, as soon as the inappetence is overcome, allow the convalescent to feed himself in an appropriate manner; let him be judge of what is most suitable for him. But, you will say, the fever will return, the pulse will rise, if the patient eats; undoubtedly it will, if you treat him on the old system. But there is no fear, with our treatment. There is no disease, however dangerous, in which I have not given an aromatized diet, as soon as the patient had a return of appetite; and, with our system of medication, I have never seen the least accident; quite the reverse. 3° Antiphlogistic ptisans are not contra-indicated in our system, provided they be highly aromatized. The antidote, that is to say, the anthelmintic, is thus introduced along with the poison. 4° Baths, unless strongly aromatized, are more injurious than useful in certain diseases, especially in verminous and convulsive affections; convulsions are redoubled in the bath. Take baths only when in health, and then let them be strongly aromatized. 5° The most rational medications in the old system, those accessories to the physician, but which, in our eyes, are the principal cause of the cure, are: aromatics, internally and externally; purgatives; emetics; and compression, which has the advantage of intercepting the communication of the fecundating impulsion or infection, and crushing the animated cause of fungoid tissues. 6° Yet, you will say, cures have been obtained, by following the ancient system. I answer, that it is not by following it to the letter; but by modifying it by so-called accessories, which, in reality, become the principal agents in the result. Balms, aromatics, essences, &c., when employed in time, go far, within a few days, towards repairing the sad consequences of an antiphlogistic diet and blood-letting. The cure is then attributed to the two latter agents; but it is the exclusive work of the above aids employed towards the end of the treatment.

[Medicines may, according to M. Raspail, be divided into four classes: 1° *Anthelmintics*, or vermifuges; 2° *antifebriles*, or *sedatives*; 3° *purgatives* and *emetics*, which are also anthelmintics; 4° *antiseptics*, or *antiputrids*; 5° *antifungoid*, or *disorganizing*, remedies; that is to say, such as have for their object the disorganization of developments of superfœtation, as cancer, scirrhus, carcinoma, &c. Remedies are administered externally and internally. 1° *External* remedies are employed under the form of: baths, fomentations, cataplasms, pommades, liniments, balsams, ointments, cerates, plasters, cauteries, blisters. 2° *Internal* remedies are, as: fumigations, infusions, pills, pastilles, powders, syrups, and lavements. He then gives a list of the various medicines which he employs, but which it would be impossible for us here to reproduce.]

General Resumè of the foregoing.—Health is the normal state: development is its constant expression, within the limits which nature has assigned to each species.—Death is a natural consequence, when the circle assigned to each being has been accomplished.—Disease is an accident which suspends the functions, or else perverts their products.—Disease is not engendered within our organs, it comes from without.—Every cause of disease is of a nature cognizable to our means of observation, even when it is concealed from our senses, or our actual appreciation.—The most frequent sources of our diseases are of animated and parasitic origin.—The object of *hygiène* is to protect or defend us from their action: *medicine* aims at getting rid of them. Our life is thus a continual combat against elements, and against enemies, which seek to prey upon us. One day conquerors, the next day vanquished, vegetables and animals scarcely ever die a natural death: they do not run their circle, they succumb. In this fearful combat, each one should then act on the defensive; he should follow certain hygienic rules, and be invariably guided by them as a rule of conduct. The following are the precautions which I recommend for your adoption: 1° To satisfy all the wants imposed on you by nature, but never to go beyond your powers and capacity. 2° A freely aromatized nutriment, with rough and unfermented wine. 3° Surround yourself while waking, and especially while sleeping, with aromatic perfumes. 4° Embalm yourself internally, as well as externally. Nature is careful everywhere to place the balm by the side of the nutriment. 5° In sedentary occupations, the bowels should be relieved, at least, every four days; with the man of business, corporeal labour is the most salutary purgative. 6° We have a thousand different aromatics; each one may choose his own. Mine consists of twenty-five *centigrammes* (about 5 grains) of camphor, three times a-day, taken internally; the same at night, whenever I awake. Frequent frictions and lotions with camphorated pommade and spirits. Sedative water against fevers and congestions of the brain. Powder of camphor between the sheets every night. Thirty *centigrammes* (6 grains) of aloes to be taken in soup, every five or six days. A highly spiced diet and generous wine, every day. Such is the method which I adopt. Let each one modify it according to his own fancy.

Vegetable Diet.—Dr. Lambe, now in his eightieth year, states that he has lived on a purely vegetable diet since 1804, and has brought up a large family on the same plan with success.

Secale Cornutum.—Mr. Rawle has found that the efficacy of the secale cornutum is impaired or destroyed by the presence of parasites. To obviate this, he places a small piece of camphor in the bottle containing the ergot, and has found that plan perfectly successful.

CLINICAL LECTURES ON MEDICINE;

Delivered at the Great Charity Hospital, Berlin, by Dr. Schonlein, first Physician to the King of Prussia, founder of the Natural System of Medicine in Germany, and Professor of Pathology and Therapeutics in the University of Berlin.

(Prepared from the German expressly for "The Medical Times.")

LECTURE XVII.

Tumours in the Abdomen, supposed to involve the Spleen, the Liver, and the Mesenteric Glands.—No functional disturbances.—Evening exacerbation of the Fever.—Limits of the Medical art.—Convulsions, Coma, Death.—Sectio.

Gohtfried Müller, a coachman, 32 years of age, entered the bospital July 30, 1841, complaining of an enlargement of the abdomen, which, according to his statement, had gone on increasing during the last six months. The distention is very considerable on all sides, particularly towards the pit of the stomach, which feels elastic, and tense to the touch; the sound on percussion in this region is dull; the cartilage of the sternum is forced forwards. Another tumour exhibits itself on the left side, extending downwards towards the anterior superior spine of the ilium, and upwards as far as the false ribs, causing the latter to project. We have, then, discovered two circumstances: a round tumour in the pit of the stomach, elastic and tight to the touch, descending to the vicinity of the navel; and a second tumour, not connected with the first, which occupies the whole of the left side, extending from the false ribs to the iliac bone, and much resembling an enlarged spleen. The tumour on the right side seems to be, from its form, shape, and elasticity, a fibrinous deposit; they are, therefore, two perfectly distinct tumours. The one is, probably, connected with the left lobe of the liver; but this is not certain. The consequence of these tumours is, that the adjoining parts, as, for instance, the *processus ensiformis sterni*, are forced outwards, whilst the intestine is pushed downwards, and towards the right; the stomach, also, has, probably, been forced from its situation, and has assumed a more perpendicular position; the tympanitic, intestinal, sound is only audible towards the right and lower portions. Thus, having described a great portion of the objective symptoms of the case, we have now to ask ourselves, what influence have these material changes upon the functions? What action, first of all, do they exercise upon the chylopoietic system? According to the account of the patient, no disturbance seems to have taken place in the latter; he does not look emaciated; the colour of his skin is of a rather dirty yellow. This will show you, that it is not always well to postpone your treatment until functional disturbances have taken place; in such cases, you may frequently be too late. You will further see, that the organic changes are of essential importance, while the functional disturbances are, often, much more subordinate. The old physicians considered the functional disturbance as the main point, whilst the material changes are more particularly the object of the modern school of medicine. According to the statement of the patient, the functions of the intestine are not disturbed; moreover, we find that his tongue has a normal appearance; he feels no inconvenience after meals; his bowels act daily; the urine is discharged pretty abundantly, and is of normal quality. Only a slight œdematous swelling of the feet is present, which is rather a singular circumstance; it proves that the tumours exercise scarcely any compression upon the abdominal veins, for even insignificant tumours, which press upon the abdominal vessels, especially upon the *vena cava*, cause, very speedily, a dropsical effusion. A slight febrile exacerbation is present towards evening; at least, the pulse becomes somewhat accelerated.

The ætiology of the case next claims our attention. The suspicion of intermittent fever will naturally suggest itself, since we have assumed that the spleen is somewhat hypertrophied. The patient states that he suffered for three months from a tertian ague, in the year 1824; of the particulars, however, as well as of the mode of treatment, he is unable to give any account. It would appear, from his description, that Fowler's solution must have been administered to him. These cir-

cumstances, however, can only give us a clue to the origin of one of the tumours; the source of the other, in the pit of his stomach, remains as obscure as ever.

The patient further states, that he was thrown from his horse, in the year 1838, and came to the ground on his belly.

Decoctum levistici with *mellago graminis* and *taraxacum* had already been ordered; the patient is to continue the medicine.

July 31.—We yesterday traced a few ætiological circumstances, which, however, were not sufficient to give us an insight into the origin of the disease. A further investigation has been productive of no new facts, and the origin, or root of the affection, is still in a state of doubt, although we have arrived somewhat near to the truth. We found, yesterday: 1º An oblong tumour in the left hypochondrium, convex externally, concave internally, and which, to judge from the position and shape, can be nothing else than the enlarged spleen, the substance of which, at the same time, seems to be indurated; we have, therefore, hypertrophy of the spleen with induration.—2. An intumescence, visible to the eye, and of the size of two fists, round, and elastic to the touch, in which, although indistinctly, fluctuation can be felt; this is seated in the pit of the stomach, and from the circumstances stated, I do not hesitate to consider it as a serous cyst, surrounded by dense walls. The question, then, arises, in what part may this serous sac have formed itself? Its position, and especially the manual examination, prove that it does not proceed from the spleen, as an interval can be traced between the two tumours, in which percussion gives a sound similar to that of the intestines, whilst the cyst itself sounds quite faint on percussion; that it cannot be situated at the stomach, is shown by the total absence of all functional disturbance of this organ. Besides this, we know that such serous sacs principally attach themselves to the liver; that they are frequently of the size of a child's head, and not uncommonly filled with hydatids. Accordingly, we may, perhaps, pretty correctly assume that this cyst originates from the anterior surface of the small lobe of the liver, which covers the stomach. The functional symptoms are so little deviating from their normal state, that the patient would certainly not be considered as very ill, if he were examined in a superficial manner. But the whole system already begins to participate in the malady. Fever exists, at least, increase of the temperature of the skin, and frequency of the pulse (96 per minute), and he commences to show hectic symptoms. What is the cause of the fever? The hypertrophy of the spleen, or the serous cyst of the liver, alone, would not cause it; there must be some other reason for it. The case of another patient, lately in the hospital, justifies this inference; he was brought to the hospital, affected with dropsy, with a very distended abdomen, and hectic fever; the latter immediately induced us to suppose that some internal organ must be in a state of suppuration, and after a short time our suspicion was confirmed by discovering the organ so affected; namely, the kidney. Simple enlargement of the spleen, or the formation of a cyst in the liver, is never attended by *febris hectica;* since such exists, however, we must draw the inference that there is another affection in existence, which is the cause of the fever, and this seems to be seated in some organ below the cyst—in the mesenteric glands. On compressing the intestine, we find, at the posterior part of it, some knotty masses; the pressure, also, causes some pain to the patient. These glands are probably in the act of suppuration.

The diagnosis might, therefore, be tolerably perfect, but the origin of the affection is still enveloped in doubt; and as we cannot arrive at any certainty, we shall try, at least, to ascertain the probabilities. The patient has paid but little attention to the commencement of his affection; he states that the cyst has existed only for the last six months. All that we have been able to ascertain is, that the patient suffered from a violent tertian ague, about seventeen years ago, and I have already alluded to the treatment he probably then received. We certainly do not know whether the seed of the affection of the spleen is to be dated from that period; but that intermittent fever (especially under the treatment we suppose him to have received) frequently produces a morbid predisposition in the spleen, although it may not cause material changes in it, we have seen in several other cases; we know perfectly, that it has a material influence upon any new affection, in consequence of the morbid predisposition alluded to. This predisposition to disease of the organ may, in this instance, have received a new impulse by the fall from the horse; the patient, at least, has complained ever since of pain in the region of the spleen, although he did not much notice it at first. A chronic inflammation seems to have been set up, the ultimate results of which we have now before us. I may here remind you of an observation made by Hildenbrandt, one of the brightest ornaments of the old Vienna school, namely, that "inflammation of the spleen is always a consequence of some mechanical influence, of a contusion, or a concussion, of this organ." Although this assertion is rather a broad one, inasmuch as intermittent fever is generally acknowledged to be a cause, not only of chronic, but likewise of acute, inflammation of the spleen; yet it corroborates our opinion, that inflammation of this organ may readily be induced by mechanical influences, especially when a morbid predisposition is already existing. These circumstances are, perhaps, sufficient to place the origin of the affection of the spleen in a clearer light, but not so the other more important affections; for, were we to assume that the affection of the liver had only been produced by sympathy, or by the same mechanical influences, we should only be forming a conjecture, in support of which, no real physiological proof can be given; and, supposing this point to be disposed of, a third would still remain unexplained: namely, the source of the distinctly perceptible degeneration of the mesenteric glands. The examination of the patient does not present to us the slightest clue to that lesion. The present state of the patient is easily recognised, but the root of the evil is still in doubt, more especially with regard to two of the affections; and I lay particular stress upon this, since the correct appreciation of the origin of the disease, is one of the most essential requisites to the treatment of all chronic affections, particularly in cases of tumours. This branch of inquiry has hitherto been much neglected by the profession, and it may be attributable to this fact, that the treatment of chronic maladies has been attended with less success than that of acute diseases. In the case before us, it is true, we may draw our prognosis from the existing facts, and the treatment will not be attended with much difficulty. You will readily be convinced, that any of the popular absorbent remedies, as: taraxacum, cicuta, antimony, mercury, iodine, bromine, &c., &c., cannot dissolve the spleen: cannot cause the cyst to be absorbed, nor the degenerated mesenteric glands to return to their healthy state. The faith in these remedies, I am well aware, is still very strong among medical men. But experience has fully convinced me, that great injury may be done by such medicines, and that is a point of the highest importance in all cases, equally in chronic, as in acute diseases. Medical men will not see, that there is a boundary to their art. Particularly young medical men, fresh from their studies, and filled with their book knowledge, commence in such cases to prescribe, and experiment with the whole range of medicines, believing that, by such means, the cure will be radically effected. If such remedies were not, or could not be, injurious, I should have no objection to them; but, in cases, where the physician must be convinced that the complaint exceeds his art, his object should be to keep healthy what is already so. The truth of this, indeed, is acknowledged in theory, but very often sinned against in practice, not only by young, but also by grey-headed, members of the profession; they forget that the medical art has a boundary, which cannot be transgressed with impunity. That the present case clearly deserves to come under the denomination of incurable, is sufficiently shown by the extent, the duration, and the variety of the complaints; and I, therefore, consider an attempt at a radical cure, in this instance, as an improper and a dangerous undertaking. A palliative treatment is all that can be adopted here; and even in this we shall meet with difficulties. First of all, we have to solve the question: which of the three complaints is it, that chiefly menaces the existence of the patient? The answer to this is readily given: it is the scirrhous or tuberculous degeneration of the mesenteric glands, from which the hectic fever originates, and on which it depends; whilst the hepatic cyst, although it may certainly cause him a disagreeable sensation and tension, yet by no means menaces his life; if this tension should become insupportable, we might then try puncturing it, as a palliative remedy; the affection of the spleen is certainly beyond our treatment; but, independently of the circumstance that nothing can be done for its cure, it does not present any immediate or urgent indications. First of all, then, we have to take care that no impediment exists to the proper action of the bowels; and this, indeed, has been our constant aim, having guarded against constipation, by the administration of the *mellago graminis et taraxaci.*

August 6th.—Convulsions suddenly took place in the patient, at six o'clock this morning, greatly resembling those of an epileptic attack; in consequence of which, we now find a state of coma, with already commencing oppression of the organs of the chest, threatening the patient with asphyxia. This creates some suspicion, lest a similar change to that found in the abdomen may not also have taken place in the brain or its membranes; for attacks, like that the patient now suffers under, are frequently observed to accompany tubercles of the brain. I thought at first, when I saw the patient in this state, that the sudden rupture of some vessel had taken place in the abdomen, but this conjecture does not seem to be established upon a more minute investigation.

The patient died a few hours afterwards.

We have now to show how far the *post-mortem* examination has justified our diagnosis and treatment; which latter, indeed, consisted in mere palliatives.

On our first examination, we found various alterations in the abdomen: 1st, a globular swelling, visible to the eye, in the scrobiculus cordis, which not only had pushed forward the intestinal folds, but also the processus ensiformis of the sternum; it was elastic, rather yielding to pressure of the fingers, and a fluid could be distinctly perceived in it; 2ndly, a tumour in the left hypochondrium, extending downwards from the false ribs to the iliac bone; it had a somewhat smooth surface, and felt doughy to the touch; 3rdly, in the centre of the body, we found a more solid, hard, tumour.—The whole of the intestinal canal was forced downwards and towards the right side; this, however, was not in the slightest degree attended by any disturbance in the digestive functions. The patient looked well, and was not much emaciated, although his complexion had assumed an earthy aspect. You will remember that we stated our belief, that the existing tumours did not originate in one and the same cause; that we considered the elastic tumour in the pit of the stomach to be a cyst, or sac, attached to the anterior surface of the small lobe of the liver; whilst we thought the tumour in the left hypochondrium to be the enlarged spleen; and that in the centre of the abdomen we pronounced as a scirrhous or tuberculous degeneration of the mesenteric glands, which we looked upon as already in the act of suppuration, and thus occasioning the hectic fever. Suddenly and unexpectedly, after a favourable night, a series of fresh symptoms took place (the patient having been seven days in the hospital), namely: violent convulsions, similar to those of epilepsy (involuntary movement of the extremities, clenched fingers, foam issuing from the mouth), which were followed by coma, and soon afterwards by death. The only facts that could be gleaned from the patient, as tending to throw any light on the origin of the disease, were: 1stly, that an intermittent fever had existed for some time, and seemed to have been treated by arsenical preparations; 2ndly, the fall from a horse, which took place several years afterwards, but which appeared to have made so little impression upon the

patient, that he assured us he had only felt the effects of it during the last six months.*

These two circumstances seem to explain the origin of the splenic tumour; for the other two, we cannot find any originating cause. The *post-mortem* examination, as I have said (which was instituted 48 hours after death), exhibited the following result:—On opening the abdomen, the displacement of the intestine was immediately seen; the transverse colon forced downwards, and to the right side, as also the small intestines; the stomach pushed upwards; the cyst-like tumour was covered by the peritonæum; a red puriform matter flowed out on making an incision. This sac, however, was only the upper part of an enormous tumour, which descended as far as the pelvis, was smooth, and rather soft, externally, hard and uneven in the centre. The whole of this tumour, which occupied the left half of the abdomen, was of a fungoid, medullary, consistence, in the different stages of its development; hard in the centre, softening towards the exterior, and in a state of dissolution in the upper part. It had forced outwards the spleen, and flattened it; the left kidney was also shifted from its position, and had become adherent to the fungus; it was, however, in itself unchanged in structure, but rather atrophied. Little fungoid masses, from the size of a pea to that of a small walnut, were interspersed through the whole substance of the liver, which was not connected with the tumour. Both lungs were filled with a similar substance; no change exhibited itself in the other organs, the brain, or the spinal marrow. Another condition, which had not even been suspected during life, was the formation of hydatids, proceeding from the centre of the left iliac bone, forcing both lamellæ of this bone from each other, and partially destroying them; these bodies contained a gelatinous fluid.

The result of the *post-mortem* examination proves, therefore, that we were mistaken in considering the lesions as differing one from another; for all the tumours, felt through the abdominal parietes, belonged to one and the same formation, in the different stages of its development. On taking all the circumstances into consideration, we should pronounce the spleen to have been the primary point of disease, and the fall from the horse as the occasioning cause. It is remarkable, that the formation of medullary deposit should only have exhibited itself in two organs—the liver and the lung; whilst the kidney, the spleen, the brain, and the spinal marrow, were free from it. This formation could not have been produced in these organs by immediate contact; the vena portæ was probably the conducting medium of the morbific deposit to the liver. According to the last symptoms which exhibited themselves during life, we should naturally have expected to have found a similar deposit in the brain, and in the spinal marrow; but the result of the *post-mortem* examination did not shew any material changes in these parts: not the slightest trace of fungoid deposit. We must mention, however, that the section of the last mentioned parts was attended with considerable difficulty, and, therefore, did not, perhaps, completely answer the desired object, in consequence of their far advanced decomposition.

* In the case of a woman, described in a former lecture, the symptoms of chronic splenitis were very marked (for instance,—a feeling of pressure in the left hypochondrium, increasing after having taken food; frequent bleeding from the left nostril; glimmering before the eyes; vomiting of blood; tar-like, black stools; the spleen projecting under the false ribs, giving a feeling of resistence to the touch, and painful on pressure); but the more evident the symptoms, the more obscure, frequently, is the origin of the disease in such cases. There are three especial circumstances, which usually give rise to chronic inflammation of this organ: 1stly, intermittent fevers; 2ndly, suppression of the menstrual flux, when congestion takes place in the spleen, and probably inflammation; 3rdly, a condition which Hildebrandt has stated to be the only cause of chronic splenitis—contusion or concussion over the region of this viscus. According to the statement of the patient, none of these exciting causes had ever taken place in her. It is not of rare occurrence, however, that patients cannot assign any cause for the origin of the malady. I recollect a case which occurred in Zurich Hospital, where the spleen, descending to the left iliac bone, occupied the left half of the abdomen, and yet the patient asserted that he had only suffered one month from it.

ACTION OF AMMONIA UPON THE PROTOCHLORIDE OF PLATINUM.

By Dr. MICH. PEYRONE, of Turin, late of the Giessen Laboratory.

Translated at the Author's request for the "Medical Times," By Dr. SHERIDAN MUSPRATT.

(Continued from page 382.)

THE formula derived from my analyses for the yellow body is similar to the one given by Magnus for his green salt. Such identity in composition is, indeed, not new; but it becomes in a high degree remarkable and interesting, when the properties of the two salts are studied.

It is well known that the salt of Magnus is quite insoluble in water, sulphuric, and hydrochloric acids. My yellow body, on the contrary, is with difficulty dissolved by these liquids, and without undergoing any change. We know, further, that the salt of Magnus dissolves in nitric acid and ammonia, forming the salts of Gros and Reiset. My yellow substance is also soluble in these menstrua, but under remarkably different phenomena.

By the action of nitric acid, it is changed into two bodies, without a trace of platinum as a residue. One of these bodies crystallizes in small, perfectly regular, transparent octahedrons, of a lemon-yellow colour, which are very soluble in water, and somewhat less in alcohol.

Two platinum determinations gave: 51·23, and 50·51 p c. platinum; the other body is copiously soluble in water, alcohol, and ether, and by slow evaporation the menstruum does not afford crystals, but is changed into a syrupy mass. This substance is capable of uniting with the chlorides of iron, mercury, and platinum, giving well-formed crystallized products. Ammonia also acts upon my yellow compound, but in a much more energetic way than upon the salt of Magnus. It dissolves with great readiness, when boiled in this alkali, and a matter is formed, which gives the same composition in per cents. as Reiset's body, but it is perfectly distinguished in its physical properties.

My yellow body is not affected by English sulphuric acid at the ordinary temperature; but, when heated in this liquid, decomposition ensues. Hydrochloric and sulphurous acids are eliminated, and a chocolate-brown matter, with a slight shade of yellow, appears, which is decomposed by boiling water. The yellow body is decomposed at a temperature of 518° Fahr., as chloride of ammonium and hydrochloric acid escape. It dissolves in the carbonated alkalies, and parts with its chlorine to the silver salts. The compound which is formed in the last case is extremely soluble, and does not appear to be capable of crystallizing. I shall take another opportunity of recurring to all these remarkable products.

The constitution of the yellow body in question is so simple, and its properties so remarkable, that it became of great importance for me to devise a means by which it might be procured when required. I made a great number of vain attempts to fulfil this object; but, on observing attentively all the phenomena which presented themselves, in the preparation of the salt of Magnus, I believed I recognized that this salt is by no means a direct product of the action of ammonia upon the protochloride of platinum, but a secondary, I might say, a further, product of the action of a new quantity of protochloride of platinum upon a very soluble compound, which is always formed when ammonia, in the heat, is brought in contact with a neutral solution of protochloride of platinum. These observations enabled me to prepare at will the yellow substance which accident had thrown in my way. The method to which I resorted is the following:—

Dissolve the protochloride of platinum—obtained by calcining the perchloride at a temperature of about 482° Fahr.—in hydrochloric acid; neutralize the liquid with carbonate of ammonia; boil, and then re-add a great excess of the carbonated alkali. The originally fine granate-red liquid, by the action of the heat and the carbonate of ammonia, assumes a straw-yellow colour, and after some time deposits a dirty green, almost black, matter. When this occurs, the whole mass must be ejected on a filter, and as the filtrate comes in contact with the cold sides of the recipient, the yellow body separates. The operator must not defer removing the mother-liquor from the crystals, as they dissolve almost entirely when left in the carbonate of ammonia. It might, perhaps, be serviceable to destroy the carbonate of ammonia by a little dilute hydrochloric acid, which does not dissolve the yellow body.

The substance obtained by the previously described method is not yet pure; it is mixed with two greenish matters, from which it may be easily separated. It is sufficient to treat the whole mass with boiling distilled water, and to filter. One of the extraneous substances, which is insoluble in this menstruum, is separated by the filter, and the other, which is much more soluble than the yellow body, remains in the mother liquor.

In a state of purity, the yellow body possesses the same qualities as the one mentioned in the former part of this treatise, with these exceptions:—that its colour more approaches to orange, and it is more readily dissolved.

The analysis also gives the same results.

0·3412 grm. substance dried at 212° gave 0·2224 grm. = 65.17 p.c. platinum.

0·4268 grm. substance gave 0·0834 grm. water, = 2·17 p.c.

0·493 grm. substance gave 0·400 grm. chloride of silver, 23·32 p.c. chlorine.

The above numbers agree much better than the former ones with the formula:

$$Pt.\,cl.\,N\,H_3$$

which I have given for the yellow body.

I shall give, in another part of this paper, a second method, by means of which this substance may be obtained with greater facility, and which shews at once the exactness of the accepted formula.

I shall now speak of another body, which is always found in the mother liquor of the yellow substance. It may be obtained with great facility in the crystallized state, by slowly evaporating the mother liquor; but, as the mother liquor always contains a large quantity of chloride of ammonium, and the two bodies possess the same degree of solubility, it is better to precipitate by spirits of wine, as by this method a not inconsiderable loss is prevented. The precipitate, thus obtained, affused with spirits of wine, and, after the separation of the sal-ammoniac, dissolved in water, gives, on evaporation and cooling, perfectly colourless, and, in a high degree, transparent needles, which seem to afford every guarantee for purity; but, unfortunately, this is not the case, as these beautiful crystals generally contain a yellow matter, from which they are, only by the greatest difficulty, separated. This matter appears to me to crystallize with the white body;—for, when the perfectly colourless crystals, transparent as quartz, are dissolved in water and evaporated at 212° Fahr., the residue presents minute traces of this yellow substance. One might suppose this matter to be a product of decomposition; but the following investigation does not warrant such a supposition:—I dissolved an evident mixture of the two substances in water; precipitated by alcohol; and obtained a quantity of the white crystals, which shewed no trace of the yellow matter, when examined under the microscope; and, also, the mother liquor offered no symptoms of its presence.

From this behaviour, the study of the white body became extremely difficult, and occupied so much time, that I succeeded, only by artificial means, in procuring a substance which gave by analysis satisfactory results. I dissolved a considerable quantity of the colourless, transparent, crystals in cold distilled water, and evaporated the

menstruum in a flat basin over the water-bath. If one looks attentively at the process of evaporation, there will be remarked, at a certain point, the formation of needles close to the sides of the vessel. When this occurs, the basin must be removed and allowed to cool. After some moments, the whole liquid will be filled with a great quantity of needles, whose points adhere to the vessel, so that the mother liquor can readily be poured off. The needles, which remain in the basin, are perfectly formed and remarkably beautiful. All that is now necessary is, to press them between bibulous paper, and dry them at 212° Fahr., and then submit them to analysis. I have made a great number of analyses of this body, but only the crystals, obtained in the forementioned way, gave me satisfactory results.

I.

0·3445 grm. of the needles, dried at 212°, gave 0·2005 grm. = 58·18 p.c. platinum.

0·6124 grm. substance gave 0·2114 grm. water, = 3·83 p.c. hydrogen.

0·4994 grm. substance gave 0·4213 grm. chloride of silver, = 20·81 p.c. chlorine.

II.

0·333 grm. substance, prepared by another method, and dried over sulphuric acid, gave 0·1949 grm. = 58·52 p.c. platinum.

0·7023 grm. substance gave 0·24 grm. water, = 3·79 p.c. hydrogen.

0·3975 grm. substance gave 0·335 grm. chloride of silver, = 20·90 p.c. chlorine.

These numbers agree with the formula :

$$Pt.\ N_2\ H_6\ Cl.,$$

which is given in the following calculated per cents. along with the values found :

	Theory.		Found.	
			I	II.
1 equiv. platinum	1233·26	58·58	58·18	58·52
2 „ nitrogen.	354·06	16·83	„	„
6 „ water ..	75·00	3·56	3·83	3·79
1 „ chlorine.	442·65	21·03	20 81	20·90
	2104·97	100·00		

The described body, when powdered, is as white as snow. The crystals are very fragile needles with four faces, and. as I have already remarked, are perfectly colourless, and transparent as the finest rock-crystal. They do not affect vegetable colours, and their taste is quite saline. They dissolve only slightly in common, not at all in absolute, alcohol. With the carbonated alkalies, they are decomposed at the ordinary temperature ; but if the mixture be heated to 104°-122°, immediate decomposition ensues, and there is formed, on the one hand, a hydrochlorated alkali, and, on the other, the carbonic acid salt of a platinum base :

$$Pt.\ N_2\ H_6\ O.$$

When the white body is brought in contact with protochloride of platinum, there is immediately produced the green salt of Magnus. The following equation represents this transformation:

$$\underbrace{Pt.\ N_2\ H_6\ Cl.}_{\text{White body.}} + Pt.\ Cl. = \underbrace{2\ Pt.\ N\ H_3\ Cl.}_{\text{Green salt of Magnus.}}$$

The green salt, obtained in this manner, is of extreme beauty, and it appears to me to be always formed in consequence of a similar decomposition.

When potassium-amalgam is allowed to act upon the white body, there is formed chloride of potassium, and an amalgam, which is a black powder containing mercury, platinum, and a large quantity of ammonia. I regret that I had not time to study further this remakable chemical change ; but, probably, the following equation represents the form of decomposition :

$$Pt.\ N_2\ H_6\ Cl. + Hg.\ K = Pt.\ N_2\ H_6\ Hg. + K\ Cl.$$

If so, the combination Pt. N_2 H_6, united with the mercury, would play the part of a true metal. I dare not, at present, decide with certainty upon this view, but all circumstances unite to render it in a high degree probable.

If the white body is mixed with sulphuric, nitric, or oxalic acids, a series of salts are obtained which do not contain a trace of chlorine. This decomposition is exceedingly simple, as is shewn by the subjoined equation :

$$\left.\begin{matrix} Pt.\ N_2\ H_6\ Cl. + SO_3, HO \\ = \\ Pt.\ N_2\ H_6\ O.\ SO_3 + H\ Cl. \end{matrix}\right\}$$

Before proceeding to the decomposition of these compounds, I shall state one of the most remarkable properties of this body. The reader must remember, that this body is produced by the action of ammonia on the yellow substance, and it has been further remarked, that, with the greatest facility, it parts with the half of its ammonia to the protochloride of platinum, thus forming the salt of Magnus, which has the same composition per cent. as the yellow body. All these facts, as well as the evolution of ammonia perceived when the white body is heated, prompted me to investigate whether the yellow substance could not be obtained by the action of heat upon the white body. To satisfy myself as to this point, I introduced a quantity of this matter into an *eprouvette*, which I placed in an oil-bath, into which I had immersed a thermometer. From 428° to 464°, a large quantity of ammonia escaped, and after the evolution of this gas had ceased, I dissolved what remained in the test tube in boiling water ; on cooling, small yellow, not very transparent, crystals deposited, whose form I could not determine under the microscope. After a re-crystallization, the substance gave me the following analytical results :

0·344 grm. substance, dried at 212° , gave 0.224 grm. = 65·11 p.c. platinum.

0·6007 grm. substance gave 0·114 grm. water, = 2·10 p.c. hydrogen.

These numbers agreed so closely with the formula :

$$Pt.\ Cl.\ N\ H_3$$

that I thought a further analysis unnecessary, particularly as the chemical and physical properties of the product were analogous to those of the substance previously obtained by accident.

I have convinced myself, by particular experiments, that the yellow body is decomposed only at a temperature of 518°. Its preparation, even on a greater scale, presents therefore no difficulty. All that is necessary is, to heat some of the powdered white substance in a sand-bath, from 428° -518° , taking care to agitate it with a pestle, and to remove the vessel so soon as vapours of sal-ammoniac are dispelled. One obtains by this means a large quantity of the substance, without fear of decomposition.

SECRETION OF CARBON BY ANIMALS.

By ROBERT RIGG, F.R.S.

To the Editor of the "Medical Times."

Sir,—The scientific world is at present much occupied with the application of chemistry to animal and vegetable physiology, and it may be interesting to some of your readers to know that, by a few very simple experiments, they may satisfy themselves upon that branch of the subject which relates to the secretion of carbon by animals.

Suppose an animal, which comprises in its whole system 50 parts by weight of carbon, to be kept for five days, during which it consumes other 50 parts; it is evident that if, during the five days, it gives to the surrounding atmosphere 60 parts, and at the end of that time it is found to have increased in weight of carbon, 10 parts; there is a positive gain of carbon, equivalent to 20 per cent.

The experiment may be easily made upon young animals. Take two of these, so nearly alike that there can be no material difference in the weight of carbon they comprise: kill one of them, and expose it to a temperature not exceeding 220°, for two or three days; it may then be powdered, and, by subjecting an average sample to analysis with oxide of copper, the weight of carbon comprised in the entire animal may be determined with the greatest certainty. The other, being supplied with food, the weight and chemical constitution of which is ascertained, should be kept in a limited atmosphere, which must be changed and tested every one, two, or three hours;* the increased proportion of carbonic acid of that atmosphere will shew the quantity of carbon given off by the animal in the course of the experiment; and the increase or decrease of carbon in the animal itself, may be ascertained in the manner above-mentioned.

In this manner, I have experimented upon many animals; and without taking account of the carbon which passes off otherwise than by respiration, the result has invariably been a great increase of carbon,—an increase which cannot be accounted for, unless we conclude that carbon is secreted by the animal.

Amongst my best experiments, are those made with young mice. A healthy young mouse, weighing 200 grains, comprises, in its constitution, from 25 to 30 grs. of carbon ; when fed daily with 60 grs. of bread, moistened with water, containing about 16 grs. of carbon, it increases in weight, and imparts to the atmosphere from 20 to 26 grs. of carbon, the quantity varying generally with the quietness or the activity of the habits of the animal. A kitten, from six to ten weeks old, when supplied daily with four fluid ounces of skim-milk, containing 66 grs. of carbon, will increase in weight, and impart to the atmosphere from 80 to 110 grs. of carbon.

Either of these animals may be kept without food, until they give off by respiration a weight of carbon equal to 80 per cent., and retain from 60 to 70 per cent. of that which they comprised at the commencement, shewing that a weight of carbon, equal to 40 per cent.. has been secreted. The experiment may also be made with birds, supplied with little or no food. A tomtit was placed under experiment, without food; the bird was violent and restless during its imprisonment. In sixteen hours, it imparted to the atmosphere 65 per cent. of carbon, when it appeared to die of exhaustion, and retained 77 per cent. of the weight of carbon it originally contained ; shewing a secretion of carbon, in sixteen hours, when under violent exertion, equal to 42 per cent.

On making the carbon in the food, and that in the air, respired by a full grown person, the basis of our calculation, we obtain results which favour the conclusion that carbon is likewise secreted by man. Physiologists estimate the weight of carbon in the air, respired by an adult, at from 5,000 to 6,000 grains per diem. I have subjected to analysis many articles of food, and found this weight of carbon far exceeds that in the food consumed by most labouring men, who may be supposed to impart to the atmosphere the greatest weight of carbon. A person, eating each day after the following rate, will consume 6,000 grains of carbon:—

			Grs. of Carbon.
Rump-steaks	1	pound, containing	1,050
Bread	1½	do. do.	2,830
Potatoes	½	do. do.	310
Porter	2	pints do.	760
New Milk	2	fluid oz. do.	57
Butter	½	ounce do.	320
Cheese	1	do. do.	150
Sugar	2	do. do.	350
Coffee	1	do. do.	96
Tea	1	do. do.	80
			6,003

This weight of carbon is not more than is consumed by some persons who are actively employed, but it far exceeds that in the food of our labouring population; and on comparing it with that allowed for each adult in the different workhouses, &c., we have in the dietary of the

	Of this 6,000 grs.
City of London Union	75 per cent.
Brentford	50 „
Uxbridge	55 „
Alresford	56 „
Macclesfield	44 „
Westminster New Prison	57 „
Milbank Penitentiary	80 „
House of Correction, Clerkenwell	53 „
Hanwell Lunatic Asylum.....	75 „

* The health of animals appears to be affected by an atmosphere containing five per cent. of its volume of carbonic acid.

And if we make the carbon in the food of some of our agricultural labourers the subject of comparison, we find the deficiency greater than in any of the above-mentioned dietaries.

I could add to these many other experiments, which furnish, in my opinion, irresistible evidence of the secretion of carbon by animals. If an animal be kept without change of circumstances, or of diet, except as to the quantity of food, it will be found that the weight of carbon in the air respired does not vary in proportion to that consumed in the shape of food. On the contrary, the deficiency of carbon supplied, seems to be met by an extraordinary effort of the animal system, as appears from the following results of accurate observation:—

	THE FOOD. Grs. of carbon.	AIR RESPIRED. Grs. of carbon.
If an animal, in the first 24 hours, has a plentiful supply of food, there is in	80	100
In the next 24 hours, a less quantity	70	94
Do. do. sparing do.	60	87
Do. do. small do.	50	78
Do. do. very small	40	65

But if the animal, instead of having its quantity of food varied, should be sometimes left in a quiescent state, and sometimes excited to great activity, the weight of carbon given off will be found to vary in proportion, within certain limits, to the activity of the habits of the animal, and the exertion called forth.

If the carbon in the food be represented by	100
That given off by an animal of easy habits will be	110
Do. do. active do.	130
Do. when under exertion	140
Do. do. great do.	150

If the animal be both stinted of food, and excited to great activity, the difference between the carbon comprised in the food, and that given off by the animal, is as follows:—

CARBON. In the food.	Given off.	Difference.
100	120	20
80	105	25
60	90	30
50	85	35

Hence, food is a substitute for expenditure of animal strength. To this may be added, that, when an animal is distressingly exercised, the weight of carbon, in the carbonic acid given off by respiration, is at first increased, afterwards gradually diminished, and becomes much less when the animal is in a state of exhaustion. Rest alone is not, then, sufficient, but rest and food soon restore the strength of the animal, and, with its strength, its power of secreting carbon; a power, which, I conceive, to be essential to animal life, and which will probably furnish a solution to some of the most difficult problems of animal physiology, including that of the generation of animal heat.

I am Sir,

Your most obedient servant,

ROBERT RIGG.

Greenford, Middlesex, Aug 14, 1844.

ON AN OPERATION OF ENTEROTOMIA, SUCCESSFULLY PERFORMED WITHOUT OPENING THE PERITONÆUM,

FOLLOWED BY

REMARKS ON THE PATHOLOGICAL ANATOMY OF THE COLON IN THE LUMBAR REGIONS.

By J. Z. AMUSSAT, M.D. Member of the Academy of Medicine, &c

(Continued from page 403.)

The diagnosis of occlusion of the large intestine is founded on the precursory symptoms; that is to say, on the vomitings, the non-evacuation of fæces or of gas, but of mucus and blood instead, through the anus; such are the characteristic signs, as shewn in the preceding case; consequently, the surgeon may trust to them even when others do not exist: such as pain, swelling, and the presence of a stricture, which can be reached by the finger. It is a remarkable fact, to be added to those in which the diagnosis can be established, notwithstanding the difficulties which exist.

As to the seat of the stricture: the knowledge of its existence in the large intestine ought not to satisfy the surgeon; he must, likewise, endeavour to ascertain the precise spot in which it is situated in order to decide whether the operation should be performed on the right or left side. This is sometimes very difficult, as neither by the touch, by percussion, nor by douches, can it be attained; as to sounds, they not only may lead us astray, but likewise be productive of dangerous accidents. There remains another mode which I have not yet employed, viz.: the evacuation of the gases by means of a small trocar; it may, perhaps, be useful in some cases, and ought to be done in two different spots; the one corresponding to the small, the other to the large intestine. The diminution of the abdomen, thus obtained, may enable the medical attendant to discover the presence of a tumour, which is impossible whilst it is distended by the gases and fæces. In the present instance, as well as in those I have already published, it would have been perfectly useless, since, when the abdomen had decreased to its normal size, no swelling could be felt.

When the precise seat of the stricture cannot be ascertained by these signs, I have found enemata, administered with such precaution as to prevent any of the liquid escaping, to be the best mode of discovering, by means of the quantity of the liquid injected, the height at which the constriction is situated; I have never yet failed by this means. We see in the present case, that, without any other sign but that furnished by the enemata, there being neither pain, swelling, nor stricture, appreciable to the finger, introduced *per anum* and *per vaginam*, I was enabled to diagnosticate that the stricture was situated towards the end of the sigmoid flexure of the colon, and operated, in consequence, with success in the left lumbar region; it may, therefore, be concluded that this is sufficient, even if no other sign be present, for the surgeon to decide whether the operation ought to be performed on the right or on the left side. It must, however, never be forgotten that the enema ought to be administered with all the precautions mentioned in the foregoing case. The operation itself is, we see, neither so difficult nor so dangerous, as generally supposed. All the stages in it were performed with as much facility as could be desired; the *indications* were perfectly correct, and did not lead in the least astray. Thus, as soon as the aponeurosis of the transversalis abdominis was divided, the lump of fat protruded through the opening; and, as soon as this last was incised, the intestine was immediately perceived; but it did not, I admit, present all the characteristic signs of the colon; finally, after having cleansed the wound, a yellow spot, probably formed by the epiploon or a fatty appendix, moving to and fro under the influence of the respiratory function, and situated beneath the peritonæum at its point of reflection from the intestine to the abdominal parietes, with the external border of the quadratus lumborum, indicated the precise spot at which the intestine should be opened. If it be impossible to discover this sign, by simply cleansing the wound, the patient ought to be requested to make gentle efforts, so as to cause the parts to bulge out, it being of the utmost importance, ere the operator opens the intestine, to ascertain the spot at which the peritonæum is reflected; and, in order to perform the incision, the colon had better be seized with two *tenacula*, instead of, as in the case related, one tenaculum and a thread, previously introduced.

In reference to the mode in which the skin and muscles ought to be divided, this case shows how much the transversal incision,—already proposed by me in the case of an eminent physician (Broussais)—is preferable to the vertical, as recommended by Callisen. Had I not operated in the way I did, I could not have distinguished with such certainty the yellow spot, indicating the point where the peritonæum ended, thus avoiding this membrane, and opening at once the intestine, &c.

Another advantage,—that of twisting the arteries,—is manifest in this operation, as I was thus enabled to do without the help of an assistant, and was not obliged to have recourse to a ligature, a small forceps sufficing to put a stop to the flow of blood. All the gentlemen present were enabled to appreciate the advantage of the surgeon's operating alone, and rapidly, in wounds as deep as in the present case, and without being embarrassed with bits of thread, always troublesome and in the way. Besides, the lumbar arteries are not very apt to come within danger, especially with the transversal incision; and even should they do so, we may readily twist them, as they are very small.

At first sight, it might be supposed that the wound was too large posteriorly, especially on perceiving the artificial anus situated in the anterior angle; but, on reflecting on the necessity of exposing the external border of the quadratus lumborum to view, the reason why the wound should extend so far backwards is easily understood. Ought this part of the wound to be united by suture? I do not think this advisable: because it is not easily performed, and also because it prevents the wound being cleansed as it ought, a circumstance which is of the utmost importance. As to fixing the intestine to the skin by means of a suture, I think it is useful, because it keeps it in the anterior angle of the wound. In all the operations I have performed, I have done this, and though the sutures did not remain in more than three or four days, and did not hinder the intestine retracting when they fell, still this was sufficient for the adherence of the artificial anus to the anterior angle of the wound.

No consecutive accidents took place; there was not even the least fever. Is this to be attributed to my having operated at an earlier stage of the disease, than in former cases? It may be so; still it must not be forgotten, that the peritonæum was not opened, which accounts for the absence of danger in the operation for artificial anus by my method; and this is more evident in this last case than in any of my preceding ones. Now, this took place when typhoid fever and erysipelas reigned epidemically in Paris! Other circumstances may be mentioned to explain this fact: the earnest wish of the patient to be operated on, her considering it as a favour, and the relief she immediately experienced. These enabled her to bear it with courage, and kept her in a state favourable for the success of all kinds of operations.

A few days after the operation, gases escaped through the normal anus, followed soon after by fæcal matter. This fact may be accounted for in two ways: 1° The organic stricture, which was considerably swoln and irritated, had decreased, and thus permitted the gases and fæces to pass below, as is daily seen in cases of stricture of the urethra; or, 2° a lateral opening had established itself, by the adherence of the intestine above and below the stricture, and by ulceration having taken place in the centre of the parts in contact with each other. For instance, the stricture of the intestine may be represented thus:—

And the abnormal opening thus:—

This may be considered as demonstrated, from the examination of the intestine in Talmas' case, and in that which I published in my second memoir on artificial anus.

Be this as it may, I cannot hope that the fæces will soon pass through the natural opening, or that I shall be able to close permanently the artificial anus. Hitherto, I have merely sought to aid the tendency nature showed to establish the natural course of the fæces, by means of enemata, for fear, lest if any more active measures were adopted, cicatrization might be disturbed, and the position of the patient aggravated.

I said, while relating the facts of the case, that it was not a matter of indifference, whether the artificial anus was formed in the right or left colon. But, before mentioning the reasons on which I founded this opinion, I will enumerate the cases in which it may be necessary to operate on the right side:—1° When it is certain that the obstacle to the passage of fæces and gases is situated far from the anus. 2° When there is

considerable doubt as to its precise situation, notwithstanding the quantity of liquid which may be injected into the rectum. 3° When the seat of the disease, though situated on the left side, is so near the spot in which the colon must be opened, as to inspire doubts as to the result of the operation on account of the inflammatory accidents which might supervene.

In order to establish the diagnosis upon the two first points, enemata, administered in the manner above described, form the best mode of avoiding error; and yet they may in some cases, fortunately of very unfrequent occurrence, fail completely ; for instance, there are some persons affected with a chronic irritation of the large intestine, and who, in their ordinary state of health, can hardly retain an enema. Now, if a stricture occurred in these individuals, it would be impossible to conclude, from the fact of their not being able to receive more than one enema, that the seat of the obstacle was near the anus. With the exception of these uncommon cases, it may be asserted—and the facts I have observed confirm this opinion—that in a patient affected with tympanitis, when the evacuations per anum no longer take place, and a small quantity of liquid only can be injected, the obstacle is not very distant, and *vice versâ*. It is hardly necessary to add, that the diagnosis will be established beyond a doubt, should a tumour be felt in the region corresponding to the commencement of the large intestine, or of the colon transversalis. Finally, in the third case, the diagnosis is not difficult; thus, by the introduction of the finger, by the touch, or by percussion, a tumour may be found to exist in the left lumbar region, or the left fossa iliaca, and which has obliterated the intestine. This, however, may be difficult, if not impossible, when the abdomen is distended with gases ; it is then that the enemata, administered as I recommend, are useful, as, from the quantity of liquid introduced, it may be concluded, whether the obstacle be situated so near the spot in which the operation must be performed, as to preclude the possibility of success.

If, from the reasons just enumerated, it becomes necessary to operate on the right side, the artificial anus produces inconveniences which are not met with in the same degree when it is made on the left side. They are caused by the greater extent of intestine below the opening, and, consequently, the intensity of the anti-peristaltic motion which ensues. This motion, by which the portion of the large intestine, rendered useless from the operation, endeavours to free itself of the fæces which, notwithstanding the presence of the abnormal anus, have been forced into it by the peristaltic motion of the remainder of the intestinal canal, - is very distressing, because the fæces which are accumulated there return with difficulty to escape through the artificial opening; the transverse colon in these efforts approaches the pubes, and these accidents, in spite of the administration of purgatives and enemata, are overcome with great trouble, and are a source of torment to the patient; so much so that, in similar cases, I have found myself under the necessity of removing the fæcal matter by means of a wooden scoop. It would, therefore, be advantageous, when the artificial anus has been established on the right side, to form a sort of septum sufficient to prevent the fæces passing beyond the opening. Unfortunately, the intestine is so firmly fixed to the abdominal parietes, that this is almost impracticable, and even were it so, it might be productive of such dangerous consequences as to deter its being attempted.

Up to the present moment, the artificial opening, in the case before related, presents no tendency to prolapsus, nor have I observed it in any of the patients on whom I operated, although it used to be very frequent when Littré's method was employed. Dr. Foulhoy, of Brest, who had opportunities of examining the patients operated on by Duret, and other surgeons of the town, mentioned to me that they were all more or less affected with prolapsus. I perfectly agree with Dr. Foulhoy that, in all probability, the accident was owing to the method employed ; because the intestine opened, being mobile in the abdomen and merely fixed to the abnormal anus, renders prolapsus much easier than when the intestine is firmly attached to the abdominal parietes, like the colon in the lumbar regions. This constitutes one of the principal advantages my method offers ; I may add, moreover, that patients operated on, as recommended by Littré, are afflicted with incontinence of fæces, whilst all mine were rather constipated than otherwise, and experienced from time to time the desire of evacuating the contents of the intestine. The infirmity presented by the former, does not exist in the latter, and, consequently, they are not rendered an object of aversion to themselves and to those around them. Finally, another circumstance to be noticed is, that the smallness of the opening in the intestine prevents the continual and involuntary escape of the fæces.

To resume : this case is the ninth (three children and six adults) in which I have performed the operation for artificial anus, according to my method: that is to say, by a tranversal incision in the lumbar region, so as to open the colon without wounding the peritonæum. The children were affected with imperforate anus, and the intestine was opened, in all, on the left side, with success ; the adults were affected with an occlusion of the intestinal canal : in three, I operated on the right, and in three, on the left side.

(To be continued.)

THE PHYSIOLOGY OF MATERIA MEDICA,

AS ESTABLISHED BY THE LATEST RESEARCHES IN ORGANIC CHEMISTRY, PHYSIOLOGY, PATHOLOGY, &c.

By the celebrated Professor T. F. SOBERNHEIM.

Translated for the 'Medical Times,' by SIGISMUND SUTRO, M.D.

(Continued from page 376.)

THE acids (both inorganic and organic) form salts with the bases contained in the digestive fluid of the stomach. The organic acids decompose the chlorides of the gastric secretion very readily, inasmuch as apparently weak organic acids are capable of overpowering strong inorganic acids, and of isolating them from their saline combinations (as shown by the experiments of Tiedemann, Gmelin, Baker, Vogel, Berzelius, and others*); the latter, then, combine with the organic substances of the gastric secretion, forming combinations of hydrochlorates, sulphates, nitrates, phosphates, carbonates, or tannates of albumine. The acids, also, form, with the pepsine, soluble or insoluble combinations, the exact composition of which, however, has not yet been determined. On the other hand, it may be safely assumed, that a great proportion of the acid is directly eliminated by the alimentary tube, or by the urine, combining with the lime or ammonia contained in this fluid.

The study of these combinations is very important, in a toxicological point of view. It is ascertained, now, as a general rule, that all metallic poisons (oxides as well as acids), some vegetable acids (tannic, oxalic), and all poisonous alkalies and earths, with their salts (oxalate of potash, chromate of potash, chloride of barium, chloride of calcium, caustic lime, caustic ammonia, caustic potash, &c.), if introduced into the stomach in such small quantities as to be decomposed by the digestive secretion and the fluid contents of the stomach, forming the previously mentioned organic combinations, are re-absorbed without injuring the cells of the pituitous membrane, or of the glandular gastric tissue beneath. In this case, *no corrosion* of the gastro-intestinal organs is found after death, even from poisoning by arsenic,* because the absorbed poison, after having entered the current of the blood, produces such a decomposition and dissolution that the vital action of the blood-cells is partly suspended, while, at the same time, the impregnated blood paralyses the central nervous system and decomposes the animal tissues. We cannot forbear noticing, here, the analogy which exists between the digestive *liquid* and the *liquid* of the blood. For the liquid of the blood stands in the same relation to the blood-cells, as the digestive liquid to the assimilating cells of the pituitous membrane ; in both, the *liquid* is only a *secretion:* in the former, of the blood-cells ;—in the latter, of the glandular gastric cells. The substances carried into the blood are either decomposed by the organic constituents they meet there, or combine with them, forming, with the albumine and fibrine of the blood, *albuminates*, *fibrinates*, and other peculiar combinations of *proteïne*. Even miasmatic substances are, sometimes, so tranformed and digested, as it were, by the blood-cells, that the accompanying fevers are produced without their exanthemata ever appearing : as the so-called *febris morbillosa*, *scarlatinosa*, *sine morbillis*, *sine scarlatina*, if we may believe the authority of Burserius, P. Frank, S. G. Vogel, and G. A. Richter. But, if the digestive secretion, and the gastric contents, are not sufficient to neutralize the whole mass of poison introduced, the latter directly combines with the organic substances,—the membranes of the stomach, and other abdominal viscera, corroding, and thus destroying, them. The transformed appearance of the organic tissues must be ascribed to a chemical combination of the animal substance with the corroding body†

What is done with remedies after their reception, transformation, decomposition, or renewed combination, in the digestive organs?—Inasmuch as they are soluble in the gastric secretion, they are absorbed, carried into the circulatory fluid, communicated by the mediation of the blood to all tissues of the organism, and eliminated again by the urinary organs, the lungs, or the cells of the skin, from the sphere of the organism. It was formerly thought, that the general effect of remedies was chiefly produced by sympathetic action, viz : by the impres-

* Thus, Tiedemann and Gmelin found, by their experiments, that any muriate, formed in the urine, is partially decomposed by digestion with vinegar, with disengagement of hydrochloric acid. Vogel found that oxalic acid possesses a greater affinity for lime, protoxide of iron and of copper, and very likely also for peroxide of iron, than sulphuric acid,—decomposing, consequently, the sulphates of these oxides.

* Thus, Ettmüller mentions a case of poisoning by arsenic, where the dissection discovered no lesion in the abdominal organs. Most likely, the poisoning of Mad. Laffarge's husband, by *arsenious acid*, comes under this head ; the poison having been administered by *little and little*, and in very small quantities, no trace of it could be found in the digestive organs, because its absorption had been completely accomplished.

† When Milscherlich injected a small quantity of a salt of iron into the stomach of a rabbit, and killed the animal some time after, he found the injected salt combined with organic substances, and the gastro intestinal membrane perfectly whole. But, when sulphate of iron was injected in great quantities, so that the gastric contents were not sufficient to decompose it, he found the pituitous membrane corroded after a certain time ; still greater quantities produced death in a few hours, and the epithelium, as well as the pituitous membranes, were transformed into a dry, brownish, mass. This transformation of structure extended as far as the sulphate of iron had penetrated into the alimentary canal. The injection of half an ounce of sulphate of manganese produced death in from two to four hours ; the internal gastric membranes were corroded, but not to the same extent as with the salts of iron : the pituitous membrane was destroyed in several places ; it was dissolved, and of a browish red colour, in consequence of an extravasation of blood produced by corrosion. The duodenum and small intestines were changed in the same manner ; the destruction extended to the cœcum. The injection of two drachms of *catechu*, which contains about one drachm of tannic acid, induced death in from half an hour to an hour. The epithelium and the pituitous membrane were found to be corroded, of a yellowish colour, and dry. The destruction was most intense in the duodenum and the small intestines, gradually diminishing as we descended lower down the intestinal tract.

sion on the gastric nerves being communicated to the whole organism. The reasons which led to this belief, and which were thought to disprove the absorption of remedies by the blood, or by the organs of circulation, were the following :—1° The rapid, and sometimes instantaneous, effect of some substances, as strychnine, coniine, hydrocyanic acid, &c., which would be inexplicable by the supposed, slower, absorption through the circulatory liquid.—2° After the destruction of the nerves belonging to the digestive organs, for instance, after cutting through the *vagus* on both sides of the stomach, no general effect is produced, though the circulatory apparatus be perfectly active.—3° The remedial substances cannot be found in the blood itself.—As to the first objection: the great rapidity of action of some substances does not disprove their transmission by the blood; for, according to Hering's experiments on horses, a solution of cyanuret of iron and potassium, injected into the stomach, entered the circulation in 20 or 30 seconds; and, besides, foreign substances are proved to enter the circulation directly through the veins, as the numerous experiments of Tiedemann, Gmelin, Westrumb, Segalas, Magendie, Brodie, Emmert, and Mayer, bear evidence. Blacke undertook some experiments very lately, with a view to ascertain whether poisons operate by their impression on the nervous centres, or whether, to produce their proper effects, their entrance into the blood is necessary? To ascertain how the rapidity of effect, produced by certain poisonous substances, agrees with their introduction into the blood, he endeavoured to measure the quickness with which the blood arrives from one end of the circulatory apparatus to the other. On using the instrument of Poiseuille, he found that a substance requires but a very short time to arrive, from the jugular vein, at the capillary terminations of the coronary arteries. This time amounted, in a horse, to 16 seconds; in a dog, to 10 seconds; in a rabbit, to 11 seconds; and in a chicken, to 6 seconds. Blacke also experimented with strychnine, and the phenomena appeared with equal rapidity. Mayer found a solution of cyanuret of iron and potassium (which had been injected into the lungs), after two minutes, in the blood, and after five, in the urinary excretion. The entrance of the poison into the blood has even been shown after tying a ligature round the thoracic duct. On the other hand, the cells of the capillary vessels very rapidly communicate to each other the received substances; and it may be assumed, according to J. Müller's experiments, that a dissolved substance arrives, in part, even within the space of a second, in the superficial capillary vessels of a structure devoid of epidermis, and thence, being carried into the blood, it may be partially distributed to the system in from ¼ to ½ a minute. Lastly, it is to be borne in mind, that this *lightning-like* effect is often mentioned in rather a hyperbolical sense. Thus, in a horse, 8 years old, to which 3 drachms of prussic acid were given in 1½ ounce of water, the effects only appeared after two minutes. Christison obtained the following results: 1-3rd of a grain (weight) of hydrocyanic acid, given to a rabbit, killed it in 83 seconds; three drops, weighing 4-5ths of a grain, killed a cat in from 30 to 40 seconds; four drops (1.1-5th of a grain) killed a rabbit in 30 seconds; three drops, placed on the eye of a cat, killed it in 40 seconds; and the same quantity, applied to a fresh wound, induced death in 105 seconds. The effects began after 63, 45, and 20 seconds:—thus, within a space of time in which the circulation is accomplished. But, if there are observations recorded in which the effects appeared more quickly (thus, I saw, in two rabbits, symptoms of poisoning in 15 and in 8 seconds; Christison in 10, and, in one case, even in 5 seconds), it must be assumed that hydrocyanic acid enters the blood more rapidly, on account of its extraordinary diffusibility; for, according to Krimer, it even acts by its vapour, and, spreading itself by reason of the warmth of the part, it is inhaled on the tongue, and thus directly led into the pulmonary circulation.

(To be continued.)

SELECTIONS FROM GERMAN JOURNALS.

By SIGISMUND SUTRO, M.D.

Case of Poisoning by the Berries of Daphne Mezereum, at Lomnitz.—The berries of daphne mezereum are used, hereabouts, as a domestic purgative, taking 5 or 6 for a dose. But, on account of obstinate constipation, a peasant took 40. Soon after, frequent and violent vomiting ensued, and almost uninterrupted pituitous stools, mixed with blood, and causing excruciating pains. The head was dull and giddy; the face shrunken and cold; the pupil dilated, and vision obstructed. Extreme thirst; burning pain felt from the throat to the stomach; violent colic. Voice altered, trembling; respiration short and difficult; pulse frequent, irregular, hard, and cord-like; urine dark; extremities cold; skin dripping with perspiration. Venesection and leeches, warm fomentations on the abdomen, and cold fomentations to the head; mustard poultices, clysters, emulsions, &c., improved the state of the patient, but, nevertheless, his recovery is excessively doubtful.—*Oesterr. Medic. Wochenschrift.*

Two Cases of Poisoning by Belladonna.—First: a boy, 5 years of age, at Grieskirchen, fell ill, soon after having eaten a few ripe berries of a belladonna-shrub. He vomited several times, and died on the following morning, at 7 o'clock, under an attack of convulsions. No medical aid had been sought. The half-opened eyes had a peculiar, dazzling, splendour; the pupils were enlarged; the mouth spasmodically closed; the anus open. The vessels of the cerebral membranes were distended with thick, black, blood. Around the pharynx and œsophagus, several red spots were found. In the stomach, there were three half-opened berries of belladonna; dark-purple spots on its sides.

Second: the other patient was a peasant, 34 years of age, who, for the purpose of allaying his thirst, ate a great quantity of ripe berries of belladonna, till he felt burning in the throat and an overpowering giddiness. At seven o'clock in the evening, he was so delirious that he was obliged to be kept down by three strong men. His face was swollen; his eyes red and prominent, the pupils much dilated. Strong pulsation of the arteries of the head and throat. Pulse full, hard, and very frequent. Swallowing impossible. After a venesection of 15 ounces, the patient became calmer; he complained of pressure, and violent burning pain, in the stomach and throat; great dryness of the mouth, particularly on the tongue; swallowing still impossible; but, after cold fomentations had been applied to the head, and clysters of vinegar administered, the power of swallowing returned. An emetic caused the discharge of about 3 ounces of a violet-blue liquid. The patient lay in a state of stupor. Thirty leeches were applied to the temples and behind the ears; poultices were placed over the whole head; clysters of vinegar administered, and an emollient decoction ordered. After 3 hours, diarrhœa and vomiting appeared. The determination of blood towards the head gradually diminished; consciousness returned; and the patient recovered, notwithstanding his having eaten, at least, 50 berries.—*Rosenberger, ibidim.*

Roisdorf, or Ems.—The indiscriminate manner in which physicians recommend warm baths and mineral waters, not regarding the nature, but merely the locality, of the complaint, is often the cause of the sufferer returning home without any improvement in his state. Ems is often visited without benefit, for the same reason. Ems invariably relieves in those diseases which are caused by disturbed digestion, whether the evil appear in the form of increased mucous secretion, or as abnormal sensations, and superficial erysipelatous inflammation of the mucous membranes. Ems is likewise indicated, when the functions of the pituitous membrane are deranged through rheumatic causes; also, in atonic gout, with dyspepsia, and abnormal secretion of the skin. In the rheumatic and catarrhal diseases of delicate individuals, the baths of Ems even seem to prevent the formation of tubercles. The author seldom observed hæmorrhoidal discharge of blood at Ems, undoubtedly prevented by the derivation which the water causes to take place through the kidneys and the skin. But, Ems operates injuriously where tubercles of the pulmonary organs are already established, promoting congestion towards the chest, and thus causing hæmoptysis. In these latter cases, which contra-indicate the use of the waters of Ems, those of Roisdorf are exceedingly appropriate. They diminish the irritation of the respiratory passages, and the cough arising from it; controlling and lessening the expectoration, promoting digestion, and causing a decrease of the fever, and of hæmoptysis. The saline bath operates as a diuretic, and is exceedingly beneficial in the tuberculous and hæmorrhoidal complaints of sanguineous individuals. But a long-continued use for months, and even years, is necessary to bring about the desired cure.—*Albers (Corresp. hein. id Westphal. Arzte.)*

The Efficacy of Calomel in Large Doses, in Typhus Fever.—In the hospital of Munich, from 10 to 20 grains of calomel (*pro dosi*) were given in the first stage of typhus. If the expected stools did not make their appearance, the remedy was repeated, until the abdomen became freer, the profuse diarrhœa ceased, and the evacuations became more regular. In obstruction, the effect was still more apparent. The tongue became moist and cleaner; thirst less; fever milder; and all the nervous symptoms appeared to diminish. In opposition to Schönlein's assertion, I have found calomel prove favorable, even when the tongue is furred and dry. If improvement followed after the first doses, the disease generally became stationary for a time, and a fatal issue was hardly ever observed. In the stools, produced by calomel, no considerable excess of bile was found. To explain this favorable effect of calomel, it is asserted, that typhus, belonging partly to an eruptive, and partly to an inflammatory, state of the pituitous membrane, it cannot be suddenly cut short, but is only caused to terminate a little sooner, and to assume a more lenient character. The origin of the disease cannot be sought for in the blood, though the blood be diseased in typhus. The great similarity of the blood in chlorotic and typhoid patients is remarkable. It seems, that the change of blood is the result of typhus fever, whilst the same is the cause of chlorosis. The whole nervous system, and particularly the ganglionic portion, is disturbed and deranged in typhus; the enervated blood tarries in the vascular, loose, and soft parts of our body, particularly in the great abdominal and thoracic viscera,—in the lungs, the mucous membranes, especially those of the ileum, producing the well-known changes observed in these parts. The fluid parts of the thin, degenerated, blood, permeate the fine extremities of the capillary vessels, occasioning those colourless and ominous stools, whilst the more solid parts contribute to the formation of congestions in the glands and cells of the intestinal pituitous membrane. Calomel, in large doses, seems to prevent these effects, or if already formed, to cause their removal, and with this view, it is particularly indicated during the first few days of typhus. But, how does calomel effect this cure? By promoting the secretion, and excretion, of the bile, or by freeing the blood of its excess of carbon? In the stools, the quantity of bile and carbon is not in such a proportion as to justify the above suppositions. Is the effect, then, the consequence of the calomel being aborbed, and combined with the organic secretions? By no means; else, colliquative diarrhœa, and great salivation, would ensue; besides, it is in itself too difficult of solution, and of digestion, and, above all, the whole quantity taken is found again in the stools (partly as sulphuret of mercury). Again, is the effect due to the disengagement of chlorine, as Ottinger and others pretend? Certainly not; for the chlorine is disengaged in such small quantity, that such energetic effects could not be produced by it. The author considers the effect of calomel as *chiefly local, by contact with the diseased pituitous membrane itself*, and this view he supports by the necessity of giving it in large doses, by its difficulty of solution, by its exclusive efficacy in the first stages only, and by its almost total reappearance in the stools. Calomel promotes the local secretion of the abdominal organs; it increases the activity of the absorbent vessels, and this causes the dissolved parts of the blood to be

partly reconducted into the circulatory current and partly discharged with the evacuations; the intestines become freed from their causes of irritation, and restored to their normal state. Lastly, the blood is itself purified by the increased secretion, or rather excretion, of bile and carbon.—*Dr. Drey* (*N. Medic. Chirurg. Zeitung.*)

NOTICES TO CORRESPONDENTS.

Medicus.—*We do not yet know how Sir James Graham will settle the* locus standi *of the L. A. C. or the M. R. C. S. With the single diploma, as the Bill now stands, a surgeon will register as a "Licentiate of Surgery," an apothecary, as a "Licentiate of Medicine." The new law will make no restrictions in partnerships. We have heard, that already the resolve has been taken by one M. P. to substitute the word "Bachelor" for "Licentiate," as the more honorable.*

"A Correspondent" *writes us a smart letter in praise of the clever music occasionally heard from within the solemn portals of the College of Surgeons. He seriously enquires if it be really a "ladies' boarding school;" and thus explains the amazing avidity of such goodlooking surgeons as Mr. —— to get on the Council. We are in happy ignorance. We suggest a note of enquiry to Sir B. Brodie.*

Alpha *writes a very judicious letter, approving of certain parts of the New Bill, trusting, that the nuisance of patent medicines will be abated, and thus continues:—"I conceive, that the General Practitioner ought not to be on a par with the mere surgeon, because he has undergone an examination in pharmacy, chemistry, &c., and possesses a certificate of qualification which the other does not; neither ought he to be classed with the mere licentiate, because he has attended and paid additional fees for attending surgical practice, and has also passed an examination in surgery, and paid a good round sum for his diploma. Besides, under the present system, he possesses certain advantages which the others do not, inasmuch as he can legally attend, and furnish medicines in medical cases, which the one cannot; and he is also eligible to certain appointments, as, for instance, that of Union medical officers, which neither of the others are. Nor can the mere surgeon or apothecery complain, if he merely ranks as a licentiate of surgery or medicine, because he has voluntarily placed himself in the position which he occupies, and has either taken advantage of the remissness of the Apothecaries' Company, or possessing the certificate of that body only, has dubbed himself surgeon, without having proved his qualification to practice that branch of the profession."*

Pathologicus *is clever, but is declined, in accordance with a rule to admit no hostile anonymous replies to communications with names attached.*

M. R. C. S. L. A. C. *and* Caustic *are both declined. They are considerably too personal.*

B. J.—*We do not know the name of the publication.*

Mr. Thomas.—*How much can an apothecary charge per mile for visits according to law? Whatever is customarily charged in the district where he resides.*

A vast number of communications are before us, which we will endeavour to notice next week.

We have the honour and pleasure of announcing, that next week we shall commence the publication of an invaluable series of practical papers on Lithotrity, Lithotomy, and the Diseases of the Urinary Organs, by Dr. Costello, a surgeon, whose reputation on the subject he is about to treat on, is deservedly European.

THE MEDICAL TIMES.

SATURDAY. AUG. 24, 1844.

Mendici, mimæ, balatrones, hoc genus omne
Mœstum ac sollicitum est ———.

It is with difficulty we command our temper while directing our readers' attention to the interruptions offered the very respectable Meeting of Medical Practitioners, at the Marylebone Institution. We may safely affirm that nothing analogous to the scene was ever before displayed by any group, however small, of *medical* men, and that we must look to the violent irruptions of the Chartists and Physical Force men, in their days of hottest zeal, for anything approaching a parallel. That a gang so well known—we had almost said, to the police—as low, in point of number, as they were obviously deficient in the ordinary qualities of an English education, should have ventured to open their mouths before respectable and educated men, with the express design of breaking up an Association, or, as a *pis-aller*, forcing *themselves*, by their *own* speeches and votes, on the Committee, is one of those incidents which throw a new light on the physiology of vulgar impudence, and furnish a fresh chapter in that romance of London life in which the Newgate or St. Giles' pickpocket faces good society for a season as a gentleman—or the footman and journeyman carpenter cheat the public as esquires and insurance directors. If the Ruggs, Raggs, and Coopers know of no such thing as decency—if the *bienseances* of life are things wholly alien to their habits—as remote from their conceptions of life as plate-glass windows to the buffalo of the prairie—surely their *instigator* has learnt by this time that there are such entities, or, if he like, absurd prejudices, in fashion—and could have advised to pay them the same sort of homage he himself gives to *honesty*. The omission has been most unfortunate. It has involved his plans in some little additional discredit: and has covered his wretched tools with the double disgrace of a despicable attempt, and still more despicable failure.

One concluding word of police warning to these gentry—worth gold to them if they would keep out of trouble:—"*Ye are under watchful surveillance, and have the deepest interest in keeping her Majesty's peace.*"

The country gives me proof and precedent,
Of bedlam beggars, who, with roaring voices,
Sometime with lunatic bans, sometime with prayers,
Enforce their charity. KING LEAR.

Circumstances, which imply no uncharitable allusion to a lost contemporary, have recently guided our thoughts to the important subject of Lunacy. We have thought on its terrific nature; pondering with saddened reflections on that awful dispensation which dethrones in man the distinguishing excellence of his nature, confounding utterly and wofully that ample gift of divine essence, which placing us at the pinnacle of animated being, as we know it, establishes us—in scriptural phrase—as the gods of earth. We have searched into its frequency—one, alas! civilization affects not, save for increase—and have felt as grieved as surprised, to find that in England alone we have twenty-one thousand well *ascertained* as thus direfully afflicted. We have gone one step further: we have examined into the appliances and aids which the wisdom of a benevolent society has prepared for an exigency so widespread and calamitous; and our hearts, wounded with the spectacle of the disease, have turned sick at the more disgusting spectacle of the remedy. We have gone from county asylum to private refuge—from union infirmary to criminal ward—from county to city—from the English kingdom to the Welch principality—and the conviction that has settled on minds saddened, but not heated, with the review, is, that our lunatics if left to themselves would scarcely have been in worse case than now!

Nunc accipe quare,
Desipiant omnes æque ac tu qui tibi nomen
Insano posuere.

Vain-glorious as we may be of our laws—fair as is the surface they present the world in all that regards public liberty, we must yet avow that in most that affects the private well-being of a great bulk of their subjects, they are—to speak of them when best—as if they were not. The wretched thrall of lunacy, like the ignorant and helpless victim of empiricism, experiences from the state for the protecting tenderness of a parent, but the unbending indifference of a hard-hearted stepmother. Startling as the sentence may sound to party rulers and dependant expectants, the state of English lunatics, makes axiomatic the opinion, that on many of the points dearest to humanity, English legislation is yet to be invented.

The Legislature and lunacy have now co-existed for a few centuries. Close akin as some consider them, let us see what the latter has yet received from the former. Sum up accounts, and perhaps the Legislature will appear to have done less for lunacy than lunacy for the Legislature.

First: Thousands of lunatics are in private unlicensed houses more completely under the dominion of the renting occupant, than the brute under its master. How are they kept? Exactly as the ruling passions of their keepers suggest. And what do they suggest? To keep them at the least expense; and, therefore, ill-fed, ill-cleansed, ill-clothed, ill-lodged, ill-served. To keep them with the least trouble: and, therefore, chained in some damp cellar, or narrow back garret—violent means of restraint for arms, legs, body, always ready; often used. Has bad treatment yet exhausted its utility? No; the lunacy is a matter of profit: some lunatics pay most handsomely. To perpetuate the malady is the keeper's subsistence! *The lunatic, therefore, is insured against cure!* Such evils, so enormous and shocking, and with multitudes of fellow beings, have been doing during thousands of years, yet what has the Legislature done? Nothing. The private, unlicensed keeper, though a slow murderer, is beyond the law's observation: the very Commissioners of Lunacy cannot enter his house to interpose between him and his victim.

Uter est insanior horum?

the law, or the lunatic?

Necessity has urged some Parliamentary steps. The counties have been allowed to build asylums. In what way? To everybody's advantage but the lunatic's and the rate-payer's. The building has first been made a job. The county gentlemen have had the building patronage in their hands—and hence, while paid Commissioners' Union Houses have cost at the rate of £40 per head, the unpaid magistrates' asylums have cost from two to £300! Size was no point the law could notice; and we have Hanwells (the model asylum!) containing one *thousand mad* inmates—a mass of beings making round them a concentrated, we had almost said a contagious, atmosphere of insanity—and defying all arrangement, vigilance, and curative care. Shape, site, space, fittings, were things not dreamed of by the Legislature; and hence we have the West Auckland Asylum, with two courts, each twelve yards wide, by thirteen long, for exercising and airing thirty-one patients!—the asylums at Bodmin, Nottingham, and Leicester, with small, dull, and gloomy yards!—St. Peter's Hospital, Bristol, in the centre of the most crowded town, without fresh air, or room for exercise: the Haverford-West Asylum, an old ill-conditioned gaol: the Bodmin asylum, frequently short of water; and so on, through the whole catalogue of building deficiencies!

Again, the *cure* of county lunatics—the first object, one would think, of wise legislation—has

been nearly overlooked. All stages of madness are allowed to mix together—the curable go hand in hand in companionship with the incurable; and the houses best provided with the medical agencies for cure, are, by a silly arrangement of parochial and county laws, crammed with the incurables, to the daily rejcetion of those whose cases offer hope!

Further: Till last session, no step was taken which furnished the miserable inmates with the protection of vigilant superintendence, and official visitation. In the county of Bedford, there is no committee of visiting justices in even nominal existence; there are no rules or regulations for the direction of the officers or servants. So of the county of Chester: and thus large institutions, requiring over human beings the exercise of the most despotic authority and power, are frequently left to the sole lawless discretion of a matron, or superintendant—stipendiaries who are, doubtless, often blameless, but who, whether worthy or unworthy, have a personal interest in securing obedience and quiet, by the shortest possible means, whatever they may be. In a foreign country would it be believed, that in Great Britain, *even now*, the state lunatics are cooped up in houses, construeted to suit any individual's chance conveniences, fitted after the caprice or need of the moment—the inmates fed, lodged, clothed, medicated, warmed, coaxed, beaten, received, or dismissed, just as it pleases the bad or good temper of hirelings; an insane community governed on the lawless principles of an Oriental pachalick!

With this short, and very general view of Legislative Lunacy, we close for the present; an early day will allow us to descend to details, furnishing definite illustrations of this hasty summary.

In vitium ducit culpæ fuga si caret arte.

HORACE.

THE deliberate proposal to the public of a Government Bill of Medical Reform, opens to the profession an epoch of unsurpassed importance. Nothing equal to it in moment has occurred to us for centuries. It is the "*tide*" in the affairs of the profession; and on our mode of "taking" it, depends the fortune of ourselves and sueeessors. Every movement then, every act, every *opinion*, of the profession, is *now* of inexpressible significance. On *us*, and *our* policy, not our's, but an age's fate may rest. The import of the epoch magnifies as we longer think on it, and forces salutary thoughts on the deep reflection, the lengthened deliberation, the full caution, which alone can place us in keeping with our responsibilities. If ever crude thought, hasty resolve, or rash action, was to be deprecated, it is now.

But, if there be such grave reasons why the whole profession should discharge the great duty of this crisis with a most circumspect wisdom, there are special motives that should operate in addition on those of our readers who share our opinions on medical amelioration. Identifying ourselves with the bulk of our members, we have asked for them not only an improved administration of medical affairs, but for that form of administration which can alone secure the continuance of good: that which, placing elective powers in the hands of every medical man, opens to the claims of all, the highest places in our medical polity. We have laboured, in other words, for good government *by ourselves*. How important then is it—if we would have our wishes turn into legislative facts—that in this exigency we show ourselves worthy of the trust we seek? How necessary, by the discrimination of our judgment, and the temper of our proceedings, to demonstrate to the Civil Government, that the representations of Sir B. Brodie, and his friends, are slanders; to shew rather that we are *men of education*, and so *know* what is due to our science, *gentlemen*, and so *feel* what is due to society. Earnestly, indeed, do we hope that the Profession of our day will prove itself worthy the epoch conceded it; that securing for our opinions the respect of society, and *deservedly* influencing the country and the Government, we may so infuse into the new Bill the teachings of an enlightened liberality, that it may be a boon for ages to science and humanity.

Two things threaten to damage the weight of our opinions, and to militate against any efficient results in the approaching movement—ultraism in action, and extravagance in speech. Like every community, we have some worthy members whose zeal surpasses their prudence; and many unworthy members, whose ambition would make ladders to notoriety out of their brethren's folly We have here, then, the elements of an undignified strife, a miserable, factious squabble, with just that pretence to right which gives large license to do wrong, and which, in the hands of fortune-less and notoriety-hunting knaves, offers the Profession as a marketable commodity. But low extravagancies are not for *us*. These are things that tell in a mob movement: with us, they can tell only for *defeat*. Our title to influence is not noise, or vehemence, or violence—but our position as gentlemen: let us forget that—and our suggestions will be unheeded, and our remonstrances thrown by with contempt.

Now, let us say then, first (to do both ourselves and opponents justice), that to oppose the whole Bill of Sir James Graham would be a fatal mistake. It contains some priceless enactments, which we cannot too soon have: and if it have some serious omissions, we have this thought to save us from ultraism,—the power that can wholly destroy the Bill, can more easily amend it. If Sir James Graham be not a bigot to his project—and nobody thinks he is—he will not be opposed to the ameliorations the calm and deliberate opinion of a dignified Profession recommend. If he even dislike them, he will hate them *less* than defeat.

Sir James Graham, at least, guarantees us *these* improvements:—

First: He delivers us wholly from some ten or twelve beggarly Corporations, who had the power of admitting into our Profession anybody at any price, with any attainments.

Secondly: He places the remaining Corporations under a vigilant supervision, and secures in our new members, no matter in what capital admitted, qualities which will uphold the scientific character of our body.

Thirdly: He destroys that degrading legal title, "Apothecary," which gave a meretricious colour to the pretensions of prescribing Druggists, and he establishes the General Practitioner in his true character of Physician and Surgeon.

Fourthly: He forms in the State a high Medical Council, vested with privileges and administrative powers, and who, by their very standing, will reflect additional eclat on the Profession they illustrate. Without adverting to the improvements this Council may make in the education and general scientific progress of the Profession, it is clear to us, that if we have it constituted—as it will be, if we do our duty—in part or in great measure by the choice of all our brethren, it will in itself be for us a social revolution.

Fifthly: He secures the segregration of the qualified man from the ignorant pretender by a State registration of every member of the Profession. We look on this step as most important. It is favourable to unity: it is in truth an incorporation of all medical men into one body; and it will be our brethren's duty to see on this point, that the boon's utility is not marred by demanding from present legal Practitioners any sum for registration.

Sixthly: He punishes the quack for pretending that he is a qualified man, by fining or imprisoning him for affirming himself on the register—the test of qualification. At present, our Perrys and Holloways call themselves Surgeons and M.Ds. (they disdain Apothecaries) and no law touches them.

Now, it is not unreasonable to expect, that the fairness with which we admit, sometimes the partial, sometimes the total excellence of these provisions, will win for our suggestions of improvement on others, a greater and more favourable attention. We would wish to impress on the Home Secretary, and on Parliament, that the Profession has no factious feeling about the Bill: it urgently needs reform, and looks to that alone: as its praise is confined to the good, its opposition is sought to be limited to the evil. Where we differ, (we mean the Profession and Sir James Graham), it is our comfort to think there is no safe, as there is no just mode of meeting us, but by concession. Right principles, discriminatingly supported by such a Profession as ours, are too strong for the strongest of Cabinet Ministers. But let us hope that the Home Secretary, in introducing his Bill so long before it can be formally discussed in the House, invited our opinions so expressly with a very different view from that of opposing them.

And, now, frankly, to give our expression of our brethren's feelings on the *faults* of the Bill. They appear to us to confine themselves mainly to two points, both, however, of essential and fundamental importance,—first, that the Governing Medical Bodies are left considerably too exclusive; and, secondly, that empirics are not sufficiently placed under the ban of the law.

We have written so many unequivocal articles on the mischief of Empiricism (many of which have been since kindly diffused by the general newspaper press), that we need scarcely repeat our opinion, that on this subject the Government Bill is most unsatisfactory. Nay, we consider that even those of our brethren who consider it impossible to suppress, or greatly lessen, quackery, cannot read the draft without feeling that the Bill might do much more in this direction, without inconvenience or difficulty. Our own fixed opinion is, that every unqualified man, perilling his neighbour's life for lucre, should be subject to summary magisterial punishment on simple proof of the fact: and where death, disease, or deformity, can be traced to his ignorant tamperings, a special law should inflict rigorous penalties as the price of his unhallowed daring. Such legislation would not annihilate—but it would degrade and considerably diminish Empiricism: and whatever some Members of Parliament may say—whatever some able thinkers may write—we are persuaded that such a restriction of a very dangerous and culpable liberty, would be well received by the Society it would so much better. But if no Minister, and no Member of Parliament—as it is

said—would undertake such stringent legislation, why, at least, as we suggested years since, shall a person living by an immoral trade—which he spent nothing to acquire—not be badged before the public in his true character of an ignorant pretender, and pay some of his illicit profits to the State, for an annual license as a public Empiric? If, analogously to the vender of "Foreign Spirits," his door pourtrayed him as a "Licensed Empiric," the truth would be told, society would be taught, the Government would be profitted, and the Profession itself would have itself to blame if the public preferred the heterodox to the orthodox doctor. In a similar policy, every Pharmaceutical shop in the empire would contain a legible declaration that the proprietor was competent, not to prescribe, but to prepare or dispense drugs.

But while heartily joining with our brethren in asking the restriction of empirical practice, we may as well warn them against an exaggeration which may throw great impeachment on our knowledge or veracity, and much compromise with Parliament the force of our demand. It is supposed by many, and loudly cried by some, that the Bill opens a new era to Empiricism; and Sir James Graham is attacked as if he were letting in a new flood of illicit practice on the people. Nay, one writer in a public journal, is exceeding wroth with Government, because the Bill commits the atrocity of enacting that every man may be (something novel or unheard of? No:) —a *St. John Long*, if he please! Need we say, that in no country in the world can a quack enjoy greater liberty of practice than in our own under our present laws? No single check exists to any man being a St. John Long *now* more that in St. John Long's own day. Have we no Perrys, and Curtis', and Jordans public as the daily and weekly press? Have we any let or hindrance to homœopathic or hydropathic M.D.s or to any number of self-educated, self-licensing surgeons? Are there one hundred druggists in the empire who do not prescribe? Is there, in fact, one law *applied* which prevents any man at any place practicing physic or surgery how or when he pleases? If there be, the present universal, rampant existence of quackery is one of the greatest anomalies in law or government with which we are acquainted,

Quackery exists: under the new Bill, as it at present stands, it will, also, exist: it is a great evil, less to us, than to the public: are there not here sufficiently strong grounds on which to rest our opposition? Why, then, shall we allow recourse to useless and disreputable exaggeration?

We shall return to this subject in our next number.

MEETING ON MEDICAL REFORM.

A very important and respectable meeting was held at the St. Marylebone Literary Institution, on Saturday evening last. At eight o'clock, when there were nearly 300 gentlemen present, Mr. Pennington, a general practitioner, the Senior "Fellow," and oldest Member of the College of Surgeons—a venerable gentleman, who has reached his ninetieth year—was voted to the chair. Among the many highly respectable gentlemen whom we noticed present, were:—Dr. Burrows, Dr. Quain, Dr. Chowne, Professor Murphy, Drs. Campbell and Ridge, Messrs. Propert, Dodd, Vickers, Squibb, Barker, Basker. Hodding, Tanner, Moss, Houlton, Hilliers, Vincent, Michell, Headlam, Bird, Jackson, Brown, Ancell, &c. Indeed, the men who enjoy the respectable practice of Marylebone, took an active, part in the successful management of this important demonstration.

After a short address from the chairman, who spoke warmly against those clauses of Sir Jas. Graham's Bill which allowed quackery, and recommended a becoming spirit of temperance and moderation, the honorary secretary, Mr. O'Connor, of George-street, to whose able exertions the profession is mainly indebted for this first medical demonstration, was called on to read the minutes of the preliminary meeting, at which it was unanimously resolved to form an independant Local Medical Association, to watch over the interests of medical men at this important juncture.

Isaac Brown, Esq., of Edgware-road, proposed the first resolution. He dwelt forcibly on the numerous evils the profession already suffered from, expressing equal surprise and regret, that when its state was already too bad, the measure of Sir James Graham should be brought forward to make matters still worse. He particularly inveighed against that part of the New Bill which, in his opinion, virtually legalized quackery. He was followed by James Clayton, Esq., of Percy Street, who seconded the resolution, which ran as follows:—"That an association, to be called 'The Medical and Surgical Association of the Borough of Marylebone,' be formed for the purpose of watching over, and protecting the interests of, the profession generally."

This resolution caused some squabbling by a Mr. *Botany* Cooper, and his friend, Mr. Rugg, of "Medical Protection" notoriety, who, angry at the condemnation of their *canaille* committee implied, in the formation of an independent Association by respectable practitioners—exhausted their limited ingenuity in distracting the due order, and thereby damaging the weight of the Society's proceedings. Messrs. Rugg and Co. were supported by a Mr. Fagg, from the purlieus of Lisson Grove, and elicited the remark that they reproduced Flute, the bellows-mender, Snug, the joiner, &c., of Midsummer's Night Dream.

The resolution was, of course, carried.

John Propert, Esq., then proposed the following resolution:—"Resolved,—That it is the opinion of this meeting that the Bill introduced into the House of Commons, by Sir James Graham, Bart., *in its present shape*, will be highly injurious to the Medical Profession generally, but more especially to that branch denominated the General Practitioners—(which class of the Profession has been yearly increasing, both in respectability and knowledge, and at the present day numbers amongst its members, men as well and as carefully educated as any in the other branches of the Profession) — inasmuch as its operation would be to throw open the practice of medicine to men, wholly unfit, from want of previous education and study, to be entrusted with the care of the lives of Her Majesty's subjects."

Mr. Propert, after a few remarks in conformity with the spirit of the resolution, read a letter from Dr. A. T. Thompson, in which that gentleman roundly denounced the measure of Sir James Graham, and offered his best assistance in opposing it.

G. J. Squibb, Esq., of Orchard-street, followed, expressing his opinion that many parts of the Bill were not to be included in the censure the Profession gave it—but emphatically expressing his opinion that the permission of Empiricism was a most unwise step, more hurtful to the public than even to the Profession.

The resolution was carried unanimously.

The following Committee was then formed:—

President, R R. Pennington, Esq.—*Vice-Presidents*, John Propert, Esq., Cavendish-street; G. James Squibb, Esq., Orchard-street; James Clayton, Esq., Percy-square.—*Treasurer*, John Dodd, Esq., Orchard-street.—*Honorary Secretary*, William O'Connor. — *Members*, Messrs. Edgar Barker, James Bird, Owen Lucas, James Tanner, P. Jackson, N. Grant, C. Craddock, Thos. Jervis, J. Houlton, G. Joseph, J. V. Vickers, J. Hodding, N. Hobson, W. Maclure, W. Macdonald, Isaac Brown, H. Ancell, G. Webster, W. Richardson, — Phillips, — Headlam, — Walne, — Keats, H. Wakefield, — Tunally, — Blackstone, — Cooke, — Newton, — Porter, E. Moss, W. Bryant, Dr. Anthony Thompson.

A great deal of interruption was occasioned here, on the part of Messrs. Rugg, Fagg, and Co. Mr. Acton having proposed that one-third of the Committee should be Physicians and Surgeons, and his motion being negatived, Mr. Cooper was anxious to have himself, his friend Rugg, and a Dr. Henry Bennet (Mr. Thomas Wakley's secretary), on the Committee, and made all kinds of objections on its formation, as above given. Being unknown to his respectable brother-practitioners, he was asked his name, and replied—"I am not ashamed to say it; my name is Mr. Cooper." Mr. Rugg being subsequently asked, said,—"My name is—is Rugg." Their chance of nomination was now settled, which Mr. Cooper seeing, proposed that the names on the Committee should be put to the vote, one by one—which would have kept the Meeting till the next Sabbath morning. This proposition was, therefore, declined; and to prevent any more from the same fertile source, Mr. Clayton, of Percy Street, Bedford Sq., gave notice that he would then, or a little later, have to move, that "No *gentleman*" (laying much stress on the word, gentleman) "should be allowed to address the Meeting more than ten times in one hour." (Great laughter.) —Mr. Rugg, as a last resource, now suggested that the present Committee should be declared to have power to add to their number, as was originally proposed. This was accordingly done. He then rose to move that he and his friend should be put on the Committee; but was told that it was the Committee that had been given the power to add to their number, not the Meeting. Whereat, Mr. Rugg, resting on a bludgeon, the source of much of his argumentative power, and looking somewhat indignant, exclaimed, "Why, in that case, you have been beating us by a side-wind." (General laughter.) Much indignation was felt at the ill-disguised effort made to disarrange the Association's orderly proceedings, and one gentleman, Mr. Vickers, expressed this feeling in very emphatic language.

—— Bird, Esq. moved the fourth resolution, which expressed a favorable opinion of the efforts of the Apothecaries' Society to raise the standard of qualifications, and strongly hoped, that, in any future arrangement, the examiners of the general practitioners should always be general practitioners. Mr. Bird briefly adverted to the very low state of the profession before the Act of 1815, when any druggist's errand-boy might set up as medical practitioner if it so pleased him, as it often did. He bore ample testimony to the good accomplished by the Society from its raising yearly the test of admission, but lamented, that a Society invested with so important a mission to play, at the head of so many thousand practitioners, should have so far overlooked its interests, and forgotten the spirit of the age, as to have continued presenting themselves to the world as a trading drug community.

This, resolution, which was seconded by Mr. Tanner, was carried unanimously.

J. V. Vickers, Esq., of Baker-street, proposed, and H. Hodding, Esq., of Gloucester-place, seconded the following resolution:—"That this meeting expresses its earnest hope, that meetings of the medical practitioners will be held in all the metropolitan districts, and committees formed, with the same objects as those of the Borough of Marylebone Medical and Surgical Association, and that the various committees will confer together for the purpose of securing unity of action in carrying out their objects."

It was now proposed by Mr. Propert, and seconded by Mr. Ancell, that Wm. O'Connor, Esq., should be appointed Honorary Secretary. Mr. Propert paid a handsome eulogium on the deserts of Mr. O'Connor, and particularly referred to the praiseworthy exertions by which he had convoked so important a meeting. The motion was carried unanimously. Mr. O'Connor cordially thanked the Association, promised his best exertions, and pointedly stigmatized the unsuccessful attempts that had been made to disturb the harmony and success of the meeting—attempts, he said, of which he had not been without forewarning.

The thanks of the meeting were now voted to the venerable chairman, who, in returning thanks, expressed his complete condemnation of the recent

Charter, adding his deliberate opinion, that though named the Senior Fellow, he looked on the distinction as a disgrace.—(Loud cheers.)

ELECTION OF COUNCILLORS, AND THE MEDICAL BILL.

(To the Editor of the "Medical Times.")

Sir,—The times I think, are sufficiently startling to arouse the most apathetic of medical practitioners when, in the small space of a few weeks, three new councillors are elected by three hundred of their fellow members; and a medical bill is introduced into Parliament for the avowed object of throwing open the Profession to unqualified practitioners. These times, I say, are sufficiently portentous to awaken medical men from those slumbers in which they have so long indulged, and to cause them to look to the ground on which they stand, to see that there is nothing rotten beneath; and to prepare themselves either for a more strenuous opposition, or, having taken a calm review of the measures, to be ready to accept that which is just, and pluck out all that is evil, which appears to me the most conscientious and safe course to pursue, and which has the sanction of your recommendation. The Charter of the College of Surgeons, and the Medical Bill, must be owned to afford food for anxious and deliberate consideration. I, for one, hold the election of Mr. Welbank to have established a most important principle. By it, the superior righteousness of hospital surgeons has been denied;—by it, the close borough system of self-election to the Council, which has hitherto been maintained, has been, at the first meeting of the fellows, swept away. No longer is it necessary for a man to be an hospital surgeon, or assistant-surgeon, or sycophant to one of the Council: by this first election an important principle is established, which, I hope, the fellows will be in no hurry to give up. The election of Mr. Welbank has certainly done some good, though I am at a loss to see why the fellows should have preferred him to the two who were nominated, and the many who were not nominated, and were his seniors. For my part, I should have been as well satisfied if the claims of the others had been vindicated according to seniority, rather than that they should have been passed over for men who have no more to recommend them than the fact of being hospital surgeons—and respectable. For though, certainly, those nominated cannot lay claim to as great a celebrity as Mr. Yearsley or Mr. Liston, who, a bye-gone Journal says, is the first surgeon in Europe,—though they have not puffed themselves; nor been puffed by others,—though they have not published cases merely for the sake of repeating them, with their names and addresses—and though their names are not found connected with pamphlets on ——, &c. &c.: yet, Sir, I think, that, in having followed their profession honourably, and in a less obtrusive manner, for twenty or thirty years, they have entitled themselves somewhat to the confidence of their professional brethren, and acquired as good a testimonial of their worth—aye, better—than some of the Council can produce. Noveltics, in a science like ours, are not to be found every day in the week; and the mere repetition of facts, the appropriation of others' discoveries and bye-gone theories, or the compilation of lectures from former teachers' notes, are not sufficient, I maintain, to entitle a man to the name of a great benefactor to his profession, or high man of science. Yet, if we look through the Council, not one-half possess greater claims than these. Many of them are decidedly ignorant of the elements of professional knowledge. We might ask A whether he is not ground up in anatomy, weekly, by a young demonstrator of his hospital, to render him fit to examine? We might say to B, we do not deny that you are a scientific man, but can you put your hand to your heart, and honestly say, that you believe your knowledge of minute anatomy is sufficient to fit you for an examiner? C, we might challenge to prove that he ever had any knowledge of anatomy, or ever pretended to have. We might thus go on: we might ask one, whether he ever proved his fitness to teach Surgery, by tying one of the brachial nerves for the subclavian artery; another, whether he ever cut away a piece of healthy intestine, in the operation for hernia: another, whether he ever forced a lithotrity instrument into the abdomen, or mistook aneurism for abscess, and plunged a lancet into it. And so we might go on, till society should stand aghast at the [illegible] attainments of the men monopolizing the high places and emoluments of our profession. But I forbear. I have said sufficient for my purpose; and they are safe from me, as long as the most densely-pated members abstain from meddling, and do not put themselves more prominently forwards, by intriguing against those fellows who are not as they are—hospital surgeons. For the present, these, I say, *pace quiescant*—and remind those that are fellows that they have an opportunity, if they choose to make use of their privilege, of redressing the wrongs of those who have hitherto been aggrieved by the Council. The influence of the Council is great, but it is the fellows' duty to lessen it. The Council cannot object. They have nothing to urge against Sir Stephen Hammick, Mr. Gossett, Mr. Kingdon, Mr. Macilwain, or Mr. Lloyd—men who were nominated at the meeting, and whom the Council have, as yet, refused to elect, though they are senior, and equal in reputation, to many who have already seats there. The Council cannot object to me, that they wish the first men in the profession to be on the Council, unless they first vote out those who have long forgotten their anatomy, and those who never pretended to any knowledge. They cannot object, while they do not put forward better men than those whose claims are, the authorship of works on bandages, or the inheritance of books on diseased joints,—hospital surgeons, and respectable though they be. By the New Charter, then, an important principle has been gained. However scanty, it is still a measure of reform; and however slow, it is progressive improvement. Let us take, then what is good, and purge ourselves of that which is bad;—let us still press on, and not budge an inch, till all we require is gained. Let those who are made fellows use the advantage they have gained for the interests of all. Let the members, on the other hand, stand by the fellows, and it will not require any vast foresight to predict, that the Medical Profession will soon have the guidance of their affairs entirely in their own hands.

Your's obediently,
CHIRURGUS.

August 14, 1844.

[We have just three remarks to make on this communication:—1. We should have liked it better, if less severe in meaning, and more prepared in style.—2. The writer owes Mr. Yearsley a handsome apology for the company he has connected him with.—3. Mr. Welbank, though not an hospital surgeon, owes his election to hospital surgeons. Messrs. Lawrence and Stanley proposed and seconded him—so that, in truth, the Councillors of St. Bartholomew's, St. George's, and the London, carried their own men. We must add a further remark. The letter smacks strongly of the spirit of intrigue; and paints vividly the self-punishments likely to arise from the miserable system of electionering introduced by the New Charter.—Ed.]

ACCURATE TEACHING.

To the Editor of the "Medical Times."

Sir.—Though I am averse to unnecessary controversy, I cannot help noticing and correcting the errors, which are contained in the last week's leading article of a contemporary in reference to the German Universities, and their examinations and degrees, &c. I should feel extremely sorry to allow these (most likely, unintentional,) falsehoods to pass uncontradicted, and I hope, therefore, you will have the kindness to insert these few lines in reply. First, it is to be observed, that the "Germany." spoken of, only refers to Prussia, whilst the other German states as Austria, Bavaria, Baden, &c., are taken no notice of, though they form three parts of the German population, for the subdivision of surgeons into those of the first, second and third class, is only known in Prussia. "In Germany there are Doctors in Surgery, and the degree of doctor is generally taken by those who have received a good education, and intend to practise as surgeons. The Doctors in Surgery, however, are principally confined to large towns, and in smaller localities the practice of surgery is thrown into the hands of the Doctors of Medicine and Surgery (general practitioners.)" This is completly false as to Germany; for, in Germany, there are only two classes of medical men: the first are the physicians who must be Doctors of Medicine, Surgery, and Midwifery, whether they exercise only one branch in large towns (as midwifery, or surgery, or physic,) or all those branches in little towns or villages. They occupy perfectly the same ranks, have passed the same examinations, and are qualified to be elected for the same offices. Doctors of Surgery alone are not known in Germany generally, for several years past. Thus the physician, or surgeon, in a large town has no higher rank than the general practitioner in the country, who has taken the degree of doctor. The *second* class of medical men are those who have taken no degree of doctor, and have consequently not passed through the same studies. It is to be observed, that in Baden, for instance, the degree of doctor is not necessary for practising, it is sufficient to have passed the examination preceding the grant of the diploma.

We are again told that the title of doctor in every part of Germany, with the exception of Bavaria, is merely honorary. It does not confer a right to practise (a mistake, for it does in some states, as Hesse), and is no guarantee whatever of medical knowledge, being granted after a merely nominal examination. I wish the writer of this article had read the letter of Professor Tiedemann, which appeared last week in your journal, and he would have saved me the trouble of denying such an absurdity as the "nominal examination." I need not repeat the great Tiedemann's assertion as to the severity of the examination in writing and *viva voce*, which must first be passed to the satisfaction of the whole faculty, before the degree of doctor is granted. The same takes place in the University of Bavaria, Hesse-Darmstadt, Wurtemberg, Saxony, Prussia, &c.

Error the third—"The clinical studies of the student are indeed everywhere exceedingly defective." The writer of the article does not compare the German clinique to the English, and I will make no comparison either; but allow me to detail the manner in which the clinical studies are conducted in Heidelberg, and your readers will then judge whether they really are so "exceedingly defective." After having attended all the preliminary courses, as anatomy, chemistry, physiology, pathology, therapeutics, midwifery, materia medica, &c., the student is inscribed in the clinique as *auscultant*, that is hearer, he takes no other part in the clinique, but to listen and observe. After having been "auscultant" for one session or two, he is inscribed as "practicant," and then the following method is adopted in all three cliniques medical, surgical, or obstetrical. For every new case the name of a practicant is called out by the assistant, and the practicant steps up to the patient, examines his pulse, and asks all such questions as may lead him to form a sound diagnosis. Neither professor nor fellow student interfere. It is well known, that the manner in which the medical man tries to elicit the symptoms from the patient, is one of the greatest tests of his skill in diagnosticating Thus, if the student has finished his examination of the patient without having asked all necessary questions, for the determination af a fixed diagnosis, the professor supplies the want by putting a few more questions. This finished, the professor asks the practicant, what diagnosis he formed. And, be it observed here, that the professor is never satisfied with the name of the disease, even if correct; but he asks the student why do you consider this to be the disease? what particular symptoms lead you to this belief? why can it not be such a disease, which has some similar symptoms?—what are all the symptoms of the disease named?—do you find them all in this case? Sometimes it happens (I particularly speak now, for example's sake, of Professor Puchelt's

medical elinique, though those of Professors Chelius and Naegele are eonducted in the same manner) that the professor proves to the student, in a catechetieal way, that it cannot be the disease named by the student. Then the student of course mentions another disease. The professor again asks what are the symptoms of this disease? When the student enumerates them, he is soon directed by the professor's questions to such essential symptoms which are not found in the patient. After three or four more guesses, all cateehetically proved to be incorrect, the professor generally leads him by his questions towards the diagnosis he has formed himself; or, he says amidst his students: we cannot know now what it is, let us use an expectant method of treatment: by to-morrow the symptoms will appear more prominent, and we shall decide; and generally the next day the diagnosis is fixed. Many countless dissections have proved the wonderful perspicacity and deep judgment of the modest Professor Puchelt, who does not seem to be a physician among his assistants, but a colleague, endeavouring to investigate the disease with his colleagues. The diagnosis fixed, the pupil is asked, what remedy he would employ; this leads to the sifting of the pupil's knowledge in materia medica, chemistry, &c., for he is always asked why do you give this remedy?—what are its effects?—how is it prepared? what must be avoided with it? If all this is settled, then the pupil must write the prescription; and here again must show his skill, and blunders cause very disagreeable embarrassments before all his comrades. Thus the student continues, under the eyes of the professor, to treat the patient till he is cured or dead. Every day he must give his report; every day he is liable to be examined in anything referring to that disease. Thus every patient is consigned to a practicant by turns. Now, Sir, do you think that method so "exceedingly defective," according to which the student must practise a year or two under the strictest scrutiny, being obliged to account for the smallest symptom—for the most minute act that influences the patient? After having been practicant for a year or two, the student enters the policlinique, that is to say, he treats the poor of the town, reports constantly to the professor, and calls him in in severe cases. The article in question concludes as follows:—"Defective as the state of the medical profession is in Great Britain, there is certainly but little we can envy our German brethren." It is certainly flattering for the English physicians to see the state of medicine in England considered rather better than in Germany. But though I love England, with her free institutions, I boldly assert that there ought to be some restraint in conducting the scientific education, particularly of medical men, on whose skill and judgment so often the life of their fellow-creatures depend. And knowing the impartiality of the English character, I, though a foreigner, enjoying the kind and unequalled hospitality of England, unhesitatingly assert that the above described "exceedingly defective" clinical studies, if imitated in England, would greatly tend to the benefit of the medical profession, and of the public. Notwithstanding the high esteem which the British physicians and surgeons justly enjoy, I think every good example ought to be followed, without considering the locality where it is exercised. Begging your indulgence for the length of this letter,

I remain, Sir, your most obdt. servant,

SIGISMUND SUTRO, M.D.

17, Beaufort-buildings, Strand, August 14.

MICROSCOPIC EXAMINATION OF THE MILK.—Recent inquiries have shewn that human milk, under the microscope, shews globules of three different sizes, to wit, the large, the medium, and the small globules. None of these are found in this fluid to the complete exclusion of the others. The first variety is the most nutritive, and the others in proportion to the size of the globules. Milks differ not only in respect of the size of the globules, but also of their abundance; a high or low amount of globules indicates richness or poorness of the milk generally. A microscopic examination of this fluid will therefore enable the medical attendant readily to determine on the fitness of the wet nurse for her duties.

POOR LAW MEDICAL REFORM.

To the Editor of the "Medical Times."

SIR—As a subscriber to your valuable journal, may I request that you will give admission to the accompanying statement as illustrative of some of the very great grievances under which Union Surgeons labour. Hoping that you may long remain as at present, the untiring and undaunted advocate of that basely treated portion of the Medical Profession,

I remain, Sir, your grateful Servant,

HENRY C. DESHON, M.R.C.S. &c.

A STATEMENT RELATIVE TO THE CASE OF SAMUEL ROGERS, A PAUPER OF THE PARISH OF SHILLINGSTON, IN THE STURMINSTER UNION.

On the afternoon of Saturday, Aug. 3d, I was summoned by verbal message to attend Samuel Rogers, æt. twelve years, who had sustained a serious injury by a fall from a waggon. I immediately visited him, and found that he had fractured his thigh bone; this fracture I at once reduced, and put up on Liston's principle, with a long straight splint on the external side. I visited the boy on the three consecutive days, also on the Thursday following, making such slight alterations in the adjustment of my bandages, &c., as the case demanded. The patient having up to this time proceeded to my entire satisfaction, and from my having taken every proper precaution to insure a satisfactory issue, I conceived it unnecessary to see him again before Sunday, when I called upon him, and found that by his restlessness, and by his having improperly turned over on his fractured limb, he had altered by force the position of the superior part of the splint, thus bringing it on the anterior and external part of the limb. In consequence of having so unruly a patient, I now took the extraordinary precaution of sewing up the superior part of the splint in the end of the bandage, and left him under the full impression that by no means could he again alter my apparatus. To my great surprise, on the evening of the same day, I received a request, in writing, from the overseer of the parish to discontinue my attendance, as another surgeon had been called in. I lost no time in seeing this overseer, to know by whose authority he had acted, and he informed me that a Mr. Jacob (a Whig magistrate for the county, and ex officio guardian) had stated that the bone was improperly set, and had desired him to call in "a proper medical man." The remark of Mr. Jacob relative to my mal-practice, had been made, before the mother of the boy, on the same day. To rebut this unfounded assertion, and to relieve myself from the imputation thus thrown on my professional skill, I at once requested the opinion of two neighbouring surgeons on the case, one of whom attended on the following day, but found the door of the dwelling locked, and was refused admittance, or access to the patient, which also was denied to me at a later period of the same day. The mother of the boy, acting under Mr. Jacob's orders, was to refuse admission to myself and medical friends, and, if necessary, was to call in the aid of the parish constable to maintain such order. Mr. Good, the surgeon, now in attendance on the case, has admitted that he found the limb in a proper position, and the patient doing well, but that he was compelled by Mr. Jacob to take charge of the case; and he has since continued to do so. On the first meeting of the Board of Guardians, subsequent to these occurrences, I made personal application for an enquiry into, and explanation of, this most unjust and unfair behaviour, but was told that an *ex-parte* statement at present could not be entertained. Thus, then, I am in this individual instance, suspended in my capacity of parish surgeon, by incompetent authority, my professional character cruelly maligned, and all inquiry for the present denied me. [A gross case of highly illegal interference.—ED.]

OSTEO-SARCOMA OF THE UPPER-JAW.—Sir John Fife removed a tumor of the left side of the face by the usual operation on the 4th of last June, and the man was dismissed convalescent on the 1st of July.

PARISIAN INTELLIGENCE.

(FROM OUR OWN CORRESPONDENT.)

Paris, August 15, 1844.

On the Treatment of Syphilitic Diseases.—By Professor Chomel. The existence of hospitals destined solely for the treatment of these affections, causes them to be seldom met with elsewhere; and the known talent of the physicians and surgeons of these establishments, renders it superfluous for me to occupy your attention with a general description. There is, however, a part of the treatment in which I differ with these practitioners, and I take advantage of the presence of two patients, now in my wards, to explain my ideas to you on this subject. At No. 7, Salle St. Bernard, is a woman affected with the primitive, and at No. 4, Salle St. Agnes, a man, with the secondary, symptoms of syphilis. The former, aged 27, experienced, two or three months ago, a considerable discharge per vaginam, but no scalding or pain in passing her water, nor heat in the parts. A few days after its appearance, she remarked the presence of flat pustulæ on the vulva and especially on the labia majora, which increased very slowly in size. On her entry, a great number of the pustulæ (an erroneus term, for they are not pustulæ, since they do not contain pus, and that of flat or mucous tubercles would be far more appropriate) still existed, and were disseminated on the labia and the upper part of the thighs. By an attentive examination, I discovered, moreover, a small ulceration on the external edge of the mucous membrane, which, though it did not present the characteristic signs of chancre, was, in all probability, one on the point of cicatrizing: the lymphatic ganglions in the groin slightly swollen and hard, but not painful on pressure; mucous membrane covering the pharynx and velum palati somewhat redder than normal, and offering an uneven surface, but no ulcerations. These last phenomena disappeared promptly by means of gargles and emollient tisannes, and it was only then that I commenced an antisyphilitic treatment, composed of lotions, hip baths, and pills containing the deuto-chloruret. hydrargyri. Under the influence of this treatment, though three weeks only have elapsed, there is an evident amelioration; the pustules have decreased; the small ulceration on the vulva is almost healed; the fauces present only a small excoriation, apparently syphilitic, as its base is of a greyish colour. In the generality of cases, I think the disorder ought to be combatted rather by a general, than a local, treatment; a great number of distinguished practitioners, and among them I may quote Ant. Dubois, never make use of any local remedies.

The man, from whom it was impossible to obtain any satisfactory information as to the mode in which the disease commenced, presented on his body and face characteristic spots. He asserted that he never was affected with syphilis, but he offered, at his entry, a considerable *engorgement* of one of his testicles, and, on the glans penis, recent cicatrices of chancres. In women, it is not at all impossible that chancres may exist in the vagina, and get well without their being aware of their presence; but in men, this may be considered as impossible. The patient, whether from natural stupidity, or from the wish to deceive me, affirmed that he had never been affected with syphilis, and even that he experienced nothing abnormal in the urethra; this, however, proved false, for, on examination, I discovered the existence of an abundant purulent discharge. In this and similar cases, a physician is obliged, from the want of the necessary information, to act upon his own judgement; consequently, the patient was made to undergo a mercurial course; three weeks have now elapsed: the spots have become paler, and, in all probability, will gradually disappear.

The treatment of the primitive accidents has been a source of dissention among physicians; and this still exists, notwithstanding the progress made of late days in medicine. Among the patients submitted to a mercurial course, some became affected with secondary symptoms: this was attributed to the non-absorption of the mercury; salivation was consequently considered as favorable,

inasmuch as it was a proof that the remedy acted on the whole system. Other practitioners, on the contrary, consider this phenomenon as injurious, from the pain, swelling, and restlessness it occasions; another inconvenience, resulting from it, is the betrayal of the disease, and the obligation the physician is under, of ceasing to administer it—a circumstance which not only retards the cure, but likewise favours the development of secondary symptoms. When these last appeared in an individual who had followed a course of mercury, they were attributed to the imperfect manner in which this substance was administered. To obviate this, what preparation ought to be employed? This question is not easily answered; some authors recommend mercurial frictions; some calomel, which is rejected by others on account of its purgative properties; some the oxymuriate of mercury, whilst others affirm that it may give rise to serious accidents. Thus you see, opinions are far from being fixed on this point, and it must be admitted, that these dissidences are well founded, since secondary accidents have been remarked after all. Of late, it has been stated, that the treatment should be local against the primitive affection, and general only when the secondary symptoms have appeared. This opinion might be considered as correct, if the primitive accidents, no matter what the treatment employed, always gave rise to secondary symptoms; but if, in ten individuals affected with lues venerea, one only experienced the latter after a mercurial course, and, on the contrary, two in the same number shewed them when no mercury had been administered, evidently it is the duty of the physician to prescribe that substance. If a person, affected with syphilis, follows a regular course, and is radically cured, he need not fear transmitting the disorder to his children; on the contrary, if the cure is incomplete, there is every probability of its being hereditary.

The conclusion to be drawn from the preceding, is, that you must endeavour to ascertain if fewer patients are affected with secondary symptoms, when mercury has been properly administered, than otherwise. But, how long ought it to be continued to obtain a radical cure? Dupuytren said, that, in the generality of cases, six weeks were not enough; that the length of treatment, and the dose of the mercurial, ought to be subservient to the time the disease had lasted. For my part, I have been led from experience to conclude, that, when the primitive symptoms have disappeared with rapidity, the cure ought not to be considered as radical, even should the treatment have lasted twice as long as the disorder, ere its being commenced;—that, in order to neutralize the virus completely, the only certain mode is to give the mercury in small doses, for a considerable length of time. I have, in consequence, adopted long since, as a general rule, the practice of administering mercury for five or six months, even in cases in which only primitive accidents existed. But, instead of giving it in large doses, as this produces salivation and necessitates its cessation for a time,—a circumstance not without danger, I prescribe it in small doses, in order to be able to do so as long as I think advisable, this being the first element of success in the cure. By following this method, I have never seen a person, to whom mercury was given for five or six months, in such doses that neither the digestive organs nor the buccal mucous membrane were affected, present secondary symptoms. It is true, that this method is not without inconvenience in hospital practice,—as to private practice, this does not exist,—on account of the time it requires, and the expence it occasions to the public establishments; this may, however, be partly remedied by making these individuals out-patients. To resume: when a patient presents primitive symptoms of syphilis, the following is the treatment I have adopted. I begin by prescribing, morning and evening, a pill containing deuto-chlorureti hydrargyri. gr. 1-6th; increasing the dose every fortnight, by adding another 1-6th, until the patient takes 2-3rds of a grain, which I never go beyond. It is thus, that I have constantly preserved my patients from secondary accidents, so frequent when the ordinary method is employed. This is so common, that Dr. Ricord has given up administering mercury to patients affected with primitive symptoms.

As to the treatment of secondary accidents, it varies according to circumstances. Thus, if the patient has already taken a great deal of mercury, and is, as it were, saturated with it, you must have recourse to the *rob. de Laffecteur*, the *tisanne de Feltz*, *d'Arnould*, &c.,* and the result obtained, merely by the change, is sometimes miraculous. Of late, a new substance has been highly lauded in the treatment of this disease, I mean the ioduret of potassium, and which, when mercury fails, may be given with *very* great advantage. I witnessed the case, among numerous others which I could quote, of a patient, affected with syphilis for upwards of twenty years, who suffered from intense cephalalgia, and on whom tumours of the periosteum had commenced. These accidents, though mercury had failed, disappeared in the space of fifteen or twenty days, when the ioduret of potassium was administered, and a radical cure was obtained by its continuance some time longer. Therefore, when secondary accidents appear, such as osteocopus, tumours of the periosteum, and such like, instead of ordering the foregoing tisannes, often taken with repugnance, prescribe the ioduret. I never give it, however, unless the patient has previously taken mercury, nor do I approve uniting the two under the form of ioduret of mercury; on the contrary, I think that the *deuto-chloruretum hydrargyri* must first be had recourse to, and subsequently the *ioduretum potassii*. This is the mode I have adopted in the treatment of syphilitic diseases, and I have found it so constantly successful, that I do not hesitate advising you to employ it, on all similar occasions.

On Ranula.—The following case, among many others, is a proof of the advantages presented by the operation proposed by Dr. Jobert de Lamballe, for the radical cure of this infirmity. In a preceding number (v. *Med. Times*, vol. 8, p. 376,) an analysis of a memoir presented by this distinguished surgeon to the Academy of Sciences having been given, I purpose relating in a succinct manner the present case, so as to complete the details there to be found, and to which I beg leave to refer your readers:—Case. S. ——, ætat. 36, entered St. Louis, to be treated for ranula. In 1842, he had been operated on for a similar tumour, and, after having been opened, the wound was prevented closing by means of a bit of lead placed between its lips; this succeeded so far, that, for two years, the cure appeared to be radical. Six weeks ago, it re-appeared and increased rapidly, so as to occupy the space comprised between the second right incisor, and the third left molar, tooth; it is of the size of an almond; it rises above the lower teeth, pushing the tongue upwards, and though it does not prevent deglutition, still mastication, and especially speech, is considerably impeded. The mucous membrane, slightly thickened, is transparent; on its internal edge, behind the incisors, two triangular mucous folds, converging towards the frænum linguæ, are to be seen (they are the orifices of the Wharthonian canal); submaxillary region painful and somewhat swoln, and, on pressing this part, the tumour becomes tense.—*Operation.* It may be divided into three stages. 1° The tongue having been raised by an assistant, the buccal mucous membrane was carefully divided, so as to expose a circular portion of the external surface of the walls of the tumour, and then excised. 2° The bistoury was plunged into the kyst, and a portion of its anterior wall removed; this permitted a thick, viscous, colourless liquid to escape, and the mucous membrane lining the kyst, of a pale rose colour, to be seen. 3° As soon as the tumour had emptied itself, the sides of the wound were inverted, and attached to the mucous membrane lining the mouth by six sutures. The immediate results were: fever, tumefaction, and pain in the sub-maxillary region; mouth dry and parched; thirst; fauces slightly inflamed. These phenomena soon yielded, and nine days after the operation, the patient left the hospital quite well. The orifice of the Wharthonian canal presented a large opening; the flow of saliva was easy; and, from the fact of the cicatrization of the exterior surface of the walls of the kyst when inverted, relapse is rendered impossible. The only inconveniences presented by this method, are: the dexterity requisite in performing it, and the fall of the sutures ere the union of the parts has taken place; these, however, may be overcome:—the former by practice, the second by increasing the number of sutures.

Apparatus for the Radical Cure of Exomphalos.—Professor Trousseau recommends, in the treatment of this disease, an apparatus, composed of a graduated compress, and a band of sticking plaister, three-fourths of an inch in breadth, and from six to ten feet in length. To apply it, the child must be held by two assistants in the air, and the hernia having been reduced, the compress must be placed on the umbilicus, and the band made to encircle the abdomen from six to eight times. Care must be taken to tighten it sufficiently, because the child, during the application, by its cries, causes the abdomen to increase in size, and, as it decreases as soon as the child is quiet, the band would be too slack, if not put on somewhat tighter at first. The only inconvenience, produced by this operation, is a slight difficulty in breathing, which does not, however, last long; the apparatus may remain untouched for eight or ten days, but Professor Trousseau, in general, changes it every week. Two applications are sufficient to obtain a cure, if the hernia is small, and the child healthy and strong; on the contrary, weak and sickly children need four, and even six, applications; finally, should this apparatus fail, astringent powders may perhaps be advantageously added to the graduated compress, to hasten the contraction of the abdominal ring.—This method, as may be seen by an article published in the *Medical Times* (vol. 9, p. 108), is the same as that recommended by Dr. de Balestrier, the only difference being that, instead of a bit of wax, graduated compresses are employed.

Hygroma, or Tumours of the Bursæ Mucosæ.—Different modes of treatment have of late been proposed for the radical cure of this affection, described, though somewhat vaguely, by Hippocrates; with more precision, by Celsus and Galen; and still more so, by Ambrose Paré, under the denomination of *ganglion*. The cause of the disease was, however, unknown, before Eller, who, in 1746, (*exposition anatomique de l'origine et dela formation du ganglion*, in the Mem. of the Royal Academy of Sciences of Berlin) expresses himself thus: "These membranous sacs would be embarrassing, rather than useful, to the tendons, did they not secrete a viscous liquid, which, in lubricating the tendons and the anterior surface of the sac, causes the parts to glide with readiness on each other, and facilitates the movements of the tendon." It is the accumulation of this liquid, after distending the sac, or in the surrounding cellular tissue after having ruptured it, that forms the disease; such is the theory of Eller, whose memoir is quoted at length by Dr. Marchal (de Calvi.) But to return to the treatment: a distinguished military surgeon, M. Barthelemy, recommends the sub-cutaneous section, by means of an appropriate *tenotome;* Professor Velpeau thinks that relapses may take place after this method, and prefers the iodine injection; Professor A. Berard, who tried this last several times at the *Pitié*, says it frequently fails; Professor Gerdy employs the sub-cutaneous puncture; and Professor Bresehet, a simple incision. Surgical operations are, however, not the only means by which this affection can be cured; pressure, frictions, temporary blisters, &c., have succeeded; Dr. Miehon has lately cured one by compresses imbibed with a strong solution

---

* *Rob de Laffecteur.*—(v. *Medical Times*, vol. 10, p. 174.)

Tisanne de Feltz.—℞. Sarsapar. radic. ʒij; iehthyocoll. ʒiiss; sulphuret. antimon. ʒiij; aquæ lb.iv; reduce to lb.ij. To be taken during the day.

Tisanne d' Arnould. — ℞. Sulphuret. antim. ʒxiiss; sarsaparill. rad. ʒij; lign. guaiac., cort. bux. sempervir., cort. daph. gnid., aa. ʒij, aquæ puræ lb.iij; reduce to lb.ij, and filter. To be taken daily.

hydrochlorate of ammonia,—a method lauded by several surgeons, and principally by Monteggia; and Dr. Baudens, another, by frictions with an ointment, contaiuing hydriodate of potass, though a surgical operation had failed. Finally, the method proposed by Professor A. Berard, to prevent consecutive inflammation, may be advantageous in cases, where, from the size of the tumour, the operation is indispensable. In a case, published by this practitioner (*Arch. Gen. de Med.*, 1825), a cyst, situated between the tendons of the flexors of the fingers, just above the annular ligament of the wrist, was opened by him: its anterior wall removed, a pledget of lint introduced between the edges of the wound to prevent their cicatrizing too promptly, and, finally, the parts were subjected to constant irrigation for six days, and, during five more, cold applications were made. No accident whatever followed. Cicatrization was soon perfect, and the movements were in nowise prevented.

Academy of Sciences. Sitting of the 12th August.—M. Elie de Beaumont, V.P., in the Chair.

On the Absorption of certain Substances, and the Modifications which they undergo.—Memoir by MM. Laveran and Millon, read by the latter.—In these researches, the following substances were administered by the authors: tartras potassæ et sodæ, 268 times; sulphas sodæ, 15; sulphur, 4; and salicine, 10; they were sought for, *exclusively*, in the urine. Tartras potassæ et sodæ: dose ʒj. to ʒxiiss. Of the 268 cases:—in 175 the urine was more or less alcaline, in 87 it was acid, and in 6 neutral. The alcalinity is easily ascertained by normal sulphuric acid (that employed by M. Gay-Lussac, in his experiments and analyses of soda and potass); the urine, emitted during 24 hours, must be collected and weighed: about ʒiv. must be taken and coloured by the tincture of the lichen roccella, after which sulphuric acid is added, drop by drop, until the liquid from blue becomes red. In order to discover if the urine be neutral or acid, or whether the soda is rejected, or combined with tartaric, or any other organic, acid, a given quantity of urine must be evaporated to dryness, calcined, and the charcoal burnt in the air; in this case, the difficulty of destroying the carbonaceous matter is in a direct ratio with the quantity of alcaline carbonates; to hasten the calcination, when it is somewhat advanced, dry chlorate of potass may be added, by which the residue is turned white: it must, however, not be omitted to calculate the proportions of chloride of potassium. In these researches, after calcination, the authors discovered:—1° That the quantity of alcaline, or earthy, carbonate, obtained from lb.ij. of normal urine, saturated from 15° to 26° of the alcalimeter;—2° that the proportion of alcali is not increased in neutral or acid urine;—3° that the urine, rendered alcaline by the administration of the tartrate, indicated an increase of from 15° to 25° of the alcalimeter;—4° that the soda was rejected, not combined with tartaric, but with carbonic, acid.—When the salt is given in large doses (from ʒviij. to ʒxiiss.), it acts principally on the intestinal tube; vomitings are not frequent, but there are always several liquid stools; on the contrary, when given in small doses, so that the quantity be taken in eight or ten hours, purgation is the exception, alcaline urine the rule; in the former, there is indigestion: in the latter, assimilation and absorption; in the one case, it is a remedy: in the other, an aliment. The stronger the patient, the greater the disposition to assimilation; habitual constipation, and that caused by a cerebral or spinal affection, favours absorption; whereas, persons suffering from diarrhœa, or fever, present a contrary disposition, the urine remaining acid; but, even here, it is not impossible, by employing certain precautions, to render it alcaline; for, in giving the salt in very small doses, the first day it remains acid; but, by continuing the remedy from day to day, the alcalinity gradually increases; certain anomalies, however, may exist: thus, a man, affected with pneumonia, assimilated ʒj. at a single dose.—Having ascertained that the tartrate was converted into carbonate, the authors next proceeded to study its effects in a therapeutical point of view, and, consequently, administered it in pneumonia and acute rheumatismus, with the idea that, when absorbed, it might diminish the plasticity of the blood; but, on analysis, no change was perceptible in this fluid, though the urea was found to have increased in quantity. The tartrate was likewise given in other cases:—1° To a patient affected with monomania, debilitated, emitting from lb.vj. to lb.viij. of urine per diem:—density less than in the normal state: depositing, on cooling, a notable quantity of carbonate of lime, which was increased by ebullition: urea in very minute proportions; the tartrate, administered so as to be absorbed, restored the urine to its normal condition, but had, as may be supposed, no effect on the monomania.—2° To another, affected with albuminuria (Bright's disease), on administering the tartrate, the albumine decreased: the urine became normal; the amelioration was, however, but temporary, for the organic lesion persisted, and ultimately carried off the patient.—3° On several phthisical persons, it had a sedative effect on the circulation, for the pulse descended from 90 to 40 in a minute, and was kept thus upwards of a fortnight.—4° It may likewise be given in affections in which the urine contains a considerable quantity of uric acid, a circumstance very frequent in individuals affected with calculus or gravel.—*Sulphas Sodæ.* The result was, in all respects, the same as in the preceding researches; in strong and healthy persons, large quantities of the salt were found in the urine, but, if weak, none whatever was met with.—*Sulphur* gave negative results in four cases, in which the urine was analysed after its administration.—*Salicine:* it passed under the form of hydruret of salicine, or salicitic acid.—*Nota.* It is to be regretted that the authors did not analyse the other secretions of the economy, instead of confining their researches *exclusively* to the urine.

On a New Organic Alcali.—Amarine: by M. Laurent.—This alcali, obtained by adding ammonia to the essence of bitter almonds (oxide of benzine), is colourless; crystallizes in needles with six sides; insoluble in water, soluble in alcohol; volatilizes undecomposed; formula:—

$$C^{84}\ H^{36}\ Az.^{4}$$

Chloruret of amarine is composed of an atom of the base and one of the acid; formula:—

$$H^{2}\ C^{2},\ C^{84}\ H^{36}\ Az.^{4}$$

On adding chloruret of platina to chloruret of amarine, yellow crystals of chlorurctted platinico-amarine are obtained; formula:—

$$H^{2}\ C^{2},\ C^{84}\ H^{36}\ Az.^{4} + C^{4}\ Pl.$$

In this case, the azote of the ammonia is not (as in *amiline*) a component part of the *amarine*, under the form of an *amide*; the formula is, therefore:—

$$\underbrace{(C^{84}H^{36}+O_{6})}_{\text{Oxide of benzine.}}+H^{12}Az.^{4}=\underbrace{(C^{84}H^{36}+Az.^{4})}_{\text{Amarine.}}+H^{12}O_{6}$$

Facts illustrative of the History of Phosphorus, by M. Alph. Du Pasquier, of Lyons.—The author studies: 1° the coloration of phosphorus by arsenic; 2° the means by which the arsenic may be separated from the phosphorus; 3° the best method to preserve phosphorus in water; 4° the phosphorescence of the water in which phosphorus has been kept; 5° the action of phosphorus on solutions of arsenious, arsenic and chromic, acids; 6° the precipitates, whether crystalline or pulverulent, or in a mass with metallic brilliancy, of several metals by phosphorus, and the imperfect decomposition of certain metallic salts by the same substance.

Academy of Medicine.—Sitting of the 13th Augt.—M. Ferrus in the chair. The proceedings of the former sitting, after some remarks from Dr. Desportes and M. Dupuy, were adopted.

The president informed the Academy of the death of Dr. Daumatz, of Metz, corresponding member.

Critical Examination of Vitalism, by Dr. Virey, M.A.M. According to several modern physiologists, *nature is a unity*; the *physico-chemical sciences* are so intimately united with the physiological, that they suffice to explain all the phenomena of life and organization. In their opinion, *matter is all-in-all*; the different telluric materials possess intrinsically the scattered vital forces. This is the system of the German pantheists, and the hypothesis of the *monades* of Leibnitz, subsequently revived and developed by Spinosa, and, lately, under different forms, by Schelling, Lamark, Cabanis, &c. But all kinds of matter are not susceptible of life; this never takes place in minerals, granite, silica, and still less in arsenic, copper, and other metals; and then inorganic matter, which, according to Kant, possesses in itself the power by which it exists, crystallizes, but is never organized. On the contrary, the only organizable bodies are combustible, such as carbon, nitrogen, hydrogen, &c. Thus, organization is the harmonious aggregation of elements in a state of equilibrium, united in a *common centre*, so as to form the individual, with a tendency to absorb and assimilate analogous substances, and also to preserve the species and propagate it by generation.

Life is *movement*:—organization is the *instrument*. The former may be destroyed in the ovum, or in the seed, by cold, by drought; consequently, the different elements have no life in themselves, but only from their mutual action on each other, during their temporary association. There are, then, two great divisions in Nature: the *mineral*, which can exist anterior to all organization, and which cannot undergo putrefaction, even when decomposed; and the *organic* (animal and vegetable), produced by generation, sustained by assimilation, and creating similar species ere they die. As to the mineral substances which form part of the frame of organized beings, they do not possess life, though they partake of the movement of the body into whose composition they enter.

The learned Academician next proceeds to shew:—that the principal physiological systems cannot explain the phenomena of organization, according to the Hallerian *irritability* or *vis insita*, the Brownonian *excitability*, the *vital properties* of Bichat and others, or the *chimie vivante* of moderns; on the contrary, chemistry destroys the organization of the blood, the milk, the semen, &c., whilst life preserves them from decomposition;—that the harmony of the various parts, in animals especially, is inexplicable by, and incompatible with, the opinion of spontaneous generation, even in the mosses or infusoriæ. The microscope, which has enabled us to discover the ova, the germs, of the minutest being, proves that nought can emanate from decomposition or by chance. Instinct, sexual intercourse, the disposition offered by the pollen and the sperm, so as to be received by certain species alone, &c., prevent all *bastard productions*, and shew the marvellous decrees which govern life. From this it may be concluded, that life is an active and essentially intelligent cause, deprived of intellectual powers. It seeks to establish the equilibrium destroyed by disease, and to complete imperfect individuals: that is to say, to restore amputated limbs in the lower orders of animals. Whence, that *internal despotism*, supposed by Hippocrates, and ancient philosophers, as presiding over the functions of the economy;—finally, it may be affirmed that there is an active force in organic beings which, aided by surrounding bodies—air, water, caloric, light—are made to harmonize with the diurnal and annual movements of our planet, so as to set limits to the existence of living beings, whether animal or vegetable.—Dr. Rochoux: Our honourable colleague announced that he would accept with pleasure the criticism of his memoir: I, for one, will do my utmost to satisfy him in that respect. Let us leave the pantheism of the Germans to those who think themselves capable of understanding it; and the atomistic system of Leibnitz, which is but a debased epicurism, as unworthy our attention; and return sincerely to the atomism of Epicure, as it alone can solve the difficulties with which Dr. Virey thinks to crush the unitarians. It is sufficient, in order to shew the exactitude of their system, to call to mind that the atom exists, possesses from its creation an activity, a shape, and a solidity, which remain invariably the same. Indivisibility or solidity is proved by the limits at which chemical decomposition is stopped, and produces new compounds; the shape of the atom is shewn by the existence of shape in all that we see around us, and which could not be, if it did not exist in the element. With these three properties, it is easy to indicate how, as the combinations of the atoms become more and more complicated, the compounds or aggregations develop faculties more and more elevated, without

having recourse to an active force independent of matter. For, since, Dr. V. himself admits that elements, void of reason, can form regular crystals in the salts, it is just as easy to recognize that other combinations may produce mouldiness, a mushroom, a flower, and, in fine, all the animals of the higher orders. From this it may be concluded:—that no distinction exists between the organic and inorganic kingdoms;—that chance cannot be present in the production of phenomena which are governed by invariable rules;—and, finally, that the facts of the inertia of matter, cited by Dr. V., as the seed which remains a considerable length of time in the earth without germinating, are cases of equilibrium, where, from the influence of contrary forces, an apparent repose is produced, but which, in reality, constitutes incessant action.—Dr. Virey: Dr. Rochoux has not replied to the principal object of my memoir, viz.: whether certain substances are incapable of organization, arsenic, for instance; my learned colleague says nothing relative to the distinction I established, between bodies susceptible of being organized and those which are not.—Dr. Rochoux: No one ever advanced that inanimate objects could maintain a discussion; but what I affirm is, that, by the reunion of insensible bodies, a sensitive one may be produced. Sulphur and oxygen, when combined, give rise to a compound which offers peculiar properties, and in nowise those of its primitive elements.—Dr. Virey: But this has nothing to do with life.—Dr. Rochoux: Doubtless; but carry further the combinations, and you will obtain more complicated phenomena. In conclusion, I think that there is but one division in Nature, and that life is the result of certain of its combinations.—Professor Royer Collard: It is not my intention to discuss the systems of Leibnitz or Epicure, it being generally admitted, that cosmogony should not form part of the physiological sciences. An important question contained in the memoir just read—how far physico-chemical phenomena are productive of those which constitute life?—is erroneously solved, when the author affirms that it is impossible, by the physico-chemical doctrine, to explain the organism; for it seems to me, that other objections may be made. No one, in the present day, asserts that a mineral lives, nor that organised bodies, differently formed, do not vary in their modes of action; but, on the other hand, it is certain, that, with the help of chemistry, organic substances may be formed; for have not urea and the allantoid liquid been thus composed? It is true they are not endowed with life; but they are not less organized matter. Whoever employs a theory in an absolute sense, exposes himself to the objections he makes against other theories; and, in the physico-chemical hypothesis, there are many quite as erroneous as those emitted by vitalists. As to what has been said, that no organic matter is the result of chance, and that spontaneous generation does not exist, I reply that nothing in nature is produced by accident; all is subservient to certain laws; however, it has been proved by numerous experiments, and principally by those of M. Edwards, that organized matter may form certain combinations, so as to give rise to new compounds. Vitalists are, therefore, in the wrong, when they employ arguments similar to those made by spiritualists against materialists. They are in the right, when they state that an inorganic body will never be endowed with life; but are mistaken when they assert that it is the result of the combination of organized matter: since life is produced by a spiritual principle,—the soul. The more you retrench from matter to give to life, the more you take from the divine portion of our frame. The soul is sufficient to enable me to explain, not organization, but the intelligence which presides over, and is independent of, matter. To resume: I think the following objections may be made to the memoir of our honorable colleague:—1° the arguments, therein, are made against doctrines which no one actually supports;—2° vitalists emit an hypothesis against the hypothesis they combat; and 3° that the imputation of pantheism, addressed by those who believe in a doctrine by which chemical action has the power of giving life, cannot be maintained.—After a reply from Dr. Virey, who denies the possibility of forming normal urea, or organized beings, by chemical action, but admits that, by certain processes, various modifications may be produced in the organism; and some remarks from Dr. Castel, who explains all the phenomena by means of two principles—sensibility and irritability—the discussion was closed.

On Artificial Anus. Dr. Dufresse read the details of two cases in which he operated, successfully, by the method proposed by Littré. (These cases will be given at length in my next).

On a New Mode of Administering different Substances.—M. Peune commenced reading a memoir on this subject, but was soon after interrupted by M. Delens, and the Academy, after a few remarks from MM. Merat and Adelon, decided that it should not be continued, but examined by a commission composed of MM. Boullay, Chevalier and Martin Solon.

Crural Hernia.—Dr. Josse read a memoir, on a case of strangulated crural hernia, with relapse after the operation.

Exanthemata.—M. Kunsfi read a memoir on this subject.

Garland de Beaumont, D.M.P.B.L., & S. &c
Honorary Physician to the Spanish Embassy.

PERISCOPE OF THE WEEK.

Gonorrheal orchitis.—[This and the eleven following articles comprise the principal contents of the two last numbers of the *Lancet.*]—Mr. Gay has found the exhibition of narcotics internally the most efficacious plan of treatment in that variety of orchitis, which is met with after the the fourth week of gonorrheal urethritis, and which is marked by the following symptoms:—general debility shown by unusual pallor of the face and mucous membranes; the skin covered with large drops of perspiration on slight exertion; quick pulse; furred tongue; high-colored urine, and constipation. The local symptoms set in with dull aching pain about the testicle and epidydimis, increased on pressure; and the formation of a dense tumour, generally in the most depending portion of the epidydimis, and circumscribed by its investing tunic. Inflammatory action commences in the part, and extends itself to the tissue of the testis; the whole swells, becomes more and more dense, and so acutely painful that the slightest touch can scarcely be borne. The vas deferens, cord, and scrotum, next become involved in one swollen, painful, mass, the veins of the latter tunic becoming exceedingly congested with dark blood. As the inflammatory action proceeds, so does the condensation of the tissues (first observed as a small hard tumor of the globus minor) extend upwards, involving in its progress the lowest portions of the testis and epidydimis, until, eventually, in extreme cases, the testis and epidydimis become one dense compact mass. This condition, Mr. Gay regards as an inflammation characterised by a low, or irritable, condition of the system at large, and the seminal tubules, in particular, and produced by sympathy, and not from succession or continuity of tissue. This latter is rarely met with, and has these important distinguishing features; it occurs only during the acute stage of gonorrhœal orchitis; the pain and inflammatory action spread from the urethra to the testis, not from the testis to the urethra, as in the sympathetic variety; the general symptoms are indicative of sthenic inflammation, and it does not yield to narcotics, but requires active blood-letting, and other antiphlogistic treatment. Mr. Gay feels assured that in the cases first described, the employment of opium, hyoscyamus, or other anodynes, from their power of allaying the general and local morbid irritability which exists, and plays so important a part in the production of this disease, will be found essential to their speedy and effective cure. He, at the same time, generally recommends the use of cold lotions as topical applications. and resting on the back with the hips raised. The early use of a mild, but thoroughly cleansing purgative, is also of great importance. This plan of treatment has been pursued by Mr. Gay in upwards of a hundred cases, of which he has carefully preserved notes, and in considerably more than an equal number of which he has no record. He was led to adopt it from experiencing the comparative inefficacy of the antiphlogistic treatment in these cases.

Hydro-pneumo-thorax.—Mr. Barlow narrates the case of a phthisical patient, in whom the metallic tinkling was very clearly presented as also the signs of fluid effused into the chest. The diagnosis was fully confirmed by the appearances after death. The case does not present any features of especial interest.

Injury to the spinal cord during hanging.—Mr. Campbell de Morgan describes the appearances after death, presented by the body of a woman who committed suicide by hanging, she having been previously labouring for a long period under scirrhus uteri, which had ulcerated into the cavity of the peritoneum, and induced inflammation. There not being any indications of dyspepsia or congestion, the spinal columu was examined. There were ecchymoses about the deep muscles over the second and third cervical vertebræ, and also in the sheath of the spinal marrow, at a part corresponding to the external injuries. At the left side and exterior of the sheath was an extensive effusion of blood, firmly coagulated. The spinal marrow having become generally softened, it was impossible to ascertain the existence of any particular softening at this part; there was not any appearance of bruising of its texture. The odontoid process was firmly retained in its place, none of its ligaments having given way, nor were there any marks of fracture of the vertebræ, nor of laceration of their ligaments, but there was an unusual degree of mobility between the third and fourth vertebræ, as though the ligaments had been stretched. The head was not examined.

Salts of Iron.—Dr. Powell is of opinion that the proto-salts of iron are more adapted for medicinal use, than are the per-salts, which are too irritating.

Use of Alcalies in Consumption.—Dr. Campbell publishes the results of certain cases of consumption, treated by the internal exhibition of the caustic alcali, the details of which were made known by him three years ago. The cases were then arranged under three heads; the first contained eleven cases of phthisis in its early stages, of these, one died in October 1842, three cannot be traced, and the remaining seven are still living, the disease having become stationary. Under the second head, were three cases in which the tubercles were unsoftened. Of these one has not been heard of for two years, the other two are still alive, and in the enjoyment, the one of good, the other of tolerable, health. The third head contained three cases of consumption in its very advanced stages, and were reported only to shew how at times very unexpected results arise, even late, in this intractable malady. No further account is given of them.

Caries of the Arytenoid Cartilages.—Mr. O'Shea narrates the case of a man, forty nine years of age, who had caries of these cartilages, complicated with inflammation of the upper part of the larynx. Appropriate treatment was adopted, but, failing to afford relief, tracheotomy was performed, the man dying four hours afterwards. On examiuation of the body, a small superficial incipient ulcer was detected at the posterior part of the right thyro-arytenoid ligaments, the corresponding ligament on the left side having been destroyed by ulceration, and an abscess was found in the vicinal muscles. The left arytenoid cartilage was detached, and converted into an osseous carious substance, cuniform, and wedged into the rima glottidis; the base corresponding to that portion which originally articulated with the cricoid cartilage on the same side was partially carious.

Atmosphere of Sick-rooms.—Mr. Perry objects to the atmosphere for sick rooms proposed by Dr. M. Hall (vide Medical Times, periscope) and considers the vapours of a marsh wholesome in comparison. He avers that such an atmosphere would be injurious to healthy lungs, and as a matter of course still more so to them when diseased.

Cure of Calculus by electricity.—Mr.

Maelune asserts that the disintegration of a very large lithie acid caleulus has been effeeted by electricity; he believes the ease will soon be brought before the profession.

The urine in dropsy.—Aeeording to Mr. Ross, the urine in dropsy exhibits a greater variety of charaeters than in any other disease, beeause dropsy is indueed by, and may be eomplicated with, struetural lesions of every organ of the body. The eontents of the urine will be found to vary aceording to the prevalenee of eertain organic lesions. There are, in addition to albuminuria, whieh has been already deseribed, (*vide* Periscope *ante*,) three eharacteristie groups of conditions of the urinary fluid, in referenee to structural actions; one eomprehending the deposit of fixed salts with or without eoloring matter; another, an exeess of urea; and a third, that of urie acid and oily matter. Seanty urine may yield a dense white deposit of fixed salts from a defieieney of the aqueous particles, but it is more eommon in protraeted cases, where the functions of the alimentary canal are mueh impaired, assimilation is imperfeet, and the destruetive aetions in the extreme texture are in rapid operation. In one variety of seanty urine, the deposit is eombined with a large quantity of eoloring matter, the sediment being of a yellow or brown hue. In this case, the urine rapidly beeomes offensive, the fœtor being commonly attributed to the deeomposition of urea, which is generally, but not always, very abundant. In some few cases, Mr. Ross has found it very defieient; it is variable in amount. His opinion of the eause of the fœtor is the decomposition of the coloring matter, and he observes, that we have the observations and authority of Liebig, that the deeomposition of the coloring matter of the urine is attended with this disgusting and peculiar odor. This condition of the urine is indieative of disorder of the funetions of the liver; it is generally observable in the latter stages of disease, and is attended with emaciation and loss of strength. Under these circumstances, the urea is sometimes so abundant as to cause pain on mieturition, and Mr. Ross avers, that pain in the baek, and frequent desire to pass the urine, which is scanty, and gives pain, are not always symptoms of inflammation of the kidneys, but in the great majority of cases merely indications of a highly irritating fluid. It may, however, from excess of irritation, induce actual inflammation of the kidneys. When the urine is cutting, we may suspect an excess of urea, and if we find it, we may conclude that the liver is the organ primarily at fault. Uric acid will, from the same cause, sometimes be found in excess in the urine, but then there will always be signs of inflammation present. This will be the case when rheumatism supervenes during the treatment of dropsy. The exeess of uric acid indicates, therefore, either an aeute attaek of the liver, or a rheumatic affection of the system. This eonclusion is in aceordanee with the analyses of Becquerel. The presenee of oily matter in the urine affords no deeided indication of the state of the internal organs, but a great exeess thereof is always attended with some lesion of the lungs. Louis has recorded the coeurrenee of fatty liver and phthisis, which, as well as the oily matter in the urine, Mr. Ross explains, by stating that the diminished amount of oxygen is insufficient to burn the oily matter secreted by the liver. When the urine is strongly albuminous in ovarian dropsy, Mr. Ross thinks we may conclude that the contained fluid of the ovary is limpid and watery: he adds, however, that in four cases of unquestionable ovarian dropsy, he did not find the urine albuminous.

Lancing the gums.—Dr. Castle condemns the praetiee of freely laneing the gums, advocated by Dr. M. Hall, and quotes several cases in whieh injurious consequences appeared to be produced by the operation. He recommends in lieu thereof, a mixture of ipecac (uana), hyd. (riodate of) potass, and syrup of West India ginger. He considers the mischief caused by dentition to be produced by nervous irritation, which cannot be relieved, he says, either by the free division of the gums, or the consequent bleeding. The medieine he prescribes, however, will prove effectual; its methodus agendi is not explained.

Protracted labour.—Under this title, Dr. J. Hall Davis details a melaneholy ease of mismanaged labour; in treating which, a seapegraee of the profession, self-styled a consulting surgeon-aeeoueheur, broke down the fœtal head, and removed the cerebrum; after whieh, he attempted to extraet the ehild with a pair of barber's eurling-irons, but, of course, ineffeetually. Dr. Hall Davis did not see the patient until two days after this proeeeding, and she was then in a dying state, she having been in labour for five days. On examination, the cranial bones were found overlapping eaeh other; the cerebral substanee had been diseharged; there were spieulæ and edges of bone projeeting against the vaginal mueous membrane in all directions; the genital surfaces, as far as could be inspeeted, were of the eolour of very dark mahogany, and devoid of all sensibility. Dr. Davis removed the eranial bones, exeepting the base of the skull, previously diminishing their size, and removing the sharp, projeeting spieulæ by the osteotomist. He then fixed the guarded erotehets upon the base of the skull, and thus, without diffieulty, effeeted the delivery of the head, the face being direeted towards the pubes. A eonsiderable quantity of offensive gas was expelled at intervals from the uterus. The birth of the remainder of the child could not be completed, until the gas generated by decomposition had been evacuated from the chest and abdomen, after which it was readily effeeted. A profuse discharge of a brown fluid, of most fœtid odour, followed; and the placenta, in a very putrid state, was taken away without mueh difficulty. No attempt at re-aetion followed, and the patient died a few hours afterwards. The treatment that should have been adopted in this case, Dr. Davis says, is the employment of venesseetion, and application of the forceps, when the head had descended down into the cavity of the pelvis. The "consulting surgeon-accoucheur," who first operated, should have been indicted for manslaughter. He is since dead.

Pathology of neuralgia.—Dr. Skae claims for himself the discovery, that neuralgia is dependent on congestion taking place in a nerve, in a part where, from the rigidity of the neighbouring struetures, as, for instance, in osseous canals, a ready diffusion of the pressure cannot take place.

Application of a poultice prior to leeching.—In the *New York Journal of Medicine*, Mr. Ross strongly reeommends the application of a poultice for the part where leeches are required, for an hour previously to using them. He says it makes the part very aeceptable to the leech, by removing all extraneous substances, together with the secretions of the skin, and other offensive accumulations. But this is not all; for the skin not only becomes clean, but also soft and wet; and this condition is peculiarly favourable to the leech, which, in its native abode, never comes in contact with a dry substance. A poultice or fomentation seems to aet admirably in preparing the part for their delicate organs of touch and taste, as they fasten upon such a part without the least delay, unless the poultice has been strongly medicated. The leech also fills in much less time, and the subsequent bleeding is much facilitated. Mr Ross has often had cases where there was so little circulation in the parts that it seemed as if the leeches could never fill; and after dropping off, the blood scarcely stained at all; and yet, by the aid of a poultiee, he has seen the bleeding beeome so profuse, that it could hardly be stopped. This is espeeially apt to occur on the abdomen, than which no other part is more benefitted by such an applieation. Independently of leeches, the application of a poultice depletes the part, moderates excitement, allays irritation, removes congestion, diminishes inflammation, and cheeks pain.

Strangulated femoral Hernia.—Mr. Chapman has published in the *Provincial Medical Journal*, the details of a case of strangulated femoral hernia, occurring in the person of a female, 67 years of age, upon whom, having previously failed with the taxis, tobacco enemata, &c., he operated, and divided the strieture. The intestine was healthy when exposed, but adherent throughout to the parietes of the sac; it was not reduced. Violent purgation was injudiciously indueed, in our opinion, and kept up for some time; the operation was followed by some pain and tenderness of the abdomen, for which bleeding and leeches were employed. It was probably indueed by the very free purging to whieh we have alluded. The wound did not present a perfeetly healthy appearance for some time, and a portion of membrane, perhaps involving part of the intestine, sloughed, although on the separation of the sphacelated parts no extravasation of fæces took place. The patient ultimately recovered.

Cancerous ulceration of the face, connected with the jaw.—A ease of this disease is reported in the *Provincial Medical Journal*, from the practiee of Sir John Fife, in the Newcastle Infirmary; it occurred in the person of a countryman, 65 years of age, who had a small hard knot in the eentre of the lower lip for four years, which ulcerated in eonsequence of a blow from a piece of heated iron, and gradually assumed the charaeter of eaneer. His health was suffering in eonsequenee. Sir John Fife removed the diseased parts with the knife, cutting away at the same time the portion of the jaw included between the first molar teeth on eaeh side: the scirrhous base being formed by diseased bone. The report of the case after the operation is exceedingly meagre; the man appears to have done well, and was dismissed on the ninth day.

Lardaceous cancer of the knee-joint.—The case of a servant-woman, 39 years of age, is published in the *Provincial Medical Journal*, whose right leg was amputated in the Birmingham General hospital, for lardaeeous cancer of the knee, of eighteen months' duration. When she was admitted, the knee was in a bent position, and was much enlarged, measuring seventeen inches and a half round its centre, fifteen inches round the lower third of the femur, and fifteen inches and a half over the tubercle of the tibia. The popliteal space was entirely filled up by a hardened mass, and the patella could not be at all distinguished from the hard structure by which it was surrounded. The condyles of the femur were also imbedded in the same structure. A perpendieular division of the joint being made after amputation, the whole cavity of the joint, except about an inch square over the extremity of the femur, and direetly under the patella, was converted into an elastic, white, fibrous structure, which extended between the head of the tibia and the artieular extremity of the femur, and was part of the whole mass forming the bulk of the tumor. The articular cartilages were gone, or were degenerated, except at the point before indicated; the patella was more dense than natural, and the whole joint was made up of a white lardaceous mass, elastic and firm to the knife. The extremity and three inches of the femur were changed by a similar deposit, the dense shell of the bone being to be seen intact below, but not above. The head of the tibia was less changed, but the cartilage was degenerated. Beneath the joint there was an extensive deposition of the same structure, with large earthy deposits intermixed; there was a mass of osseous or earthy deposit in the course of the vessels at the point of amputation. There can be but little doubt that the disease in this case will return.

Rupture of the Heart.—A case of this kind is reported in the *Provincial Medical Journal*, from the practice of Mr. Nason. The patient, a man of 72 years of age, who had not previously presented any indications of cardiac disease, died suddenly, and on examining the body, there were found three ruptures on the middle of the anterior face of the left ventricle. The upper one had very irregular and ragged edges, and was large enough to admit two fingers; the middle one could admit a gooso quill, and the third, which Mr. Nason thinks he made himself, would allow one finger to pass through it. The ventricular parietes were soft and flabby, and much thickened anteriorly; the valves were healthy, but the left coronary artery was ossified, and the lining membrane of the aorta was studded with atheromatous deposit.

Extirpation of the parotid gland.—It appears from the *American Journal of the Medical*

Sciences, that this operation was performed by Dr. John Mc Clellan, of Green Castle, Franklin County, Pa, on a female, as long ago as the 14th of May, 1805.

Relative proportion of the deaf and dumb, blind, and insane, in the races of European and African origin in the United States.—Dr. Forry has published an analysis of the censuses of 1830 and 1840, in the *New York Journal of Medicine*. from which it appears that, in the census of 1830, the ratio of whites, deaf and dumb, was 1 in 1964, and of the coloured population, 1, in 3,134; and of blind, the ratio of the former was 1 in 2,651, and of the latter, 1 in 1,584. In the inverse result in the two races, the excess is about equal, the deaf and dumb whites being a little more than three to two, and the excess of coloured blind being in about the same ratio. The number of insane was not included in that census. According to the census of 1840, the ratio of the white deaf and dumb, was 1 in 2,123; of the coloured, 1 in 2,933; of the white blind, 1 in 2,821, of the coloured, 1 in 1509; of the white insane, 1 in 977, of the coloured, 1 in 978. In both the decennial enumerations, the ratio of white deaf and dumb is the higher, and the same comparative result is afforded among the coloured blind; but the ratio of white deaf and dumb has diminished slightly in the latter census, while that of the coloured population has increased about equally; and, as regards the blind, a similar ratio of white decrease, and of coloured increase, is shewn. These results seem to admit of ready explanation, on the ground of white immigration, and coloured emigration, since neither the blind, nor the deaf and dumb are often found moving from conntry to country. Of these three terrible inflictions, it is remarked by Professor Tucker, that the one which is congenital is the more prevalent among the whites; while the higher ratio of blind among the coloured population, may be reasonably referred to their more severe labour and greater exposure, to their greater improvidence, and less advantage of medical aid. The proportions of the insane and idiotic in the two races, it is seen above, are identical, the ratio being somewhat more than 1 in 1000; and as regards the patients of this description at public and at private charge, both classes of the population seem to have the same proportion. Those at public charge in both are about twenty per cent. of the number at private charge.

Necrosis of the long bones.—Dr. Oke, in a communication, published in the *Provincial Medical Journal*, after enumerating the appearances presented by necrosis occurring in the long bones, enforces the surgical rule, that, as soon as an external opening, communicating with the diseased bone, is found, it should be laid open, the crown of a trephine applied once or more times, according to the extent of the disease—the intervening bony bridges being removed by Hey's saw, or by a chisel and mallet, and the sequestrum exposed, and removed, if loose; if not loose, then left to be disposed of by the natural process. If the cavity consists of carious bone, which will sometimes be the case, the diseased surface should be cleared away by a sharp gouge, in the manner recommended by Mr. Hey. When the sequestrum is of considerable length, extending above and below the aperture, so that it cannot be taken out through it, it should be cut across, and then either end can be extracted separately. In this way, Dr. Oke removed a sequestrum from the arm of a young man, equal in length to the entire humerus. In performing this operation, he accidentally divided the musculo-cutaneous nerve, thus occasioning the instantaneous dropping of the hand. Muscular power was not restored to the limb until after the lapse of several months.

Spontaneous rupture of the uterus.—Dr. Arnold, of Jamaica, narrates in the *Provincial Medical Journal*, the case of a negress, 35 years of age, who died of rupture of the uterus, consecutive on softening of its parietes, caused by inflammatory action.

Inversion of the uterus.—Mr. Square details, in the *Provincial Medical Journal*, the particulars of a case of inversion of the uterus, following labor, in which hæmorrhage did not take place for seven or eight days after the birth of the child, and then recurred at intervals to such an extent, as to place the life of the patient in great danger. The loss of blood was ultimately arrested by secale cornutum and the tincture of the sesquichloride of iron. The uterus could not be restored to its normal position.

The effects of antimony on infants.—Mr. Wilton in the *Provincial Medical Journal*, gives the details of several cases, in which antimony, exhibited internally to children, caused excessive depression and exhaustion, and in two cases, a fatal termination. The principal post mortem appearance was an exceedingly ex-sanguineous condition of every part of the body. Mr. Wilton observes that antimony is a dangerous remedy for children, and always requires caution and observation in its use. To the truth of this remark we can add our own testimony.

Transformation of pus cells into a mucous or fibrous tissue.—[This and the three following articles comprise the principal contents of the last number of the *Medical Gazette*.]—Mr. Addison, when experimenting on pus globules, found that by mixing them with a definite portion of liquor potassæ, he obtained a plastic membrane, capable of being suspended on the point of a needle. With respect to the events accompanying or preceding this singular transformation, he observes that liquor potassæ causes pus cells to burst open and discharge their contents; and it is evident, he says, that in this experiment, the plasticity of the resulting material arises from the rupture of the cells. The fluid element of the pus, before this event, is limpid; that is, it has no plastic equality or tenacity whatever; it drops from one vessel into another like water, but when a majority of the cells have been ruptured, and their contents mingled with the previously existing fluid, then the whole becomes exceedingly plastic and coherent; it will no longer drop from one vessel into another, and it exhibits all the microscopic appearances of fibrous tissue or of mucus. The event, therefore, accompanying or preceding this transformation is the rupture of the pus cells, and the result is a mucous or fibrous tissue. By the term transformation, as applied to cells, Mr. Addison does not mean any transcendantal conversion of one object into another, but that they are altered in appearance by a living growth, or by death; in character by peculiarity of situation, and that when they burst or become ruptured, and their contents mingled with the fluid in which they float, they form either a fibrous tissue, a plastic mucus, or a secretion. The membrane thus formed by the action of liquor potassæ on the pus cells, Mr. Addison describes as being a most delicate, thin, transparent, and highly elastic fibrous membrane, exactly resembling some of the transparent membranes of the embryo, except in the presence of blood-vessels, or the structureless basement membrane of Mr. Bowman.

On the state of the blood in morbus Brightii and various forms of anœmia.—Setting out with the principle that the extreme tenacity of the blood in the early stages of Bright's disease, produced by the evacuation of albumen by the urine, constitutes the true cause of the deficient proportion of hematosine observed at later periods, acting by interrupting those endosmotic changes occurring between the contents of the corpusele and the chyle, when each fluid possesses its ordinary specific gravity, Dr. Owen Rees seeks to apply it to the explanation generally of cases of anœmia, and to trace them as more or less connected with albuminuria. He observes that when large quantities of blood have been lost, or the circulating fluid is deprived of one of its most important constituents, the albumen, by its passing off in the urine, or in leucorrhea, the remainder of that fluid absorbs water in order to maintain its bulk, and is thus, when the primary danger has passed away, productive of anœmia, inasmuch as a cause exists in that fluid which interferes with the development of the corpuscle, and keeps up the anœmiated condition. He believes that the various forms of anœmia which attract the attention of the practitioner, in many of which no very obvious cause for pallor can be ascertained, will frequently admit of explanation, if the principle above mentioned be kept in mind, and inquiry made into all the probable causes which can produce a decrease in the specific gravity of the liquor sanguinis. This decrease may be caused in one of three ways: first, by removal of one or more solid constituents from the blood; 2ndly, by inactivity on the part of the exhalants, the skin, lungs, and kidney, which will so derange the balance between the ingested and exhaled fluids as to leave an excess of water in the blood; and 3rdly, by an increase of the absorbent action of the skin. Dr. Rees mentions a mechanical condition influencing the degree of pallor, and which he regards as an important element in the production of anœmia. It consists in a change in the form of the corpuscles, producing a thickening of their edges, as seen under the microscope, and exactly resembling a state always to be produced artificially by the addition of dilute saline solutions to the blood after removal from the body. This Dr. Rees has frequently observed in the blood of anœmiated girls, and it is doubtlessly caused by the entrance of the too dilute liquor sanguinis into the globules at the commencement of the degeneration, rendering the form of the corpuscle such as greatly to interfere with their circulation through the capillaries, and thus contributing to the production of the pallor. As a practical deduction from his observations, Dr. Rees suggests the adoption of the same plan of treatment in the early stages of the morbus Brightii, that is found efficacious in chlorosis and anœmia from hæmorrhage, viz, chalybeate tonics, saline purgatives, and nutritious diet; he being satisfied of the value of the plan, which, though not immediately calculated to remove the congested condition of the kidney known to exist in the complaint, is still of efficacy in preserving the normal state of the blood, and may thus fairly be considered as assisting in recovery. Dr. Rees also objects to bleeding in every form for the removal of the congested condition of the kidney, which he says should be effected by counter-irritation, and dry cupping.

Ovariotomy.—Dr. F. Bird has placed on record another successful case of this operation. His patient was a young lady of very irritable temperament, who had suffered from the disease for three years. Some degree of local peritonitis supervened after the removal of the tumour, but was removed by increasing the temperature of the room, so as to cause considerable diaphoresis, and by the exhibition of opiates. The weight of the tumour was twenty-nine pounds; it appeared to have its origin in a single Graafian vesicle, and the greater part of the ovary did not present any very material change, except increased density. It contained a large number of secondary cysts.

Poisoning by Digitalis.—Mr. Wilson narrates a case of poisoning by digitalis, occurring in the person of a workman, who drank an infusion of the leaves to cure a sore throat. The effect of the first dose was a long sound slumber; the second, taken the morning after, caused dizziness and staggering; then syncope. When visited, he lay supine, cold, pale, and covered with a copious perspiration. He was conscious, and complained of violent pain in the head; the pupils were dilated. The pulse was extremely low, three or four feeble pulsations being succeeded by a complete intermission occupying several seconds, the whole number of beats not exceeding 38 or 40 in the minute; each stroke, though very weak, was given with a peculiar explosive shock. The man complained of great pain in the epigastric and umbilical regions, and had incessant and severe vomiting. The function of the kidneys was completely suspended, and there was a considerable and constant flow of saliva. Dietetic and medicinal stimuli restored him to his ordinary state of health in a short time.

Case of Molluscum.—Dr. Atlee, of Lancaster, Pensylvania, details in the "American Journal of the Medical Sciences," a case of molluscum, associated with fibro-cellular encysted tumours, and encephaloid disease, occurring in the person of a female. The disease first shewed itself when she was sixteen years old, in the form of a small cutaneous tumour on the upper part of the back, soon after which a sub-cutaneous tumour was discovered in the bend of the arm,

which became as large as a goose's egg, and in the early period of its growth was the cause of distressing neuralgia. From this period the skin became more and more covered with tumours, varying from the size of a pin's head up to that of a large nut, while several other tumours, from the size of a pea to that of a goose's egg, made their appearance beneath the skin, firmly attached to muscular and tendinous tissue. When in her 29th year, the patient began to suffer from neuralgia of the left side and thigh, accompanied with a lateral inclination of the body to that side, the cause of which she attributed to the violence of the pain. She menstruated at the age of fifteen, and with the exception of a few months' omission at that age from exposure to wet and cold, was regular up to her 30th year, when it ceased altogether. When she was first seen by Dr. Atlee, the cutaneous tumours had become so extensive, that the point of the finger could not be placed upon any part of the entire surface, without coming upon them. The scalp, palms, soles, fingers, toes, ears, nose, lips, —in fact the whole surface of the skin was affected with this tubercular disease—the back particularly being crowded with countless numbers of the smaller tumours, interspersed here and there, with larger ones. Not more than five or six of the more deeply-seated tumours could at this time be detected, and they were confined to the arm, hip, and thigh of the left side. To relieve her sufferings, the patient had become habituated to the use of large doses of opium. Dr. Atlee had recourse to the exhibition of Plummer's pill for some time, but without advantage; while the patient was taking it, the neuralgia of the thigh became so intense, that he removed a large tumour which was deeply-seated on its surface, and attached to the rectus muscle, in the hope of affording relief, which, however, was only temporary, the neuralgic pain returning in a few days, and also a troublesome burning in the cicatrix. The tumour was the fibro-cellular encysted tumour, described by Dupuytren. Fowler's solution was afterwards employed, with the effect of improving the condition of the skin; but the pain continued as severe as ever, and two more encysted tumours were removed from over the glutœus medius, to which they were attached. No advantage was derived from the operation. Soon afterwards evidences of the presence of an encephaloid tumour were discovered in the abdomen under the left false ribs; it rapidly increased to an enormous size, and the patient ultimately sunk. On examination of the body, it was found to arise from the bodies of the first, second, and third lumbar vertebræ, which were wholly degenerated into medullary matter: it occupied the entire of the left side of the abdomen, and caused, by its presence, considerable displacement of the abdominal viscera. Its weight was fourteen pounds and a half, and it consisted of what is denominated encephaloid matter. The molluscum tubercles were sessile and globular, having a contracted base, and not possessing a pedunclc; they did not contain any atheromatous matter, but consisted of an elastic or homogeneous, semisolid, gelatiniform substance, not liable to disintegration by pressure, and of a yellowish-white colour. The skin covering them was smooth, and nearly of the natural appearance. The three tumours which were removed by operation, varied in size from that of a filbert to that of an almond. The smaller one was spheroidal, the others oblong. They were closely seated upon the muscular fibre, had no perceptible connection with nerves or nervous filaments, were enclosed in a dense, opaque, and fibro-cellular envelope, between which and the tumour, the attachment was so feeble that when opened, the latter almost fell out. Freed from its envelope, the tumour externally was smooth, opaque, hard, and of a dull white colour. When cut into, it cracked as in scirrhus,—the section shewing an internal structure, homogeneous, smooth, elastic, hard, fibro-cartilaginous and white.

Inoculation of morphia for neuralgia.—Dr. Castiglione uses a solution of three grains of acetate of morphia in half an ounce of distilled water, and inoculates this solution with a lancet making numerous punctures in the course of the affected nerves. His paper is published in the *Gazetta Medica de Milan.*

Sponginess of the gums.—Dr. Schneider, of Fulde, is in the habit of curing this affection by cutting away the diseased parts when very fungous, down even to the bone, with a pair of scissors; and to prevent a relapse he prescribes a mixture to be rubbed upon the parts composed of muriatic acid, tincture of myrrh, honey of roses, and extract of rhatany.

GOSSIP OF THE WEEK.

Bachelor of Medicine.—First Examination.—Examination for Honours.—Anatomy and Physiology.—(Examiners, Mr. Kiernan and Professor Sharpey.)—Describe the parts (excluding the bones and ligaments) met with in dissecting the posterior region of the neck; the dissection to be carried as far as the vertebræ and posterior aspect of the scalenus posticus muscle, being limited below by the first rib, laterally by the outer edge of the scalenus posticus and point of the mastoid process, and above by the line of insertion of the sterno-mastoid muscle and superior curved ridge of the occipital bone.—Commencing at the integuments of the perineum, describe the parts exposed in dissecting as far as the deep perineal fascia. Having next cut through the horizontal and descending rami of the pubes on both sides, and removed the bone, describe the more deeply-seated parts, including the bladder, in the order in which they are met with in pursuing the dissection from the arch of the pubes to the rectum, the dissection being limited behind by the rectum, and on either side by the obturator internus muscle. The bladder, the prostatic and the membranous portions of the urethra, to be opened, and the structure of the prostate gland and corpus cavernosum to be described.—Chemistry—(Examiner, Professor Daniell.)—1. What is the essential principle of a *thermometer*? Describe and compare Fahrenheit's and the Centigrade thermometers. 2. What do you mean by a *Calorimeter*? Explain by an example the purpose to which it is applied. 3. Explain the charge of the prime-conductor of an electrical machine upon Faraday's theory of Induction. 4. What is the difference between a simple and a compound Voltaic Circuit? Give *Ohm's* formulæ for the two arrangements, and explain in words their application to the results of experiment. 5. Describe the process of Electrolysis, and state the laws which govern its action upon both primary and secondary compounds. 6. Explain and illustrate by examples the laws of *definite, equivalent,* and *multiple* proportions. 7. What are the equivalent numbers upon the hydrogen scale; and the respective weights of 100 cubic inches, at mean pressure and temperature, of the following gases and vapours:—hydrogen, oxygen, nitrogen, iodine, carbonic acid, carbonic oxide, ammonia, sulphurous acid? 8. What are *Ethule* and *Methule*? Draw a parallel between the compounds of the two. 9. Explain the principal steps of the conversion of cane-sugar into alcohol, and of alcohol into vinegar. 10. What is *Protein*? Whence is it derived? What are the principal compounds into the composition of which it enters as a radicle?—Materia Medica and Pharmaceutical Chemistry—(Examiner, Dr. Pereira.)—1. Illustrate by examples the following observation of Linnæus:—"Plantæ quæ *genere* conveniunt, etiam virtute conveniunt; quæ *ordine* naturali continentur, etiam vertute proprius accedunt; quæque *classe* naturali congruunt, etiam viribus quodammodo congruunt:" and name those natural orders in which exist respectively the greatest and smallest number of exceptions to the general rule. 2. A specimen of a commercial fecula is placed under the microscope for your examination: you are required to state its name, and the characters by which you recognise it. 3. Explain, according to the Amidogen hypothesis, the process for making the *Hydrargyri Ammonio-Chloridum*, Ph. Lond. 4. What is the name, mode of preparation, effects, uses and doses of the substance represented by the following formula:

$$C^{35}\ H^{20}\ NO^{6} + C^{4}\ H^{3}\ O^{3} + HO\ ?$$

5. Name the substances respectively numbered 1, 2, 3, 4, 5, and 6.—6. If the resin of scammony be adulterated with the resin of jalap, how can the fraud be detected?

The English cotton factories are said to employ 183,243 persons.

At the Berlin Deaf and Dumb Institution, great progress has been made, we hear, in the instruction, by intellectual means, of the deaf and dumb inmates.

An American Physician announces, that he has changed his residence to the neighbourhood of the churchyard, which, he hopes, may prove a convenience to his numerous patients.

The late Dr. Dalton.—This celebrated philosopher and chemist was the first, and only Quaker upon whom the honour of Doctor of Laws was conferred by the University of Oxford. He was installed at the visit of the British Association for the Advancement of Science, in 1833.

Medical Literature.—The following is a *verbatim et literatim* copy of a notification posted in the parlour of an inn on the classic heights of Mendip:—"Drenches for Cows for a Cheel & Yalows with bottel of Sp. to 2s. 3d. to 1s. 9d. Drenches no hotlet for horses cheeld 2s. 6d. Warranted Good to be had at Mr. Jno. Brins Castel of Cumfort Inn Physical balls 1s. each Duratic balls 9d. Cardel balls 8d. Cough balls 6d."

On the 29th ult., John Todd, aged 18, a post-office runner between Castle Douglas and Kirkpatrick, Durham, Scotland, coughed up a halfpenny, which he had swallowed 13 years before. He had long been troubled with a pain in the chest, and difficulty in breathing, and occasionally with mental derangement and somnambulism. After vomiting the halfpenny, his breathing became more free, but he felt giddy for a day or two, and complained of a disagreeable feeling of emptiness in the chest, "as if," to use his own words, "there was a hole at the back of his breast bone."

Another death has occurred from the effects of tight lacing. Elizabeth Allen, aged 20, pupil of Madame Davies, a fashionble metropolitan milliner. Deceased was addicted "to tight lacing," and after eating a hearty dinner, she stooped down to take something out of her box, and in that posture died. Congestion of the vessels of the head was the cause of death.

Gentlemen admitted Members of the Apothecaries' Hall, 15th August, 1844:—Richard Hodges, Henry James Shirley.

Gentlemen admitted Members of the Royal College of Surgeons, on Friday, August 16th, 1844:—W. Carey. F. H. Duffort, F. C. G. Ellerton, G. Walker, W. Box, J. Bourne, E Lawless, J. Terrey, W. W. Kemp, H. Bencraft, H. B. Pickess.

Obituary.—On the 2nd inst., Michael Fogerty, Esq., late surgeon of St. Helena's Corps, 11, Gower-place, Euston-square, aged 54.—On Monday, the 12th inst., at his residence, 7, Park-road, Stockwell, Henry William King, Esq., surgeon, aged 25.—At Broadby, near Nairn, John M. Grant, M.D.—Of cholera, whilst on duty with H.M's 29th regt., Assistant-Surgeon J. T. F. Maedonald.

Appointments.—Surgeon: W. R. M'Laughlin, M.D., to be Surgeon and Agent at Lough Swilley.

1st West India Regt.—G.W. Powell, Gent., to be Assistant-Surgeon; 2nd ditto—E. B. Leeson, Gent., to be Assistant-Surgeon.

William Anderson, a surgeon and man-midwife, of Manchester, was tried on Tuesday, at Liverpool Assizes, for the manslaughter of an infant. The infant was crying; was taken to a chemist, who advised to have it taken to Mr. Anderson, who gave it a mixture, containing, as analysis suggested, two drops of laudanum to the tea-spoonful. Of this, he gave four tea-spoonfuls in the course of fifteen or eighteen hours, when symptoms of poisoning plainly manifested themselves. The child shortly after died. The prisoner was acquitted. The medical witnesses appear to have thought, that two drops of laudanum would be fatal to the infant (six weeks old) in from 7 to 14 hours. There are, however, very few cases which attribute death to so small a dose.

Dr. Ryan, the eminent chemist, and well-known lecturer to the Polytechnic Institution, has been elected by the Admiralty Professor of Chemistry to the Royal Naval College of Portsmouth. This appointment is the more gratifying, from being not only unsolicited, but quite unexpected.

The German Interpreter. By J. C. Moore.—London: Baillicre, Regent-street.—This is a compendium of most of the phrases an English traveller will require in making his way through Germany. In works of this description that have come under our notice, we have been led to remark their uselessness to those who have not previously some little knowledge of the language. In the work before us, however, we have not the same objection to urge: the *pronunciation* of the German phrases being carefully given in English equivalents, the untravelled or unlearned Englishman may make sure of communicating his wishes in very respectable German. To some of our medical friends, using these slack days in a visit to the far-famed Rhine, the *German Interpreter* will be very valuable.

Errata.—In Dr. Barrett's paper, inserted in the *Medical Times*, August 17.—In the Title, in the Summary, for "*prosperity*," read "*prospects*;" and in the Title, page 414, for, "*and prosperity*," read "*and prospects.*" In the second column, for, "*Caventons*," read "*Caventous*;" in the third column, for "*Mr.*," read "*M. B.*;" and in the P.S., for "*practice*," read "practise."

Metropolitan Mortality for the Week ending Saturday, August 17.

Causes of Death.	Total.	Average of 5 Springs.	Average of 5 Years.
All Causes	932	900	946
Zymotic, or Epidemic, Endemic, and Contagious Diseases	251	191	178
Sporadic Diseases—			
Dropsy, Cancer, and other Diseases of uncertain or variable Seat	100	106	111
Diseases of the Brain, Spinal Marrow, Nerves, and Senses.	158	159	157
Diseases of the Lungs, and of the other Organs of Respiration	216	233	286
Diseases of the Heart, and Blood-vessels	31	19	21
Diseases of the Stomach, Liver, and other Organs of Digestion	91	88	69
Diseases of the Kidneys, &c.	8	5	5
Childbirth, Diseases of the Uterus, &c.	6	9	10
Rheumatism, Diseases of the Bones, Joints, &c.	7	5	6
Diseases of the Skin, Cellular Tissues, &c.	1	1	1
Old Age	41	56	71
Violence, Privation, Cold, and Intemperance	21	25	26

No. 258. **SUMMARY.** Aug. 31.

LECTURES ON THE THEORY AND PRACTICE OF MEDICINE, by Dr. C. J. B. WILLIAMS, M.D., F.R.S.:—
Hæmorrhagic Affections of the Intestinal Canal—Hæmatemesis—Hæmorrhoidal Flux—Causes—Symptoms and Treatment—Forms of Diarrhœa—Bilious Diarrhœa—Diarrhœa Crapulosa 439

LITHOTRITY, LITHOTOMY, AND THE DISEASES OF THE URINARY ORGANS, by W. B. COSTELLO, M.D. 441

ON AN OPERATION OF ENTEROTOMIA Successfully Performed without Opening the Peritonæum, followed by Remarks on the Pathological Anatomy of the Colon in the Lumbar Regions, by J. Z. AMUSSAT, M.D., Member of the Academy of Medicine, &c.. 441

ON REFLEX NERVOUS ACTS AND THEIR DISTURBANCES, AND THE MORE PROBABLE PARTS OF THE DOCTRINE OF SYMPATHIES, by F. WILKINSON KING, F.R.C.S.E.:—
The Reflex Centre apart from Brain: Whytt, Alison, Hall—General Doctrine of Excito-Motory Agency; and Derangements—Sympathies not Excito-Motory 442

ACTION OF AMMONIA UPON THE PROTOCHLORIDE OF PLATINUM, by Dr. MICHAEL PEYRONE, of Turin, late of the Giessen Laboratory 444

SELECTIONS FROM GERMAN JOURNALS, by SIGISMUND SUTRO, M.D.:—
Case of Ephdrosis, the Perspiration having an Alkaline Re-action 444
Cholera caused by the Roe (qy. Spawn) of the Barbel.. .. 444
Acute Gastritis caused by Clysters of Musk 445
Inflammation of the Appendix Cœci Vermiformis.. 445

PARISIAN INTELLIGENCE:—
Professor Velpeau on Diseases of the Eye—Conjunctivitis Papulosa—C. Purulenta—General Treatment—Local Bleedings—Purgatives—Calomelas—Local Treatment—Collyria—Cauterization—Nitrate of Silver.. 445
On Artificial Anus.. 446
Case of Spina Bifida 446
Proceedings of the Academy of Sciences, Aug. 19th 447
M. Boussingault's Researches on the Effects of different kinds of Food on Cows 447
M. Ebelmen on Silicic Ether 447
Proceedings of the Academy of Medicine, Aug. 20th 447
M. Louis de la Porte on Pestis 447
M. Segalas on the Influence exercised by Traumatic Lesions of the Spinal Marrow on the Functions of the Urinary Organs 448

TO CORRESPONDENTS 448

LEADER:—
THE "TIMES'" ATTACKS ON SIR JAMES GRAHAM—THE TRUE POLICY OF MEDICAL REFORMERS.. 448

PHYSIOLOGICAL EXPLANATION OF SOME MESMERIC PHENOMENA, by Mr. BRAID 450

REPORT OF AN INTERVIEW WITH ALEXIS, THE CLAIRVOYANT, ON FRIDAY, JULY 20th, 1844 451

OBSERVATIONS ON A WORK ENTITLED "CHEMISTRY IN ITS APPLICATIONS TO AGRICULTURE AND PHYSIOLOGY," by PROF. LIEBIG, M.D., Ph.D... .. 452

THE "PONS ASINORUM," by JOHN JACKSON, Esq... 453

MEDICAL PUBLISHERS AND MEDICAL MEN 454

THE EDINBURGH VETERINARY COLLEGE.—Professor Dick 454

HOSPITAL REPORTS:—
King's College Hospital.. 455

PERISCOPE OF THE WEEK:—
Use of Baths 456
Warm Baths 456
Sea-Sickness a Remedy for Jaundice 456
Vaginal Hysterotomy.. 456
Molar Pregnancy 456
Keratoplasty 457
Action of Concia on the Blood 457
Calculus in the Bladder 457
Cases of Midwifery 457
Case of Twins—Injudicious Use of Secale Cornutum 457
Decomposition of Mercurial Preparations by the Product of Fermentation 457
Asbestos in Dental Practice 458
Strychnine in Chorea 458
Tumour of the Palate 458

GOSSIP OF THE WEEK 458

METROPOLITAN MORTALITY TABLE 458

COURSE OF LECTURES ON THE THEORY AND PRACTICE OF MEDICINE.

Delivered by C. J. B. Williams, M. D., F. R. S., Professor of the Practice of Medicine, and of Clinical Medicine, at University College.

We have next to consider the *Hæmorrhagic affections* of the intestinal canal. We have enumerated all the more marked (intense) and distinct forms of inflammation, excepting that characteristic species, which we shall have to consider under the head of dyspepsia. The one of these classes of disease, that we meet with in practice is so much like another, that it would take too long to go fully into them: there is, however, considerable room for arrangement and classification, and I shall, on some future occasion, take some pains to put them upon a different plan, in order to make their peculiarities more easy of appreciation.

The hæmorrhages of the intestinal canal may be referred to the same causes, as the other hæmorrhagic affections of which I spoke, under the head of general pathology. They may proceed from congestion going on to a great amount, or from determination of blood. Hæmorrhage is, sometimes, a symptom in the early stages of gastritis and also of enteritis, and in some degree in dysentery. Also, independently of the causes of congestion, there is sometimes a dissolved state of the blood, a deficiency of fibrine; and, hence, hæmorrhage takes place in the intestines, and vomiting of blood occurs, in connection with low fever or with a cachectic state, from the deficiency of fibrine. And, lastly, it may occur in connection with organic and structural disease of the stomach and intestines, which is, perhaps, the most common cause or source of hæmorrhage. Ulcer of the stomach, I consider to be an hæmorrhagic disease. In connection with all these affections, which are very apt to promote the occurrence of hæmorrhages of the intestinal canal, circumstances causing inflammation and obstruction of the circulation through the liver, either from functional or structural causes, and preventing the return of blood from the intestines, are very liable to cause congestion in the intestinal tube, and thus become predisposing and exciting causes of hæmorrhage.

Hæmorrhages of the intestinal canal are classed according to the situation in which they take place. Those commencing in the stomach, and leading to vomiting of blood, are known by the term hæmatemesis, and when they proceed from the other end of the canal, towards the lower part, leading to the discharge of blood by stool, they constitute hæmorrhoidal flux. When the blood is effused higher up in the canal, it sustains, in passing through the intestine, various changes in its aspect. There is, here, evacuation of blood by stool, but it is in an altered condition; it loses its red, florid, colour, and becomes of a dark, pitchy, appearance. Hæmatemesis, or vomiting of blood, is often preceded by a feeling of weight, or uneasiness at the pit of the stomach, sometimes accompanied by palpitation, or a feeling of pulsation at the epigastrium; as though the arteries pulsated with increased force. Then, there is a sensation of nausea, and fulness, previous to the blood being vomited. The blood thrown up is usually of a dark colour, but it is not always so. It is not, generally, florid, and this is one of the characters by which it is distinguished from hæmorrhage from the lungs. It is, too, mixed with mucus of a slimy character; this is from the stomach, and it is unlike the mucus from the intestines; it is usually of a more ropy character, and does not contain any air. It is not preceded by cough, but by a feeling of nausea: this is another mode of distinction. It is, really, sometimes very difficult to judge from the patient's own account, for he will often tell you that blood is vomited—that there is the heaving of vomiting—when the blood is brought up from the lungs. Patients, in speaking of blood brought up from the stomach, will never tell you that it is coughed up. It is, sometimes, difficult to distinguish between hæmatemesis and hæmoptysis, as to the actual mode in which the blood is brought up, and the presence or absence of cough will not always guide us sufficiently; we must, in these cases, determine the fact by examination of the chest, and the total absence of pulmonary symptoms may assist us in forming the diagnosis. Another circumstance to be taken into account is, that when blood is vomited in considerable quantity, there usually is some also passed by stool, but in an altered state. Where this is the case, it is a strong argument in favour of its having been hæmatemesis, and not hæmoptysis. The immediate effect of the loss of blood may be to cause great faintness, giddiness, and even syncope. In some instances, hæmorrhage from the stomach has proved fatal. Dr. Watson mentions a case, in which it proved so, without any blood being thrown up at all: the patient died of a fainting fit. Sometimes, the vomiting of blood may occur again and again, and the patient may be quite blanched by the repetition of it. It is, generally, less dangerous when occurring in women than in men. It is not at all uncommon to find a quantity of blood vomited when the menstruation is irregular. This is far from being a fatal symptom. I have known patients to bring up almost a wash-hand basin full of blood, at that period, without the system suffering any other effect than a feeling of faintness, at the time. In males, it is generally indicative of an obstructed state of the function of the liver, and is usually connected with some other symptoms or signs of derangement of that viscus. The loss of blood may cause extreme faintness, followed by a reaction; the pulse, too, becomes extremely irregular, and various symptoms of anæmia occur. On *post mortem* examination, the appearances of the stomach are very uncertain: sometimes it is found to be congested, but where the vomiting of blood has been considerable, the congestion of the stomach is found to be more or less relieved by the loss of blood. But, in some instances, there are found various organic lesions and traces of mischief having occurred, such as ulceration or perforation of the coats of an artery, which always leads to fatal hæmorrhage. Where the hæmorrhage has been long continued, there are black patches in some parts of the stomach, and ecchymoses of its coats. Enlargement of the mucous follicles is seen in these states, and in some of the inflammatory diseases I before mentioned. But, where the disease has been very serious, and has proved fatal, there is almost always found some organic disease of the stomach, the chronic ulcers I before mentioned, or else some malignant disease, as scirrhus. The liver, in such cases, is also found affected with disease. The exciting causes of hæmorrhage from the stomach appear to be bad living, and imperfect action of the bowels, besides the causes already enumerated. Hæmatemesis occurs, also, in gouty persons, and where there is great constipation or imperfect action of the liver.

The *treatment of hæmatemesis* is to be modified according to the amount of hæmorrhage, and the state of the constitution. Where it occurs in plethoric persons, or is accompanied by fever, it is not desirable at first to check the hæmorrhage, but rather we must reduce the fulness of the blood and the inflammatory tendency. We may do this by depletion: venesection or leeches applied to the epigastrium, or to the anus, may be necessary. But, in all cases of hæmorrhage from the intestinal canal, it is highly desirable to increase the natural secretions of the abdominal viscera; and, as I have mentioned that obstructed action of the liver is almost always connected with the disease, medicines which act on the liver are most commonly eligible,—calomel and blue pill, with saline aperients, in the first instance, and followed the next morning by sulphuric acid, and sulphate of magnesia, in sufficient doses to pass readily through the intestines. Very frequently, these means, alone, without astringents, will tend to retard hæmorrhage from the stomach. When the hæmorrhage is more considerable, and the patient appears to be much weakened by it, we must adopt immediate measures to arrest it; and this may be done pretty surely—if no organic disease is connected with it—by sugar of lead combined with opium; and, likewise, oil of turpentine, in small doses, seems to act very effectually here: from 15 to 30 minims for a dose, repeated four or five times a day. In persons, already considerably blanched, and in whom the hæmorrhage appears to be quite of a passive character, unaccompanied by any increased action, the muriated tincture of iron is useful. In the scorbutic forms of the disease, tonics and astringents are commonly employed; oil of turpentine and creosote, with other measures to support the strength of the patient. Even here, it is necessary to see that the secretions are free, and to promote this, muriatic acid is sometimes useful. Melæna is merely a modification of this affection, and the treatment is the same. There may be a discharge with the fæces of blood, or matter of pitchy blackness; and, sometimes, there is, accompanying it, pain in the iliac and hypochondriac regions, and great agitation and pulsation. It is necessary to purge freely; castor oil, and a few drops of turpentine, are very useful, and acid mixtures, in most cases, are serviceable in promoting the natural secretion, and tending to arrest the bloody flux. Hæmorrhage, from the

lower intestines, is an hæmorrhoidal flux, and in some of these cases the blood passes of a bright red color; sometimes, there is a dark coloured liquid, and sometimes one of a florid colour. This disease is to be treated surgically, when seated at the verge of the anus. Sometimes, it is located higher up, but, generally speaking, it is a congestive disease, owing to the imperfect action of the liver; the veins become obstructed and gorged from the blood accumulated in them; sometimes, the blood coagulates and forms hæmorrhoidal tumors, which may burst and give rise to ulcers: this is chiefly caused by the passing of the fæces; sometimes, these attacks come on quite regularly. In many instances, where the liver is diseased, structural disease of the intestine occurs, and the blood does not pass with freedom through it, and congestion takes place. I saw, a few days ago, the body of a man opened who had died of an attack of bronchitis; he was a very hard drinker, and was in the habit of taking spirits to a great extent; the liver was very hard, and exhibited few traces of vascularity in it. I was confident the liver must have obstructed the circulation of the blood, and that he must have been in the habit of losing blood by stool; and it appeared, upon enquiry, that he had lost a considerable amount daily for many years past, until at last a bronchitic attack supervened, and proved fatal; this shows how an hæmorrhoidal flux proves a means of relief, even in the midst of serious organic disease. Congestion, in plethoric individuals, may go on for a considerable time, and then an hæmorrhoidal flux may come to the patient's relief, until apoplexy or some such serious disease results. A full state of the blood vessels, in the intestines, arises from obstructed action of the liver, and a constipated state of the bowels. It often happens that the serious evils of constipation are relieved by the occurrence, from time to time, of hæmorrhoidal flux, which, perhaps, may be considered as a natural loss of blood, that is to say, a means by which nature gets rid of the consequences of these irregularities,—a sort of safety-valve to the system. This is the common rule; but, in some cases, the fluxes are so great as to weaken the system very considerably. Where the flux has continued for some time, and has then subsided, it is surprising what a degree of diseased action may result. This matter has been forced upon me by repeated observation, and you often see, in connection with the suppression of hæmorrhoidal flux, that patients become a prey to hypochondriasis, and a great amount of distress and suffering, both mental and bodily, the relief from which is dated from the time the discharge again recurs. The flux is liable to be stopped naturally, and great evils are apt to occur; if this state continues, it may do serious mischief, and lead to a great amount of functional derangement. The treatment consists in preventing the occurrence of the hæmorrhage, and should be that which is calculated to promote the natural action of the intestinal canal, and particularly the action of the liver. Hence, you find that these troublesome affections are often relieved and prevented by a few doses of some mercurial, followed by cooling saline medicines. They require local treatment also. It is highly desirable to avoid purgatives that irritate the lower part of the canal. Scammony, colocynth, and even senna, and, in some cases, calomel, are to be avoided. The aperients should consist of mild mercurials, castor oil, sulphur and sulphate of potash, salines, sulphate of magnesia with nitric acid, and tartarized soda, &c. Stomachics are not often necessary. In some few instances, injections of acetate of lead (about six grains to four or five ounces of starch), with a little laudanum, and a small quantity of turpentine, are desirable.

We now proceed to consider the *forms of diarrhœa*, and here we are to be guided by the symptoms by which it is attended. It sometimes arises from a diseased or broken-down constitution. There are several kinds of diarrhœa, and we may judge of its nature by an examination of the matter passed by stool. Diarrhœa consists in an increased secretion from, and an increased peristaltic action of, the intestinal tube, so that the matter is passed through more rapidly, and in increased quantity, as well as in a more liquid state than usual. Having already considered that form of diarrhœa connected with enteritis, more particularly of the lower part of the canal, we have now to consider the forms connected with other kinds of inflammation. Hence, mucous diarrhœa is accompanied by a discharge of a mucous, slimy matter, with slight traces of blood. It arises in some cases of dysentery, from irregularities of diet, or fæculent accumulations in the intestines, more particularly in the colon. It is also present in the early period of some febrile affections, especially where the intestinal mucous membrane is more or less implicated. In some cases, where the inflammation is intense, there is not only mucus, but shreds of lymph are passed down the canal. Another variety of diarrhœa is the watery or serous kind, in which there is a free discharge of liquid from the intestine, with but little pain,—only a sort of griping pain, occurring more like colic; and, sometimes, the quantity of liquid passed in this way is immense, causing a great amount of depression, and even fainting. This must be considered more in the light of a flux, and the fainting that occurs depends as much on the irritation of the secretion itself, as on there being any inflammation present. This is represented well in the action of purgatives, particularly of the drastic kind, where the same effect takes place, even where there is, perhaps, no blood lost. Diarrhœa may also depend on the same causes which produce other fluxes: the sudden suppression of perspiration, cold sour drinks, sudden mental emotion, and fear, particularly, produce a watery discharge from the intestine. We often see sudden changes of diet, more particularly in children, produce the complaint, called watery gripes; this is different from the slimy discharge, just spoken of, and is usually accompanied by more intense inflammation. The common cause of the mucous and serous diarrhœa, is a congestive or obstructed state of the vessels of the intestines, generally, this being usually connected with obstruction of the liver. You must look, in many of these cases, to the liver, for the cause of the mischief occurring in the intestines. It often happens, in connection with mucous diarrhœa, that there is an absence of bile in the stools, or that the bile presents a disordered appearance; the stools are very dark, or green, and often attended by a very sour smell, from the absence of the proper bilious matter. There is, commonly, great disturbance of the digestive function, and there is sometimes actual fulness and tenderness in the right hypochondrium, with other signs of a congested state of the liver, or actual jaundice. But there is an opposite kind of diarrhœa that occurs, namely: bilious diarrhœa, where the discharge by stool is great, and contains an orange yellow, or green liquid, often very scalding and irritating, the fæces causing a great deal of griping pain in the intestines. This is apt to occur in hot seasons, in persons of intemperate habits, connected with hepatic symptoms. Here, the tongue is more loaded than in most other forms. The urine is high coloured, and remarkably turbid. In other cases of serous diarrhœa, the urine is scanty and turbid, with an absence of the aqueous part, the water being carried off by the intestines, instead of by the proper channel. In the form of diarrhœa, of which we are now speaking, there is a more copious deposit of red matter than usual. Bilious diarrhœa sometimes arises from duodenitis, and may be produced by mercurial medicines; in fact, all these different forms of diarrhœa may be produced by the irritation of different kinds of purgatives, long continued.

There is another variety of diarrhœa, which consists of an accumulation of fæculent matter, and the fæces are in a diluted state, rather darker than usual, but still of a yellow colour, and discharged in increased quantities. This is one of the simplest forms of diarrhœa, and is called the *diarrhœa crapulosa*. Then, there is, also, a kind of diarrhœa connected with imperfect digestion of the food, from its being hurried too quickly through the intestines. This sometimes takes place where some purgative matter is administered, or when the food contains some irritating substance, causing an increased action of the intestines, which hurries the matter through, instead of allowing it to remain until it is properly digested. This sort of irritable diarrhœa may proceed from weakness of the digestive organs, or from an indigestible and irritating quantity of food.

Now, whatever may be the form of diarrhœa, if it is of a slight character, it may soon pass off, and it must be considered as, in some degree, a natural means of relief. If the diarrhœa is slight, it may be easily counteracted; but if it is severe, and the discharge is considerable, causing great prostration of strength, it becomes more serious, and may cause great emaciation and loss of power, all the functions being attended with general disorder. There is nausea, anorexia, thirst, the urine is morbid and scanty, and, in extreme cases, it may be actually suppressed. The skin is hot and dry, and sometimes it becomes shrunken, when the diarrhœa is excessive. There is a great feeling of chilliness and susceptibility to cold, and the tongue presents various altered appearances.

The *treatment* of the more serious forms of *diarrhœa* is to be guided by circumstances. Where it is of the mucous form, and is accompanied by pain, griping, and tenderness in the abdomen, it must be treated by mild, antiphlogistic means; and it may, in some cases, be necessary to apply leeches to the abdomen or to the anus: in severe cases, fomentations or a warm bath, and blisters on the abdomen, may be necessary. In the great majority of cases, it is necessary to increase the action of the liver. Mercurial purgatives, of sufficient strength, should occasionally be given, as well as astringents, to stop the diarrhœa. It is very frequently the case, that the flux is so excessive that it is desirable to check it, but here the cause of the flux is to be considered. If the irritation is excessive, it is necessary to combine, with the other remedies, narcotics and sedatives, and if the griping pain is severe, and the quantity of the flux is so great as to weaken the patient very much, it may be advisable to combine calomel with the opium. In many cases of diarrhœa, I give a dose of calomel with conium, to work briskly through the intestines, where the diarrhœa has resisted the operation of astringents. The exhibition of this remedy must depend on the state of the diarrhœa. If there has been previous constipation of the intestines, or if improper food, or the distention of the abdomen with fæculent matter, have been the cause of the diarrhœa, then a purgative may be given without any opium at all. Generally, if the pain is excessive, calomel, combined with conium, is a good thing, followed by castor-oil or senna. If the diarrhœa continue long, and there are no signs of fæculent accumulation, where the diarrhœa seems to arise from the irritation of the flux, rather than from biliary obstruction, and if there is no pain, mild astringents answer best: after the bowels have been evacuated, a mixture of chalk and aromatics seems to have the desired action. Opium has the effect of relieving the pain for the time, but, from its tendency to arrest the secretion of the liver, it increases the mischief afterwards. In some cases, if the diarrhœa continues in spite of the milder astringents, metallic astringents become necessary, such as sugar of lead, or sulphate of copper, combined with opium. If these fail to produce a beneficial effect, then astringent injections are of great use: as a solution of alum, and sulphate of copper. I have stopped the diarrhœa by an injection of nutgalls, in cases which had resisted every other treatment.

After the diarrhœa has been stopped, it is necessary to take care that no inflammation succeed, for these fluxes, when stopped too suddenly, tend to produce inflammatory lesions; and, when any disposition to this occurs after the stoppage, it may be necessary again to give aperients to open the bowels. If the inflammation is severe, fomentations or blisters may be desirable. It is often necessary, after the continuance of diarrhœa, to give, alternately, astringents and aperients, until the bowels have got into regular action, and appear to have resumed their healthy state. The natural condition of the bowels is thus to be re-

stored, and kept up, partly by medicine, and partly by diet. It is of the greatest consequence, in the treatment of diarrhœa, to confine the diet to the mildest farinaceous food, such as: arrow-root, rice, gruel, sago, and things of that kind, avoiding animal food. The patient must be kept quiet in bed; and to get the bowels and other organs into tone, it is often useful to give tonics, such as: cusparia bark and mineral acids; and, sometimes, rhubarb and magnesia, combined with tonics, are of considerable efficacy.

LITHOTRITY, LITHOTOMY, AND THE DISEASES OF THE URINARY ORGANS.

By W. B. COSTELLO, M.D., Surgeon-Lithotrotist to the ROYAL FREE HOSPITAL.

Introduction.

I have been often urged and much blamed, during the last dozen years, for not publishing at least some of the observations which a long practice of the operation of lithotrity must have suggested. I plead guilty to the charge of having too long observed a silence on the subject, which might have been usefully broken, and I acknowledge feeling some regret at not having spoken out earlier, as many errors of opinion and practice have, in the meantime, obtained currency. I was, however, much occupied in another important labour, which long ere now I had hoped to bring to a conclusion, and in which I should have had ample scope for any thing I had to say on this subject. If, however, I have said but little, my labours as a practitioner, which were always open to the observation of my professional brethren, have not been fruitless. For these reasons, and possibly, also, because "I was not pressed to publish cases, that patients might come," as Sir C. Bell phrases it, this task, which I have always regarded as a duty, has remained unperformed.

In an operation which has owed its successful progress to private practice solely, and which, soon after its introduction, met with coldness, or repudiation, in the metropolitan hospitals, it is not so much to be wondered at that erroneous estimates should have been formed of its value, its application, its operative forms, and its results. By a lamentable miscalculation, it was assumed that dexterity of performance was to result from witnessing the operation a few times, as performed by competent hands. The surgeons of our great hospitals were yearning to try their hands: they dreamt of no difficulty. The manœuvre of lithotrity was to be learned in a day. The lithotritist, having shewn what he could do, was politely bowed out, to leave the arena free to those who adhered to the old operation from respect to their own fairly won fame, or to those who wished for full scope for adventurous experimentation. Cut off by their own act from any but accidental opportunities of witnessing the progress of the new method, the former stood up stoutly for the superiority of cutting under all circumstances, while the latter were committed to the necessity of learning, at the expense of others, that the operation which they deemed so simple, required much patient study and opportunities of a special kind before they could attain familiarity with the great variety of circumstances that occur in the practice of this method, and that degree of dexterity which renders the practice safe, and almost painless.

Judging from the occurrences which passed from time to time under their eyes, the partisans of incision stoutly maintained their ground against their experimenting colleagues, who were humbly struggling for a sufferance for lithotrity, until a kind Providence should enable them to do better. There is no saying how long the advantage would have remained with the champions of the "vias antiquas," had not the fact been silently working its way among the world of patients, that there was a milder and less perilous method of cure than that to which some of their fellow-sufferers owed their deliverance. This had a wonderful effect on their convictions. It might have been but an effect of condescension on the part of the lithotomists, but when the patients began to stipulate at least for a trial of the new method, it is surprising with what alacrity their wishes were met. "It was a good operation." "Who ever doubted it." "It was very simple." "Every one could perform it,"—not excepting even those who could not!

Worldly interest is a powerful persuasive, and the substitution of its language for that of passion and opposition, is not the least remarkable circumstance of the history of this operation. Claims were put forth on the one side, and prejudices gave way on the other. In the sentiment of their respective interests, the sufferer and the surgeon were reconciled, and an opposition, no longer tenable, was abandoned.

Far, however, from facilitating the universal acceptance of the new method, this attempt to retrieve lost ground, only served to subject it to another and more trying ordeal. It had now to suffer in public estimation, from the blunders of men, bold to undertake, but incompetent to perform. The injury inflicted upon it, by the mischiefs resulting from its practice in untried hands, was most serious. The evil could only have been avoided by the establishment of some public position, where the operation might be witnessed, and the rules regulating its performance clearly propounded. Precept and practice would thus have gone hand-in-hand, instead of the latter proceeding perilously on a voyage of discovery in search of the former. The opening of a ward in the Royal Free Hospital—to which the editor of the MEDICAL TIMES adverted, in terms so obliging towards myself, in a late Number of that Journal—will, I trust, open a new era for lithotrity, enabling it at last to take its place, not only as an accredited operation, but as one of the most glorious achievements of surgery.

From the point of view in which lithotrity has been placed, by the circumstances just alluded to, it could not be judged otherwise than unfavourably. In the absence of more correct materials for forming a sound opinion, many, for whom the study of the whole subject was impossible, judging from events within their knowledge, have thought lightly of its importance, or rejected it altogether. Judgments of this kind have had great influence, and have retarded that development on a large scale, to which the new operation is justly entitled. These judgments, limited and incorrect as they necessarily are, are, nevertheless, not altogether unfounded. Patients have presented themselves to me not unfrequently, their confidence shaken, and almost in despair, from ill-directed attempts to operate by lithotrity—attempts fruitlessly persevered in, from thirty to forty minutes by the clock; whereas, it should be known that the operation, properly conducted, ought not to last more than that number of seconds, at the most. The moments to be occupied in its performance must be regulated to fall within, rather than exceed, this space—they are not to be subject to the clumsiness of the operator. Much may be done in half-a-minute safely, while nothing but distress, risk, and mischief, can follow from attempts protracted, for no other reason, than that they have been unsuccessful. Of lithotrity, it may be more correctly said than of any other surgical operation, that, to be safe, it must be quick. The *tute* must go hand-in-hand with the *cito*.

But, as regards the patients, the evil has not been limited to a protracted and painful instrumentation. Some have paid with their lives the want of skilfulness in their surgeons, who, in some instances, have attempted to crush the stone before the instrument had reached the bladder; and, in others, have gone beyond it, pushing the "lithotrite" into the cavity of the abdomen. However much these mishaps are to be deplored, they are not justly chargeable to an operation which, in competent hands, is unquestionably preferable, as a general method, to that which it has already so extensively superseded; and all that can be concluded from their occurrence is, that the question of the presence of the one or the other method, must always include the tact and experience of the operator. The conclusion can be forced no farther than this, that, in one man's hands, the cutting operation, as regards execution, is reduced to its minimum of risk; whilst, from the want of tact and familiarity, in these same hands, it may happen that, with lithotrity, its dangers are inversely augmented. Let it be conceded that, in unpractised hands, lithotrity presents results less favourable than the cutting operation, the fact still subsists, that, as the circumstances of the judgment, favourable or otherwise, as regards lithotrity, must depend on the individual tact and knowledge of his business in the operator, so no argument against it can be deduced from the mishaps, or misfortunes of inexperience, how numerous or how serious soever they may be. No degree of skill, or knowledge however great in other surgical operations will compensate for the want of tact, and familiarity with the various manipulations of lithotrity, as modified by the great variety of the circumstances that occur in its practice. The chief element of superiority in lithotrity, and the paramount condition of success rest in him on whom the reduction of its principles to practise devolves. But this is not so much the case, as regards lithotomy, a bungling operator being as frequently successful as the most expert. In the one, the comminution of the stone in order to its expulsion by the urethra, is the main object, and needs to be accomplished with a degree of method, tact and caution, qualifications indispensable in the surgeon; in the other, the incision is the chief point, the extraction falling within the category of ordinary surgical processes. The adversaries of lithotrity have blinked these points, while practitioners at once rash and incompetent have, by their want of success and the infliction of mischief, brought it into unmerited disrepute, and thus played the game of its detractors. It is time to protest on behalf of a most valuable improvement in our art against the erroneous judgements and bad practice that would depreciate it, and to tear away the mask from those who, assuming the air of a deep interest for science, endeavour for their own petty interests to obscure the truth and mislead by the artifice of words.

In exposing facts, my aim shall be to inculcate important precepts, and at the same time to refute the errors of some recent writers, who, from imperfect data and false views, have treated of lithotrity more in the manner of an academical thesis, than as a subject that required special study and extensive practise of its manipulations, to entitle their opinions to any weight.

ON AN OPERATION OF ENTEROTOMIA, SUCCESSFULLY PERFORMED WITHOUT OPENING THE PERITONÆUM,

FOLLOWED BY

REMARKS ON THE PATHOLOGICAL ANATOMY OF THE COLON IN THE LUMBAR REGIONS.

By J. Z. AMUSSAT, M.D. Member of the Academy of Medicine, &c

(Continued from page 426.)

Remarks on the Surgical and Pathological Anatomy of the Lumbar Colon.

In the different memoirs I have published on this subject, I indicated merely the principal symptom, viz.: the distended state of the intestine, but without laying sufficient stress on the morbid condition of the part. But, having given you all that is known on the surgical and pathological anatomy of the colon in the lumbar regions, in cases of obstruction of the large intestines, I now proceed to demonstrate the fact on a more solid basis, viz.: the autopsy of adults and children, who have died from the effects of the disease.

It was generally supposed that the cellular space, existing in the left lumbar mesocolon, was too small, and too changeable, to admit the possibility of opening the intestine in that spot. This error was propagated by the unsuccessful operations performed by Callisen and Duret, of Brest, and by the imperfect manner in which the examination was performed by the various surgeons who studied the subject; it being impossible to ascertain the precise condition of the parts while they are empty,—a fact which I pointed out in 1838, while giving the details of Broussais' case.

By numerous *post mortem* examinations, I ascertained, beyond a doubt, that a large cellular space existed in the lumbar mesocolon, and this not only in the healthy, insufflated intestine, but

likewise in morbid cases, of which the following, among many others in my possession, is a proof: —A woman died, after having evacuated nothing, per anum, during forty-six days. At the autopsy, the sigmoid flexure was found to be obliterated by a cancer; the colon was distended to its utmost extent; the space on which, posteriorly, the peritonæum was found absent, was considerable, so much so, that *enterotomia* might have been performed with ease, and the patient's life prolonged.

In children affected with imperforate anus, the distended state of the lumbar colon, by meconium and gases, causes the cellular space to develop itself as in the adult, in proportion to the size of the intestine;—a fact confirmed by several cases of children who died affected with imperforate anus. It may, therefore, be asserted that sufficient pathological proofs have been given to show that this operation may be performed, even in children, without wounding the peritonæum.

It may not be useless to mention here the principal objections made against my method, when I first proposed it. Thus, without taking into consideration the distended state of the intestine, in the cases where the operation was indicated, it was affirmed that the position of the lumbar colon was too changeable to permit of the attempt at opening the intestine posteriorly. The same objection was made as to the possibility of performing lithoutripsy with straight instruments, and, without in the least considering the erroneous method adopted to ascertain the direction of the urethra and the rectum, my opponents declared that it would be rash to introduce a straight instrument into a crooked canal, and I was requested to examine the anatomical preparations of these parts, contained in the Museum of the Faculty of Medicine.

But this is not the only analogy which exists between the objections made against these two operations; for, after being obliged to acknowledge the correctness of my opinions, as far as the adult is concerned, it was asserted that it could not be done in children. And here a curious circumstance may be mentioned: that it was by *disinflating* the rectum and bladder, that I was led to conclude that straight instruments might be introduced into the latter organ, and, on the contrary, it was by *inflating* the large intestines, that I established the possibility of opening the colon in the lumbar region, without penetrating into the peritoneal cavity. Finally, it was forgotten that the impracticability of distending the bladder by injection, or inflation, so as to render lithotomy by the high operation feasible, is owing, in the generality of cases, to its being thickened and contracted. But this does not exist in *enterotomia*, since the inevitable result of the disease is to distend the colon, and produce naturally the desired effect.

The principal point—the constant presence of the cellular space, where the operation is requisite —having been proved beyond a doubt, by *post mortem* examinations, it is not necessary for me to enter into greater details on the pathology of the disease, which I examined at length in another memoir; all I will add is, that the parts which indicate the spot in which the intestine is to be found are fixed and invariable, and that it is sufficient to bear in mind, *the last rib, the spine of the ilium, the aponeurosis of the transversalis, the pad of fat, and the external edge of the quadratus lumborum muscle, to know precisely where the intestine ought to be opened.*

As to the operation, though minutely described in my preceding memoir, still I think it useful to draw the attention of surgeons to the most important and embarrassing part—the opening of the intestine—since it has to be done without any other guide or assurance than that furnished by its situation; nothing indicates positively that it is the large intestine, and as yet I have been unable to discover any characteristic sign. However, the existence of a yellow spot, observed in the foregoing case, and which indicates where the peritonæum is reflected from the intestine to the abdominal parietes, seems to be important, and will become more so, should it be perceived in other cases. I have now performed this operation nine times, successfully, without wounding the peritonæum; in one (my second case,) the intestine was contracted, and in the present instance it was in a semi-distended state.

The danger attendant on wounds of the peritonæum, in all the operations performed on the abdomen, cannot be denied; and to prove this, it is enough to compare the results obtained by Littré's method and my own. Thus, in the former, generally speaking, twenty-four or forty-eight hours had hardly elapsed, before signs of inflammation of the peritonæum appeared; and this is not to be wondered at, since that membrane is twice opened; on the contrary, of nine patients operated on by me, two only died, and that ten days after, and without offering any symptoms of peritonitis. Another proof, still more conclusive, is furnished me by J. L. Petit; this distinguished surgeon frankly confesses that, almost against his better judgment, he attempted thrice the radical cure of hernia, by merely incising the sac. Two of these patients died from peritonitis; and the third was in so dangerous a state, as almost to make him fear a like result; he quotes other facts very similar. It may, therefore, be considered as proved, that it is highly advantageous to avoid wounding the peritonæum in these and similar operations, and, consequently, I anticipate my method being generally adopted; and I trust that, for the future, surgeons, instead of allowing their patients to die—instead of asserting that the disease is irremediable, and therefore fearing to have recourse to the operation,—will, on the contrary, not hesitate to perform it, since I have proved that it may be done, without running the risk of wounding the peritonæum.

Ere I conclude, it may not be uninteresting to show the analogy between the operation for strangulated hernia and for artificial anus, as, in both, it must be performed on account of the obliteration of the digestive canal, and is, in each, equally indispensable for recovery, being, in fact, a *sine quâ non*—a case of life or death. The surgeon would be equally culpable in allowing his patients to die in either case, since the operation may prolong their life. In strangulated hernia, it is universally admitted that there is no time to be lost; sphacelus comes on, sometimes, with great rapidity, and yet, notwithstanding the danger attendant on this complication, it may be the saving of the patient by the formation of an artificial anus, which subsequently may be obliterated by an operation. In internal stricture, invaginations, &c., this resource cannot be relied on, since it seldom happens that the accident yields, or that a new passage is formed. As to the operations: that for hernia is more evidently indicated, and less difficult; the space in which it ought to be performed being perfectly limited, not only by the tumour, but likewise by the abdominal ring through which the intestine protrudes; on the contrary, *enterotomia* is far from being so easy, nor does it appear so evidently necessary, nor so urgent; however, though it presents greater difficulties, on the other hand, it is not so dangerous, from the fact that the peritonæum is not wounded.

To resume: I think I have clearly demonstrated by facts, by surgical and pathological anatomy, and by the success which followed the different operations I have performed (being now nine in number), that the colon may be opened in the lumbar regions without wounding the peritonæum; that this operation is as indispensable as that for strangulated hernia, since the former is performed for internal, the latter for external, stricture; and that it ought to be placed among the number of those which may be performed when all other means have failed. In conclusion, it may be added that it has been already performed successfully by several surgeons, foreign as well as national.

STAINS OF NITRATE OF SILVER.—A gentleman in practice, in Westminster, has recently succeeded in effacing the stain produced by a solution of the nitrate of silver on the skin by the combined application of the nitric, and hydrochloric acids.

ON REFLEX NERVOUS ACTS AND THEIR DISTURBANCES, AND THE MORE PROBABLE PARTS OF THE DOCTRINE OF SYMPATHIES.

By T. WILKINSON KING, F.R.C.S.E.

(Continued from page 404.)

The Reflex Centre apart from Brain: Whytt, Alison, Hall.—General Doctrine of Excito-Motory Agency; and Derangements.—Sympathies not Excito-Motory.

Many practitioners of the highest class are ready to ask, how are we to decide what is, and what is not, true and profitable in the reflex doctrines? All willingly admit a part, but all* seem reasonably hesitating to admit the whole. The truth is, that the theory, in a pathological and medical point of view, still remains to be so ordered, that the traveller may know where he is; so built up that the enquirer may advance by safe progressive steps, without distrust of the soil he climbs on, or of the clouds above him. My former views may be summed up in the following illustrative remark. My colleague, Mr. John Hillon, who has taken some pains to detect excito-motory signs in cases of paraplegic injury, informs me that, four or five times, (not without marked failures) he has, by pinching, &c., caused reflex phenomena in the penis and anus, between the second and fifth, or sixth, day after the infliction of the injury, but not later. Now, I would suggest that there is but one way of explaining these occurrences, *i.e.*, by inferring an incomplete division of the medulla by the violence, and the subsequent completion of the section by inflammatory softening. All these cases were, I believe, fatal.

If it be true that the reflex acts in man are not dependent on the spinal marrow as a centre, we, of course, must turn with greater interest than ever to the medulla oblongata. The following facts point to the exclusion of brain from our question:—

M. Flourens removed the cerebral lobes of a chicken, and thus destroyed sight, hearing, and will. But it lived ten months; swallowed, when crammed; slept or moved, as set to do; but could not turn aside, or choose, or remember.—(Solly on the Human Brain, p. 310.)

Magendie removed the cerebellum of dogs, &c., and all the parts above the fifth nerve-roots; hearing, smell, taste, and the cry remained, and the paw was used when the whisker was plucked.

Fœtuses born with scarcely more of brain than a mere medulla oblongata, suck, swallow, breathe, cry, move, and defecate naturally. The fœtus of the kangaroo breathes, holds the nipple, gropes, &c., for three whole months, in the marsupium.

"Alexandrine Labros, born in May, 1820, of a healthy father, but sickly mother. The child was well formed, but thin; extremely delicate, and of very shallow capacity. At the age of seven, great weakness at the extremities; a deficiency of intellect, and inability to articulate distinctly; some injury towards the brain suspected. At the age of nine, great dilatation of the pupils; parents remarked she always carried her hands towards the generative parts. On the 12th January, 1830, she was admitted to the hospital for orphans. Paralysis of lower extremities; difficult speech, imputed to fright; said to be nine and a half, and scarcely equal to one of six years, in consequence of neglect. She was very weak on her admission, and her intellect very deficient; replied with difficulty and hesitation, but evinced attachment and gratitude towards those who were kind to her.

Though her limbs were very feeble, she could walk, but frequently fell. The organs of sense performed their functions well, and she eat moderately. In January, 1831, she was cachectic and scrofulous, and had kept her bed for three months, lying on her back. She could hardly move her legs, which, till now, had retained their sensibility, using her hands; she was dull, and never

* All, or almost all. A few would, perhaps, go beyond their teachers.

spoke, evincing neither pleasure nor grief, and only replied yes or no. Towards the middle of Feb., she was taken with looseness, *stomatite pseudo-membraneuse*, and died March 25th, 1831."—(Cruveilhier, vol. 1.) Here, the *cerebellum* in a girl, eleven years of age, seems to have been very little more than *equal to two horse-beans* in size, with a band of union *behind* or above the pyramidal summit of the medulla: probably, the effect of active atrophy in fœtal life.

Now, we may gather from these observations, that the motions, more directly essential to animal existence, are guided by a set of perceptions, or *excitor* influences, directed to the essential brain, the meso-cephale, cerebral nodus, or medulla oblongata, and I think we may do this, without depending too precisely on the relative use of similar parts in dissimilar animals, or in the successive epochs of development.

Whytt wrote in the middle of the last century, and we may reasonably make some allowances for his terms, the latitude and very meaning of which are still unsettled.

"If the motions of the muscles in a cock's limbs, after decollation, are, without doubt, owing to its *soul*, may we not also ascribe to the same principle the like, but *less* remarkable, motions, in men and quadrupeds, after their heads are struck off."*

"Nor is it" (the soul) "influenced by any rational motives, but merely by the stimulating causes affecting the several organs: i.e., it acts as a *sentient*, and not as a *rational* principle."†

"The various sympathetic motions of animals, produced by irritation, are owing to *particular sensations*, excited in certain organs, and thence communicated to the brain or spinal marrow."‡

The intricacy of nervous researches is not only dependent on the disparity between man and animals: it belongs to the very nature of the subject. The following is intricate enough.

"In the case of the decapitated young hedgehog, after all gasping has ceased, motions of the larynx are still excited on irritating the nostrils, or on irritating the medulla itself, just as the peculiar motions of the trunk are excited on irritating the limbs, tail, or spines—or the spinal marrow."—(Dr. Hall's first 4to. memoir., § 48.)

The truth, however, is not all stated here, for the fact is that any active excitation may cause almost any, or even every motion, and that without precision or uniformity.

Inspiration (the whole efficient of respiration), for example, is the great central initiative rousing act, primarily and immediately necessary, as preparing alike for physical, humoral, and nervous, processes. Locomotive, circulatory, and mental efforts directly succeed. There is much import in the expression—stretching oneself.

Dr. Alison expresses a general view of excito-motion, thus: (1826—Vide Dr. Hall's 1st 4to. p. 58.)

"We have seen evidence sufficient, as I think, to induce us to acquiesce in the proposition, that these (sympathetic) actions most generally depend on the excitation of *particular* sensations. In order that these sensations may be felt, the nerves, from the impressions on which they proceed, must be *entire up to the brain;* but where they are strongly felt, their influence extends or is reflected downwards, often to parts of the nervous system remote from those in which they originated. Each acts as a stimulus, or excites an involuntary instinctive impulse, which acts as a stimulus on particular muscles only; and we cannot tell why. This was the doctrine of Whytt, of Monro, and of Haller. Modern physiologists have rendered it somewhat more precise, only by determining the portions of the encephalon which appear essential to the sensation, and those actions of nerves, in consequence of them, taking place."

Dr. Hall's general view of excito-motory doctrine seems expressed in the following passages (1st 4to. sec. 116, 120, 122):—

"This excito-motory system of nerves presides over ingestion and exclusion, over retention and egestion, and over the orifices and sphincters of the animal frame. It is, therefore, the nervous system of respiration and deglutition, and of the retention and expulsion of the fœces and urine, and of the semen."

"The true spinal system is, in a peculiar sense, the seat or nervous agent of the appetites and passions. Through it the emotions affect, not the expression and the respiration alone, but the pharynx, the larynx, the sphincters, the expulsors, and indeed the whole muscular system of the animal frame."

"The true spinal system *never sleeps;* respiration and deglutition, the action of the orifices and of the sphincters, are continued.

The physiology of the reflex system is thus set down in Dr. Hall's latest memoir, 4to. 1843, p. 52.:

A.—*The Excited Actions.*

1.—Of the iris;—of the eye-lids.
2.—Of the orifices;
  1. The larynx,
  2. The pharynx.
3.—Of the ingestion;
  1. Of the food,
    1. In suction,
    2. In deglutition.
  2. Of the air, or respiration.
  3. Of the semen, or conception.
4.—Of exclusion.
5.—Of the expulsors, or of egestion.
  1. Of the fæces;
  2. Of the urine;
  3. Of the perspiration; (?)
  4. Of the semen;
  5. Of the fœtus, or parturition.
6.—Of the sphincters.
  1. The cardia.
  2. The valvula coli. (?)
  3. The sphincter ani.
  4. The sphincter vesicæ.

B.—*The Direct Action, or Influence.*

1.—In the tone, } Of the muscular system.
2.—In the irritability, }

An exact knowledge of the functions, here included, is still a desideratum, and the subject is fairly open to investigation at all points—to extend, correct, and define its application. *The disorders of excito-motion should be spasm or palsy;* but we find set forth, in addition, between old and new hypotheses, a whole tribe of sympathetic morbid effects—all which are, perhaps, without exception, generally received,—although it is scarcely probable that a physician could be found who admits the whole into his pathology. The systematic place—relation and order—in which the nervous affections should be studied, I long since endeavoured to indicate (see "First General Laws, or Fundamental Doctrines of Medicine and Surgery."). Some erroneous views of sympathy I have objected to on several occasions (vide the article "Fracture" in the *Cyclopædia of Surgery*, and four papers on "Stricture" in the last volumes of the *Lancet*.)

Happily, no one can well feel his pretensions to originality invaded by an open discussion of pathological sympathies. It is true, that every one may claim some favorites amongst these, as peculiarly his own; but when we shall have deducted the old from the new, and the false from the true, and shall have struck a balance between the ideal and the real discoveries of different authors, we may find that little remains, in the way of fame, to be contested. An elegant writer began his career long since, by discovering a peculiar sympathy between the capillaries of the skin and those of the liver; but we have never heard the result. An element of genius (excepting Darwin's) is a power to choose the *truth*, not truth and error in equal proportions.

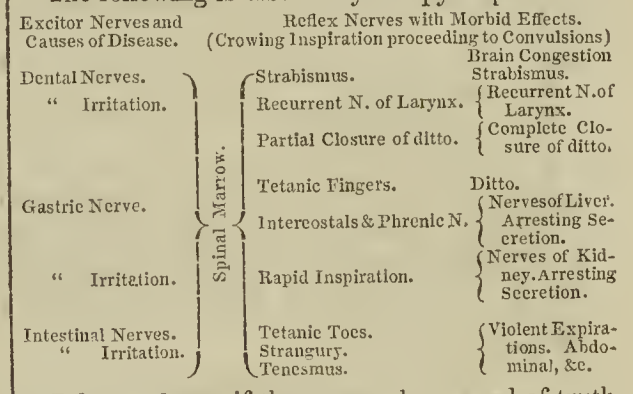
Let us admit some meaning to excito-motion and excito-spasm. I shall not object to excito-tone, nor, of course, to palsy. Beyond this, we rapidly sink into uncertainty and error.

Sense, pain, sympathy;
Stimulus, shock, collapse;
Excitors of secretion, and of arrest of secretion;
Excitors of nutrition, and of atrophy;
Excitors of congestion, inflammation, and of fever.

This is far from a complete catalogue of the sympathies of writers. A few opinions concerning some of these sympathies will, I hope, assist the enquirer to attain some right judgment of the whole. A steady gaze may dissipate many. Roger Bacon (1250) might have deduced the wisdom of the ancients on such an occasion, thus: "Draw me the teeth of that hydra-prejudice, and sow them, broad-cast, in the light of day; so shall they spring up to manhood, armed, and straight destroy each other." Untamed strength, virgin soil, and the timely stone cast—the accessories of the fable—may be hints for the all-accomplished, admirable, Crichtons of philosophy and medicine. Alas! the victor's strength was evil!

I avail myself of the plates in the last (New) Memoir of Dr. Hall, because I deem it just to advance what I can against the system of opinions therein advocated, and far less for the reason that they are maintained by him, than because some such ideas are very prevalent, or even universal.

The following is essentially a copy of plate 4:—



I do not know if there may be a word of truth in this diagram. We have no shadow of *proof*, that the spasmodic facts are not simply referable to disorder in the nervous centre. Strangury and tenesmus (pain and not mere spasm) are local inflammations. Congestion of brain, and arrest of bile and urine, are surely not excito-motory, nor palsy, in any sense hitherto explained. Possibly, I may be a peculiar instance of *antipathy*, or perverted sympathy, in the matter of gastric and intestinal irritations; but, free digestion oppresses my chest with repletion, and laxatives, on the contrary, make me low and irritable.

"One of the most interesting of medical subjects, in relation to the reflex function, is that of dentition. Dentition is a sort of natural experiment upon this function. The general convulsion, the strabismus, the spasm of the fingers and toes, the croup-like affection of the respiration, the repeated vomitings, the tenesmus, the strangury, the involuntary discharge of the urine, and of fæces, from its operation, denote the influence of irritation of the maxillary nerves, through the medium of the medulla, upon the muscles of voluntary and respiratory motion, of the eye, the larynx, the sphincters, &c., in the human subject, and indicate so many arcs of the reflex function. However these facts may have been known, their true *rationale* has not been discovered. In all such cases, the remedy is, to relieve the part in which the cause is operating. In the present instance, the maxillary nerves and vessels are to be relieved by free scarification; the lancet should be used freely, daily, or still more frequently."—(Dr. Hall's 1st 4to. Mem. p. 25.)

Would it not be proper to enquire here, in the first place, what the teeth have to do with any one natural reflex act? And again, should not the teacher of sympathy explain what the most visible diseases of the jaws are, which set up remote disorder, or should he not, at least, point out one of all the positive affections of the sockets that will uniformly excite one sympathetic disease? In the absence of all facts of the kind required, what is irritation but conjecture? If the nose runs, we say, there is catarrh; if the saliva flows (and this depends much on climate), it is said, "Ah! Dentition!" If the nose be dry, and itch, the cry is, 'bowel irritation!' whilst dry lips only signify fever. We purge to tenesmus, and blister to strangury. Teething causes both these, and everything else besides.

The further consideration of excito-motion and

* Whytt's Essays on the Vital Motions; Edin. 1751, p. 389.
† Ibid.—p. 320.
‡ Whytt's works.—p. 510.

sympathy, in health and disease, will, I think, be most acceptable, in the form of isolated and detailed observations, respecting distinct functions.

36, Bedford Square.

ACTION OF AMMONIA UPON THE PROTOCHLORIDE OF PLATINUM.

By Dr. MICH. PEYRONE, of Turin, late of the Giessen Laboratory.

Translated at the Author's request for the "Medical Times," By Dr. SHERIDAN MUSPRATT.

(Continued from page 424.)

The evolution of ammonia, and the appearance of the vapours of chloride of ammonium, afford, indeed, the best thermometer.

I have still to add, that the yellow body is always obtained when the white compound, or the body of Reiset, is evaporated to dryness with a large quantity of hydrochloric acid. There is produced sal-ammoniac, and a yellow substance, which on analysis gave me the following numerical result:—

0·3405 grm. substance gave 0·2212 grm. = 64·96 p. c. platinum, and

0·4368 grm. substance gave 0·0866 grm. water = 2·2 p. c. hydrogen.

I will not, at present, occupy more time in remarking upon the mutual relations between the yellow and white body, as I shall return to this subject after explaining some facts which remain yet to be mentioned. I shall now describe the salts which are obtained by the action of acids upon the white body.

SULPHATE OF THE PLATINUM BASE.

$$Pt.\ N_2\ H_6\ O + SO_3$$

This salt is produced when a cold solution of the white body is mixed with sulphuric acid of mean concentration. As each drop of the acid enters the liquid, a small quantity of shining plates of extreme beauty precipitate; these crystals, which strongly disperse the light, and in many respects resemble cholesterine, very probably consist of two equivalents of acid and one equivalent of base. I say probably, as it appears to me that they can only exist in the medium in which they are formed. All my endeavours to isolate this salt in a state of purity were fruitless, as alcohol, and water in a greater degree, abstract from it a portion of sulphuric acid. The numerous analyses which I made of this compound offered me no other results, except the conviction of the existence of an acid salt and the impossibility of obtaining it pure. I shall now proceed to the neutral salt, the preparation of which is attended with no difficulty. It suffices to dissolve the described plates in hot water:—the neutral salt is much less soluble than the acid one, and therefore, on refrigeration, deposits in very regular quadra-octahedrons, which, when re-crystallized, afforded the subjoined results:—

0·242 grm. dried at 212° gave 0·1315 grm. = 54·33 p. c. platinum.

0·248 grm. salt gave 0·135 grm. = 54·42 p. c. platinum.

0·410 grm. salt gave 0·1325 grm. water = 3·59 p. c. hydrogen.

0·5716 grm. salt gave 0·1756 grm. water = 3·41 p. c. hydrogen.

0·4567 grm. salt gave, when precipitated with chloride of barium, 0·296 grm. sulphate of barytes = 22·2 p. c. sulphuric acid.

0·4065 grm. salt, precipitated with nitrate of barytes, gave 0·264 grm. sulphate of barytes = 22·33 p. c. sulphuric acid.

Two salts obtained in different ways served for these analyses, and the found numerical results agree with the formula:—

$$Pt.\ N_2\ H_6\ O + SO_3$$

Composition in per cents.

		Theory.			Found.	
1 equiv.	platinum	1233·26	54·48	..	54·33	54·42
2 „	nitrogen.	354·06	15·64	..	„	„
6 „	hydrogen	75·00	3·31	..	3·59	3·41
1 „	oxygen..	100 00	4·43	..	„	„
1 „	sulp. acid	501·18	22·14	..	22·33	22·20
		2263·53	100·00			

This powdered salt is as white as snow, but, in a crystalline state, it is in regular, colourless, perfectly transparent, quadra-octahedrons, which are so large that their angles can be measured with the greatest ease, and the faces are very smooth and well formed.

The crystals are soluble in fifty or sixty times their weight of boiling water, less soluble in cold water, very insoluble in spirits of wine, and have no action upon colours. This salt dissolves in diluted sulphuric acid, and, on slight evaporation and cooling, deposits in the already mentioned plates; but if the liquid be more concentrated, there appears a mass of blood-red crystals upon its surface. In vain have I endeavoured to isolate these crystals; they are almost immediately converted into the plates. When the liquid is still further evaporated, the salt is converted into a black mass, which deposits a large quantity of platinum on the addition of water.

NITRATE OF THE PLATINUM BASE.

$$Pt.\ N_2\ H_6\ O + NO_5$$

The preparation of this salt is similar to that of the sulphate. By mixing a solution of the white body with nitric acid, small, colourless, needles are deposited, which, when washed with alcohol, and re-dissolved in boiling water, yield, on gently evaporating and cooling, small, friable, needles, soft to the touch, perfectly colourless and transparent.

Analyses of the Crystals.

0·2605 grm. salt, dried at 212°, gave 0·131 grm. = 50·28 per cent. platinum.

0·3225 grm. salt gave 0·1625 grm. = 50·38 per cent. platinum.

0·5447 grm. salt gave 0·1602 grm. water = 3·26 per cent. hydrogen.

These results gave a corresponding formula to the sulphate:—

$$Pt.\ N_2\ H_6 + NO_5$$

The following is the above formula, calculated in per cents., along with the numbers found:—

		Theory.			Found.	
1 equiv.	platinum	1233·26	50·55	..	50·28	50·38
3 „	nitrogen	531·09	21·77	..	„	„
6 „	hydrogen	75·00	3·07	..	3·26	„
6 „	oxygen	600·00	24·61	..	„	„
		2439·35	100·00			

This salt is soluble in ten times its weight of boiling water. It explodes, on being heated, like gunpowder; the platinum determination must, therefore, be performed in a tube of about ten inches in length. The properties of this salt will require a special study, on account of their remarkability. I shall, therefore, only cursorily glance at them in the present treatise. When it is boiled with spirits of wine and nitric acid, a vapour escapes, strongly affecting the nose and eyes, and there is deposited a white—with a tinge of yellow—substance, perfectly insoluble in water. This substance—for the purity of which I cannot vouch, contains 46·5 per cent. platinum, and 2·9 per cent. hydrogen; it dissolves in nitric acid, affording a crystalline matter, appearing to possess nothing in common with all the bodies which I have hitherto had the opportunity of remarking.

When a weak nitric acid solution of the nitrate of the platinum base is brought in contact with the above-mentioned vapour, particularly in a condensed state, it is converted into a blue body, very much resembling the artificial ultra-marine.

I have come to the conclusion, that the compounds of oxalic acid, as well as most of the other acids, with the alcalies, decompose the white body, giving a series of salts which contain no trace of chlorine. All these phenomena rest on nothing else but a perfectly simple decomposition, through which the mutual affinities of the bodies, coming into play, are made effective.

The white body that I have described, and which contains the same composition per cent. as the supposed radical of M. Reiset, with which it is also analogous in most of its properties, is, therefore, no other than the chlorine compound of the same base met with in the sulphate and nitrate, and behaving towards acids—sulphuric, nitric, and oxalic—like many other protochlorides, which it is unnecessary further to dwell upon. This chlorine can also be substituted, not only by the fore-mentioned acids, but by all other bodies resembling chlorine, and which are capable of forming compounds of less solubility than the chlorine one; e.g., this compound is decomposed by iodine and mellonuret of potassium. The radical of the described series of salts has the composition:—

$$Pt\ N_2\ H_6$$

which, I think, I obtained as an amalgam, and the salts of this radical take the following general formula:—

$$Pt\ N_2\ H_6\ O,\ A$$

A representing any acid.

It would be superfluous to remark, particularly, that the formulæ, which I have obtained for my salts, perfectly agree with those given by Berzelius, in his Jahresbericht (1842), for the bodies of Reiset.

This coincidence appeared to me so remarkable, especially after a comparative examination of the two bodies which formed the starting point in our investigations, that I could not refrain from repeating a part of the researches of M. Reiset. I hasten to state, that my results confirm the formula of M. Reiset, in such a way as to be highly satisfactory to me.

(To be continued.)

SELECTIONS FROM GERMAN JOURNALS.

By SIGISMUND SUTRO, M.D.

Case of Ephidrosis, the Perspiration having an Alkaline Re-action.—A man, 45 years of age, of weak constitution, often affected with rheumatism, began, in December, to perspire profusely every morning, rheumatic affections being, at the same time, very prevalent. The perspirations gradually increased, and so reduced the patient, that, at the end of January, he was emaciated to a skeleton, and could not raise himself in bed without assistance. The perspiration, which was more profuse at night than during the day, exhibited a peculiar earthy smell; it restored to reddened litmus paper its original blue colour, but contained no sugar. With all this, the patient was perfectly free from fever, and only felt a little chill, when kept out of bed, whilst it was being dried; his appetite was very good; thirst slight; urinary excretion increased, rather darker than usual, but neither exhibiting the presence of albumen, nor any precipitates; it was acid when first voided, soon after becoming ammoniacal; bowels regular. The thoracic and abdominal organs being all in a perfectly healthy state, the author considered the disease as idiopathic ephidrosis (having concluded, from the history of the case, that it could not be an attack of irregular intermittent fever). Different remedies were employed, without apparent effect: purgatives and diuretics, bark and quinine, mineral acids, chlorine, internally and in the form of lotion, alum, acetate of lead, &c., till the disease, after the duration of 19 weeks, as gradually disappeared, as it had been developed. But, even then, the usual strength was so slow in returning, that six months after the entire cessation of the perspirations, the patient could not perform his accustomed work. The foregoing case is so far remarkable, that, at a time when the acid was so decidedly prevalent in some of the secretory products, the perspiration of the man not only did not have an acid re-action, but, on the contrary, coloured the reddened litmus-paper blue.—*Dr. Philip in Casper's Wochenschr.*

Cholera caused by the Roe (Spawn?) of the Barbel.—The author is led by his experience to coincide in the observations of Rapp and Marx, as regards the vomiting and purging occasioned by eating the spawn of the *cyprinus barbus*. But he only saw these consequences produced in children. After taking the spawn, frequent bilious vomitings ensued, with præcordial anxiety, and purging, accompanied by tenesmus, violent perspiration, convulsions of the upper and lower extremities, anxious expression of the features, singultus, and syncope. If not gone too far, these accidents are removed by an emetic of ipecacuanha; but, if the vomiting is already very strong, the author always found irritants, applied to the præcordia, with the in-

ternal use of aqua oxymuriatica and of lemonade, to have the proper effect.—*Dr. Trusen, of Posen, in Hufeland's Journal.*

Acute Gastritis Cured by Clysters of Musk.—A female, 31 years of age, suffering from habitual obstruction, fell ill in consequence of having taken a violent cold. Believing that she was attacked only with her usual colic, she took the next day an ounce of Glauber's salt (sulphate of soda), but, instead of its removing the obstruction, violent fever continued, with a burning pain below the præcordia: frequent vomiting and very troublesome eructations. The præcordial region was extremely sensitive to the slightest touch; abdomen contracted; pulse frequent and wiry, scarcely perceptible at the right arm. A venesection was instituted, of a pound and a half, twenty leeches were applied to the scrobiculus cordis, then warm anodyne fomentations, and, every second or third hour, a clyster of castor oil; an emulsio oleosa, with extr. hyoscyam. and syrup. diacod., was also given internally, with calomel, and a warm bath ordered. The patient having vomited most of the medicines, leeches were again applied in the evening, which seemed to alleviate the pain a little. The next morning, the bowels acted, but the other symptoms continued in the same degree: hands and feet cold; another warm bath. Of her own accord, the patient drank a decoction of cinnamon, with wine, which caused all the symptoms to increase to their highest pitch. The constant vomiting, eructations, and pains, threw the patient from one fainting fit into another; hands and feet as cold as ice; face hippocratic; pulse scarcely perceptible. Under these circumstances, the author ordered, at the evening visit, the following clyster (a renewed application of leeches, warm bath, emuls. oleos. &c., having failed to cause any improvement):—

℞. Decoct. sem. lin. ℥viii.
(ex. ℥iii. parat.) adde
Mosch. Tonquin. c. sacch. bene subact. ʒiss.
M. for two clysters, to be given within two hours.

With this treatment, the patient was, by the next morning, greatly improved. After these clysters, which the patient retained till the morning, the vomiting, singultus, eructation, thirst, and pain, diminished; the pulse reappeared, and then a general perspiration broke out over the whole body, with something resembling urticaria. The recovery now commenced, under a well-regulated diet, although it was somewhat impeded by a severe salivation (caused through the calomel), and slowly proceeded to a full restoration of her former health.—*Dr. Trusen, of Posen, Hufeland's Journal.*

Inflammation of the Appendix Cœci Vermiformis.—This disease is not so rare as is generally imagined, although it is frequently mistaken in practice. The following are its symptoms:—*continued* (not remitting), deep, lancinating pains, in the regio iliac. dextra, gradually increasing within 12 or 24 hours, and extending over the abdomen towards the right and inferior part: increased by movement of any sort, by coughing, and by the slightest pressure; also, bilious vomiting, obstinate constipation, dry tongue, covered with a brownish fur, great thirst, quick, small pulse, but little urinary excretion. The patient lies mostly on his back. In a short time, great weakness supervenes, which ends in death, from the third to the sixth day. If the disease continue above that period, at the eighth or tenth day, a circumscribed tumor, more or less movable, is generally observed in the right iliac region, attaining the size of a walnut, or even of an egg, and terminating in fæcal abscess, in consequence of gangrenous perforation of the processus vermiformis. The morbid action of the peritonæum is indicated by the extended inflammation, following the spontaneous opening of the abscess, and the effusion of its contents. This stage is evidenced by the sinking of the tumor, accompanied by inflation of the whole abdomen, anxiety, prostration; pulse small, and scarcely perceptible, but greatly accelerated; extremities cold, &c.; and sometimes there is retention of urine, and fæcal vomiting. The autopsy generally shows: the processus vermiformis, black, gangrenous, perforated and diminished in size; effusion of pus and fæces into the abdominal cavity; the peritonæum covered with an exudation of lymph, thickened, perforated, and sometimes gangrenous; the intestinal convolutions joined together by pseudo-membranes; the psoas, iliacus, and quadratus lumborum muscles, changed in their structure, softened, and blackish. The most frequent *cause* of this disease is, mechanical injury, as that occasioned by fruit-stones, gall-stones, &c., arriving at the appendix of the cœcum, and squeezing themselves into it. Sometimes, the complaint is undoubtedly secondary, proceeding from a primary inflammation of the cœcum, or of the cellular tissue lying behind it and the colon ascendens (*perityphlitis* of Puchelt); perhaps, psoitis might likewise lead to inflammation of the proeessus vermiformis. A singular fact is, that the cases, hitherto observed, have occurred only in individuals between the ages of 18 and 50, and very rarely in children or old people. According to Grisolle, the male sex is more subject to it than the female. As to the *diagnosis*: it may be confounded with inflammation of the cœcum (the obstruction is generally, however, more obstinate and constant in the latter); with *perityphlitis* (but this, according to Puchelt, mostly arises after a chill, the pain first appearing in the hepatic region, having an inflammatory, rheumatismal, character, and becoming fixed, only at a later period, in the region of the cœcum and colon, from which it seldom extends further.) From *peritonitis* and *enteritis*, the disease is distinguished by its position in the right iliac region, by the circumscribed nature of the tumor, &c. *Psoitis* is distinguished by its seat in the lumbar region, by its arising after some external injury, by the flattening of the buttocks, and by the impossibility of turning the thigh outwards. The *prognosis* is generally unfavorable; recovery only taking place when stools ensued before the formation of abscess, attended with decrease of the symptoms. *Treatment*: twelve to twenty leches; venesection, cautiously applied; emollient cataplasms; clysters of camomile-tea; linseed-oil and soap; warm baths,—&c.; internally; purgatives of sulphate of magnesia, ol. ricin., or infus. sennæ compos., with potass. If these remedies are rejected, Barne recommends: 6 grs. of extr. colocynth. co., 2 grs. of calomel, with 1 gr. of opium, to be given every six hours. If the symptoms do not decrease, it must be carefully ascertained whether a tumor has formed, in which case, a timely incision may still save the patient. If effusion of pus into the peritonæum has already taken place, Stokes, Graves, and Chomel, recommend large doses of opium (one grain every hour); in some cases, the use of morphia, by the endermic method, is said to have been very successful. The author concludes by enumerating several cases.—*Dr. Burger, in Hufeland's Journal.*

PARISIAN INTELLIGENCE.

(FROM OUR OWN CORRESPONDENT.)

Paris, August 22, 1844.

On Diseases of the Eye. By Professor Velpeau.—In my last, I mentioned that it was my intention to describe the treatment of *Conjunctivitis Purulenta*,—but, before so doing, I wish to draw your attention to another variety, of which there is a case now in my wards.

Conjunctivitis Papulosa.—The mucous membrane of the anterior surface of the eye may not only be inflamed throughout its whole extent, as I have already stated, in a preceding lecture, but likewise the phlegmasia may be limited, so as to present one or more spots, surrounded by healthy tissues, constituting what is called partial conjunctivitis, of which the form most frequently met with, is conjunctivitis papulosa. This is in direct opposition to the opinion of several practitioners, who will not admit that the different component parts of the eye may be inflamed separately; for, as you may perceive in this instance, not only one of the membranes is alone affected, but, likewise, the phlegmasia is limited merely to a portion of its extent. The fact is evident, and it cannot be denied, that the conjunctiva may become the seat of several red spots, offering all the characters I have assigned to conjunctivitis simplex. The young woman, at No. 16, forms a striking proof; she presents, at the inner canthus, a red spot, extending over about one-third of the surface of the sclerotica; it is very apparent: is composed of blood-vessels in the form of arborizations, the base turned towards the cornea; and evidently it is seated neither in this membrane, nor the sclerotica, because the sight is perfect, and because its mobility indicates that the conjunctiva alone is affected. In this variety, a greyish-white, or roseate spot appears, at first conical, but which is soon depressed, constituting what have been denominated papulæ: these last, coinciding in number with the spots, have been taken, by some oculists, for ulceration. This error is easily accounted for, as the papulæ, at a certain period, present an apparent depression; this, however, as in aphtha, is owing to the swoln state of the surrounding parts, not to the ulceration of the spots. As to their seat: some authors say that it is at the union of the cornea with the sclerotica; others, in the conjunctiva alone; but, by experience, I am convinced that it may be sometimes on the conjunctiva alone, sometimes on the cornea, or on both at the same time. I observed it once on the cornea of a man, who offered four other distinct spots. The disciples of Beer, or what is called the German school—which, however, the Germans refuse to admit—affirm that this variety is the pathognomonic character of scrophulous ophthalmia. It is not necessary to waste much time in refuting this opinion; the patient, I have just alluded to, is in nowise scrophulous, and I have seen it attack individuals of a muscular, bilious, or nervous temperament: in short, presenting all the different kinds of constitution. Moreover, it is not requisite to have recourse to the constitution to explain the cause of the papulæ; they develop themselves, generally, in the inner or outer canthus, on the sclerotica: and, on this spot, the individual normally offers a species of knot, or eminence, sometimes so apparent as to make him suppose that he is affected with a disease of the eye; it is this eminence which becomes the seat of the disease. Conjunctivitis papulosa very often remains limited; sometimes, however, it extends gradually to the whole surface of the conjunctiva; it lasts generally eight, ten, or fifteen days, and, in some cases, it is overcome with greater difficulty than general conjunctivitis. As to the treatment: the nitras argenti succeeds better in substance, than in solution, for, in most cases, as soon as it is applied, the disease stops, and resolution takes place; when it attacks the whole mucous membrane, you may have recourse to both. Finally, what I have said of conjunctivitis papulosa, is applicable to all partial inflammations of this membrane, for, as soon as phlegmasia attacks a spot, the papulæ soon appear; consequently, these diseases may be divided into general and limited.

Having terminated what I have to say on conjunctivitis papulosa, I will now continue where I left off in my last lecture;—the treatment of:—

Conjunctivitis Purulenta.—When describing the symptoms of this variety, I laid sufficient stress on the danger attendant upon it, the accidents it gave rise to, and the rapidity with which it developes itself, to make you surmise that the remedies employed must be active and energetic, if you wish to save the eye. This is but too true, and must ever be present to your memory. The treatment here, as in the other varieties, may be divided into:—

1° *General Treatment.*—It consists of—*venesection*; this has been carried to its utmost extent: since English practitioners have bled twenty times in cases of this disease; one has even stated having drawn *forty pounds* of blood, but this assertion, notwithstanding the celebrity of its author, is hardly credible, to say no more. This method, however, has not been without its utility, since it has proved that bleeding must be considered as an accessory means, undoubtedly beneficial, but which does not put a stop to the progress of the purulent phlegmasia, and, consequently, cannot be considered as one of the principal remedies.—*Local bleeding, purgatives.* The same remarks are applicable here; they may be useful as adjuvants, but no more.—*Calomelas.* This substance has been

warmly recommended, when given in large doses: I frankly confess that I have never administered it; the more so, as the results obtained in conjunctivitis simplex were far from satisfactory; moreover, the partisans of this method say nothing which proves its real efficacy. I will not waste time in dissertations on the utility of terebinthina, camphora, colchicum, &c., but conclude by saying, that the general treatment is insufficient for the cure of conjunctivitis purulenta, whether it be that which attacks infants, or grown-up persons; the only form that is ameliorated by it, is the blenorrhagic,—by the balsams.

2° *Local Treatment.*—Perceiving the inutility of the preceding remedies, practitioners prescribed all kinds of collyria, but mostly without benefit. Cauterizations of the surface of the inflamed conjunctiva were also practised, and, to attain this end, several instruments have been recommended. Thus: Sanson recommended an annular *porte-caustique*, sufficiently large not to touch the cornea: accompanied by excision of a portion of the conjunctiva; this, however, succeeded in some cases only, and, as more patients lost their eye than those who recovered, further researches became necessary; the more so, as, in a disease so dangerous and so rapid, the generality of remedies, used in the other varieties, are here without effect; what is requisite, is one possessing great energy, whether in the dose employed, or in the nature of the substance. It was said that large mercurial frictions, combined with leeches, sufficed, but this opinion is not only erroneous, but also dangerous; because, while employing these remedies, instead of others more efficacious, the disease continues to increase in intensity, and when you find out their inutility, it is too late to save the eye. You must always bear in mind, that this is not a species of ophthalmia which will yield sooner or later, with or without treatment. In conjunctivitis purulenta, if the appropriate remedy is not employed immediately, the eye is lost, and it is here that experience is so useful, and ignorance unpardonable. I once strongly recommended the following solution:—℞. Calomel. ʒi., decoct. malv. sylvestr. ℥iv.,—the phial must be well shaken, each time, and the liquid introduced into the eye. It succeeded in numerous cases of ophthalmia blenorrhagica; unfortunately, in others, it failed completely. I have likewise had recourse to various other substances: *calomel*, introduced in powder, is useful, but does not always cure: *corrosive sublimate*—dose, gr. ij. to grs. iv. in ℥j. of water; as it is soluble, its administration is easier than that of calomel, but it must be watched with great care, and, on the other hand, I did not find its discutient properties to be greater; for, sometimes, though employed, the disease persisted: *nitrate of silver*—but, before speaking of this substance, I wish to state why excision of the conjunctiva ought to be rejected. First, it is difficult, if not impossible, to perform it precisely where it is needed; and this may be easily accounted for, when we remember the condition of the eye itself, and the swoln state of the lids: secondly, supposing that the diseased portion of the mucous membrane was removed, this would not prevent the remainder from being subsequently affected, and the eye lost: thirdly, it does not destroy the virulent principle, which renders it so dangerous: finally, it causes a deformity; besides which, experience teaches us that it often fails. To return:—numerous practitioners agree that the nitras argenti may be very advantageously prescribed, but in large doses. In Ireland, Scotland, England, as well as in St. Petersburgh, this remedy has been employed with success. M. Florian has ordered it, in several hundred cases; he is enthusiastic in its praise, and declares the disease yielded. In England and Belgium, this is also the opinion of a great number of practitioners. For my part, I have prescribed it for the last twelve years, and I do not hesitate to assert that, though not infallible, it is still the best remedy I know of. The doses, in which it is employed, differ according to the country of the practitioner: thus, in England, from ʒij. to ʒiiss. are dissolved in ℥j. of water: M. Florian, unfortunately, has not mentioned the dose in which he orders it; finally, other persons employ it in substance. It must be confessed that, at first sight, the use of nitrate of silver, as recommended by me, may create fears as to the result; when we reflect that the least contact with the cornea, when in its normal state, gives rise to an opaque spot, we can hardly divest ourselves of the idea, that the application of the remedy is sufficient to destroy the organ. This opinion has been announced by some practitioners, and, about a year ago, Dr. Delasiauve performed several experiments, on account of four cases which occurred in Professor Trousseau's and my wards, and which were published. From his experiments, performed on rabbits, in which he employed a solution composed of nitrat. argent. ϑiij. to ϑiv., aquæ puræ ʒvj.—℥j., the author concludes that, since the animals lost their sight, a similar effect would be produced in man; and, contrary to Professor Trousseau, who attributed the non-success to the remedy having been prescribed too late, he considered it to be owing to its powerful action. Experience, however, has proved precisely the contrary; and you have, even now, an example of the efficacy of this remedy in ophthalmia purulenta. A young girl entered, a few days ago, with one eye only affected; it was cauterized, and she was ordered the collyrium, which produced an amelioration. Twelve hours after, the other eye was attacked; the collyrium was employed, without success; cauterized the next morning, the disease appeared to have yielded. As a general rule, you must not be too timid in similar cases; and I insist the more on this, as I appreciate the hesitation of those who have never had recourse to this remedy, since I myself experienced this feeling. This was, on my part, owing to the circumstance that, in some cases in which I prescribed the azotas argenti, at the dose of ϑiij. or ϑiv. at first, the cornea was partly destroyed; an opaque, white spot appeared, followed by a large ulceration. Was this caused by the disease? Was it the consequence of the action of the remedy? Might it not happen that a certain quantity of the nitrate may be collected on a portion of the cornea, and give rise to this ulceration? These questions are still surrounded with considerable doubt, in my mind; this is the cause why, sometimes, I hesitate still, and have made it a rule to advance progressively. In the case I have just quoted, evidently, if the disease continued, it was owing to its having been employed in too feeble doses.

It may, therefore, be concluded: that the nitrate of silver is the most efficacious topical remedy we possess, provided it be employed in large doses, and in a certain way; by this I mean, that attention and practice are necessary for the management of this remedy. It is not enough to place it simply under the lids; on the contrary, all the diseased surface must come in contact with it, and it must penetrate as far as the oculo-palpebral groove. Some persons say, that these minutiæ are of no utility, but that it is sufficient to drop the collyrium into the eye; this is not my opinion, for I consider that these precautions go a great way in obtaining a successful issue. It is not necessary to state, that the remedy ought to be employed in different doses, or more or less frequently, according to the stage and intensity of the disease; all I will say is, that, when very intense, you had better cauterize than prescribe the collyrium. To do this, you must evert the lids, so as to be enabled to reach the whole conjunctiva, carefully avoiding the cornea, which, however, is, in general, somewhat preserved by the pus covering it. If the lids cannot be everted, you must then have recourse to the solution, with the precautions just mentioned; finally, if they cannot be separated, the liquid must be injected by means of a glass syringe. When you prescribe the collyrium, you must never omit visiting your patient the same day, in order, if the disease still continue, to cauterize the conjunctiva with the solid nitrate of silver; when this has been done twice, the collyrium is sufficient to obtain a cure, when employed as follows, in ℥j. of water: the first day ϑj., persevered in as long as the pus continues to be secreted abundantly; as soon as it decreases, the dose must be gradually reduced to grs. iv., grs. ij., gr. j.

These are the rules which, in my opinion, you ought to follow in prescribing azotas argenti in conjunctivitis purulenta; but you must not, on that account, neglect other means, with the idea that it is enough to obtain a cure. Thus, when the patient is young and strong, general and local bleeding must be had recourse to; in ophthalmia blenorrhagica, copaiva and cubebs must be added. When the patient is of a weak constitution, local bleeding only should be employed; when the lids are very red, they must be rubbed with mercurial ointment; finally, when the conjunctivitis purulenta is not blenorrhagic, energetic purgatives may be administered, such as: oleum croton tiglii, extractum colocynthidis, and such like.

Having thus terminated this class of diseases, in my next lecture I will commence another, viz.: affections of the cornea.

Artificial Anus.—Cases read by Dr. Dufresne before the Academy of Medicine; Sitting of the 13th instant.—1° In August, 1795, V——, æt. 57, was, during harvest, occupied in loading his cart with wheat; during an effort to lift a sheaf, the band having broken, he lost his equilibrium, fell, and the left side of his abdomen struck one of the stakes forming the sides of the cart, with sufficient force to cause it to penetrate deeply. Taken home, M. Dagueseau, a surgeon residing at Chadurce, was called in immediately, and decided upon establishing an artificial anus, according to Littré's method. No consecutive accidents occurred; and the patient soon got well, and lived twenty-four years, for he died in 1819, aged eighty-one. A small leather sac was adapted to the opening by Dagueseau to receive the fæces. —*Remarks.* This case, though incomplete, is interesting, because at the period at which the operation was performed, only one case had succeeded—that of Duret de Brest, in 1793. The patient, operated on by Filoz, in 1776, died twenty-eight days after; that by Antoine Dubois, on the tenth day, and that, by Desault, likewise died.—2° Masset, a potter at St. Eutrope, was affected with several fistulæ in ano, and having consulted Dagueseau, this practitioner considered it impossible to obtain a radical cure, except by establishing an artificial anus in the left hypochondrium, according to Littré's method. This operation, performed in 1811, succeeded; the fistulæ cicatrized; after which the artificial opening gradually diminished in size, and in two years was completely closed. The cicatrix, from an excess committed by the patient, burst open, notwithstanding the presence of a truss; but, by appropriate remedies and rest, it healed, once more, and the man was thus delivered of the two infirmities.—*Remarks.* This case, which has no precedent in its favour, may astonish some persons, and the operation be considered as not indicated; all that can be said is, that Dagueseau's talent was sufficient to enable him to form an opinion as to the absolute necessity of the operation, ere he performed it.

Spina Bifida.—A child, six days old, labouring under this affection, was brought to the Foundling Hospital and placed in Dr. Baron's ward; it was operated on by Dr. Tavignot, and, though it terminated unsuccessfully, this case is still worthy of attention. Various methods have been proposed for the radical cure of this disease. In 1779, Desault and Mathey advised passing a seton through the swelling; this rapidly caused inflammation of the walls of the kyst, followed by fatal meningitis. Forestus and B. Bell recommended the ligature: this is not more advantageous than the former, as a case, recorded by Heister, is a proof. In 1807, Sir Astley Cooper cured a patient by compression, and in 1809 another, by repeatedly puncturing the tumour with a needle and evacuating its contents; this method succeeded likewise in the hands of MM. Robert and Rosetti (*v.* Arch. Gen. de Med. vol. 17, p. 280, and vol. 18, p. 102). In 1841, Dr. Dubourg, physician to the Hospital of Marmande, concluded that, since the division of the bones in hare-lip disappears as soon as the soft parts are united, the same thing would take place in this disease, on removing the tumour which is the cause of malformation of the spine, and, consequently, proposed the following operation, which, in three cases, has succeeded twice. An elliptical incision is made on the base of the tumour, and the surgeon, as soon as the

serosity has escaped, places his finger on the wound, so as to prevent the entry of the air into the theca vertebralis; the lips are then kept united by means of the twisted suture, and, after placing small compresses under the points of the pins, a bandage must be passed round the body. It was this operation, somewhat modified, that was employed by Dr. Tavignot. Finally, Jeau Maurice Hoffman (Miscellanea Cur. Nat. decad. 2. an. 5. obs. 208,) and Camper (Mem. de la Société Royale de Medecine, ann. 1784 and 1786) record two cases, in which the patient recovered after the rupture of the tumour. Case.—The child, six days old, presented, over the lumbar vertebræ, a tumour of the size of an egg, transparent, fluctuating, and reducible; when the liquid was pushed back into the theca vertebralis, the preternatural space between the spinous processes was felt; the envelope of the tumour was very thin, and the skin seemed on the eve of being inflamed; in order, therefore, to prevent the spontaneous rupture, the operation was decided upon and performed as follows:—After seizing the swelling with a forceps, so constructed as to compress it near the vertebral column only, an incision was made, and the instrument closed more and more as the liquid flowed out, so as to prevent the access of the air into the kyst. Having evacuated all the seresity, the lips of the wound were united, after the division of two or three nerves contained in the walls, by the twisted suture, and a bandage placed round the trunk. During three days, everything seemed to promise a fortunate result; but, on the fourth, the opening made by one of the pins was found to be the seat of an ulceration, through which a small quantity of liquid escaped. Fears were entertained as to the possibility of the entry of air into the theca vertebralis, which in all probability took place, for, soon after, the child became agitated, refused to take the breast, and died on the fifth day. Might not this have been avoided by removing the pins earlier? And, in order to supply the support they offered, may not strips of sticking-plaster be employed? This operation, notwithstanding the advantages it presents, may be productive of serious accidents, on account of the presence of a portion of the spinal marrow in the tumour,—a fact pointed out by Professor Cruveilhier and Dr. Voillemier (Bull. de la Soc. Anat. XIV année, p. 123), and this circumstance will induce repeated puncturing, combined with compression, to be preferred.

Academy of Sciences.—Sitting of the 19th Aug.—M. Elie de Beaumont, V.P., in the chair.

Researches concerning the Effects produced by different kinds of Food on Cows: by M. Boussingault: memoir presented in his name by Professor Dumas.—After proving the errors contained in M. Playfair's researches, the author performed a series of experiments.—Two cows—one having calved 96, and the other 40, days before the commencement of the experiments—were submitted to the following diet; the quantity of food given during 24 hours, was: hay 24lbs.; potatoes 17lbs.; beet-root 24lbs.; cake, made from the brassica arvensis, 24lbs.; cut straw *ab libitum;* boards were substituted for litter, in order that no other food might be taken, but that given. Under the regimen, the average quantity of milk obtained per diem was from 8 to 9 quarts. The same animals were then fed:—1° *On beet root,*—for 17 days; the result was:

	First Cow.	*Second Cow.*
Loss in weight	110lbs.	94lbs.
Quantity of food taken	2353lbs.	2256lbs.
Ditto of milk obtained	99qts.	104qts.

Compos. of milk.			
	Caseum	3·67	3·81
	Sugar of milk	3·39	3·74
	Butter	4·56	3·42
	Alcaline chlorurets	0·43	0·54
	Phosphates of lime, magnesia, &c.	0·22	0·26
	Water	87·73	88·23
			100·00.

The dried excrements weighed 83lbs., which gave 3·5 per cent. of a fatty principle, of a pale green colour, and very fusible. At this period, the animals were in so sorry a condition, that they were fed on hay for a fortnight before anything else was attempted.—2° *On hay,*—for 15 days; the result was:

	First Cow.	*Second Cow.*
Increase of weight	64lbs.	102lbs.
Quantity of food taken	622lbs.	640½lbs.
Ditto of milk obtained	65½qts.	89qts.

Compos. of milk.			
	Caseum	3·63	3·56
	Sugar of milk	3·46	3·94
	Butter	5·92	4·39
	Alcaline chlorurets	0·45	0·52
	Phosphates of lime, magnesia, &c.	0·27	0·20
	Water	86·26	87·39
			100·00.

The dried excrements weighed 402lbs. which yielded 3·3 per cent. of a fatty principle, similar to wax, of a greenish colour.—3° *Potatoes,*—for 14 days; the result was:

	First Cow.	*Second Cow.*
Loss in weight	48¼lbs.	40lbs.
Quantity of food taken	1221lbs.	1191¼lbs.
Ditto of milk obtained	47qts.	76½qts.

Compos. of milk.			
	Caseum	4·37	3·99
	Sugar of milk	3·09	3·99
	Butter	3·97	4·63
	Alcaline chlorurets	0·55	0·55
	Phosphates of lime, magnesia, &c.	0·27	0·27
	Water	87·75	86·57
			100·00.

The dried excrements weighed 288lbs., and yielded 0·006 of a fatty principle, very fusible.

From these facts it may be concluded: that beet-root and potatoes do not contain sufficient food for milch cows, even when given *ad libitum;* that the aliment may, for several reasons, be inadequate to the wants of the animal:—1° when it does not contain enough azotized principles to replace those eliminated; 2° if the carbon is not in sufficient quantity to supply that burnt during respiration, or excreted; 3° if the proportion of the different salts, especially phosphates, are insufficient to supply the losses sustained by the system; 4°, finally, according to opinions lately announced, if it does not contain the quantity of fatty principles which escape in the different secretions, and especially in the milk. This admitted, the author then analysed the substances employed in the preceding experiments, and found that, though they all contained the elements (sugar, starch, azotized principles, salts) necessary for the production of animal heat, and the reparation of the losses caused by the secretions, yet two—beet-root and potatoes—were really inadequate to the wants of the animal, and it is these which do not contain a sufficient quantity of fatty principles. Consequently, it may be affirmed: that the food of the herbivoræ ought always to contain a certain proportion of substances analogous to fat, in order to form that contained in the tissues and in the secretions, which present a notable proportion, such as: bile, milk, &c.;—and that, if the alimentation is insufficient, this principle is furnished by the fat contained in the tissues, and the quantity of milk gradually decreases; if the diet be persisted in, the existence of the animal may be compromised.

Professor Dumas, after analysing the preceding memoir, added that he had received a letter from M. Boussingault, giving the details of his researches on the fattening of pigs with potatoes: the result is contrary to the opinions of those who admit that fat is formed by the herbivoræ, and proves the exactitude of the ideas announced by MM. Boussingault, Payen, and the learned Professor himself.

On Silicic Ether. By M. Ebelmen: memoir presented by M. Regnault, M.A.S.—On pouring absolute alcohol on chloruret of silicium, a lively reaction takes place; a considerable quantity of gaseous chlorhydric acid escapes, and the temperature gradually decreases, until the quantity of alcohol exceeds that of the chloruret, when no more gas escapes, and the heat rises. Distilled, at first, a small quantity of chlorhydric ether passes over, and, on continuing the distillation, two products are obtained: 1° That which passes over until the thermometer marks from 352° to 370° F.: it must be separated, and when rectified, until its boiling point becomes fixed between 387° and 420° F., it constitutes a colourless liquid; of an ethereal odour, *sui generis;* a strong, peppery taste; density 0·932; insoluble in water, by which it is decomposed slowly, and deposits a small quantity of silica; neutral; soluble in alcohol and ether; an alcoholic solution of the alcalis decomposes it rapidly, and, by means of the acids, silica may be obtained in a gelatinous form; placed on a platina plate, at a red heat, it burns with a white flame, and deposits its silica as an impalpable powder. If we admit, with Berzelius, that 277·32 is the equivalent for silicium, and Si O^3 the formula for silica: the analysis of the ether gave Si $O^3 + 3\ C^4\ H^5\ O$;—if, on the contrary, we conclude, with Professor Dumas, 92·44, the equivalent for silicium, and Si O the formula for silica, that of the ether will be Si O + $C^4\ H^5$ O.—2° The liquid, which passes off between 370° and 636° F., was found, on analysis, to contain the same quantity of carbon and hydrogen, whilst that of the silica increased as the temperature was raised. Distilled, it gave a colourless liquid, of feeble odour, and different taste from the preceding; density 1·035; the action of water, alcalis and ether, as before; analysed, the formula was found to be $(Si\ O)^2 + C^4\ H^5\ O$. The two following formulæ explain the reaction which takes place between alcohol and chloruret of silicium.

$$Si\ Cl. + C^4\ H^6\ O^2 = H\ Cl. + Si\ O + C^4\ H^5\ O.$$

$$(Si.\ Cl.)^2 + 2\ C^4\ H^6\ O^2 = C^4\ H^5\ Cl. + H\ Cl. + H\ O + (Si\ O)^2 + C^4\ H^5\ O.$$

The author further announces, having made several experiments on the action of alcohol on the chlorurets of titanium, stannum, phosphorus, arsenic, and sulphur, and which, when complete, will be communicated to the Academy.

Academy of Medicine—Sitting of the 20th Aug.—Dr. Ferrus in the Chair. After some remarks from Dr. Delens, who considered the speeches of the different members as succinct, yet often given with less exactitude in the *bulletin* of the Academy than in the various periodicals, and a reply from Dr. Dubois (d'Amiens), annual secretary, the proceedings of the former sitting were adopted.

The Perpetual Secretary then read the *Ordonnance,* by which his Majesty confirmed Dr. Laugiers' nomination, who, in consequence, was requested to take his place amongst his colleagues.

The President informed the Academy that Dr. Barbier (d'Amiens), corresponding member, was present.

On Pestis.—Dr. Pariset read a report on a memoir, presented by M. Louis de la Porte, surgeon in the navy, on the focus, the causes, the mode of production, and, finally, the duration of incubation of the plague. After a learned analysis of this memoir, and one from M. Cigalla (which shall be given in my next), the learned reporter concluded by proposing: 1° to thank MM. De la Porte and Cigalla; 2° to place their memoirs in the Archives of the Academy; 3° to inscribe their names on the list of future correspondents.—*Dr. Rochoux:* Two opinions exist on the mode of propagation of this disease. The first is that, which, according to the ideas of Fracastor, supposes the disease to be contagious, and that a virus, analogous to that of variola, is the sole cause of the plague; consequently, by isolating the patient, the propagation of the disease may be prevented. The second consists in considering the affection as produced by insalubrious causes, or by infection: and of late this opinion, confirmed by experience, gains fresh partisans, and will, in all probability, ere long be generally adopted; indeed, no further proof is necessary after the learned report we have just heard. In the memoir which gave rise to it, are enumerated causes, which men, living in civilized countries, can hardly think credible, were they not attested by persons whose testimony cannot be doubted. But, though this evidently is the origin of the disease, still it is equally certain that a sick person may communicate it by touch to a healthy one. It is like the typhus which ravaged Paris in 1814, which made numerous victims, and yet soon disappeared, as it was not communicated from one patient to another, after a second or third time; now, does not a similar effect take place in this

disease? This shews that, in order to put a stop to its progress, the patients ought to be separated, and not collected in lazarettos, and that our sanitary measures are useless, if not injurious. I will content myself by quoting, in favour of this assertion, England, which has suppressed all quarantines, and yet, notwithstanding her extensive commerce, and the rapidity with which voyages are now made, there has never been a case of plague in the United Kingdom.—*Dr. Castel*: The ideas, entertained by the inhabitants of Marseilles, are owing to the descriptions given by ancient authors on this disease, and its causes. The question, as yet, has never been solved, and why? Because it has been badly put. It has always been considered in an absolute, whereas it ought to be in a relative, sense; there being no disease which, rigorously speaking, may not become contagious, and does not, on that account, cease to be infectious. A focus is not necessary to give rise to infection; the communication of the disease, from one person to another, is suffieient to establish the existence of this cause.—*Dr. Rochoux:* Napoleon, on the accuracy of whose judgment no one will raise a doubt, said that the disease was communicated, rather by the respiratory organs, than by the skin; and this is not at all astonishing, when we consider the extent of the mucous membrane, lining the bronchi.—*Professor Moreau:* Dr. Rochoux seems, sometimes, to admit, and at others to deny, the possibility of the disease being propagated by contagion; I, therefore, should be obliged, were our honourable colleague to state what is his opinion on this subject.—*Dr. Rochoux:* My opinion has never changed; I do not think this disease contagious.—*M. Hamont* requested to be heard. (An incident here took plaee, the President stating that as *membre associé*, M. H. could not be heard until he had obtained the assent of the Academy, an opinion in which Dr. Dubois (d'Amiens) coincided. M. H., on the contrary, asserted that he had a right to be heard from his title of *membre associé*; to set the question at rest, the President consulted the rules of the Academy, and, having recognised that he was mistaken, informed M. H. that he had a right to give his opinion.) *M. Hamont:* In this question, there is a fact which needs solving, on account of the interests which are at stake; according to some, the plague is propagated by infection, to others, by contagion. This distinction, in my opinion, is puerile, as it matters little whether the transmission takes plaee by one or by the other means; the essential point is, that it does occur; and of this, numerous facts preelude the possibility of a doubt. (Here the speaker quoted several cases in support of this opinion.) I agree with Dr. Rochoux, that the re-union of individuals affected with this disease may increase the danger, but differ from him as to the abolition of quarantine; and though, perhaps, certain modifications may be adopted, still I think that the suppression of lazarettos would be highly dangerous. It is well known, that the plague may be benign for a considerable length of time, and become all at once malignant, and it is at these periods, that its propagation in Europe, by ships coming from the East, is to be feared. I, therefore, conclude that, when a vessel comes from a port in which the disease does not reign, it should be submitted to a quarantine of fifteen days, voyage included; and, when it comes from an infected spot. the length of the quarantine be left to be decided by the Board of Health.—*Dr. Londe:* The reporter quoted a case, in which incubation lasted thirty days; it seems to me impossible that, were this fact true, it would have eseaped Dr. Aubert Roche's researches.—*Dr. Pariset:* The fact was mentioned to me by the Swedish Ambassador; it occurred in 1819, when the passage from Alexandria to Marseilles often lasted a month. Moreover, I can attest that, in Egypt, incubation sometimes lasts a month.—*Professor Adelon:* This subject has already been discussed several times in the Academy, and two questions, though very different, have been confounded; I mean, the scientific and the legislative: the former alone should be solved in this Assembly; as to the latter, the laws of the country exist, and ought to be obeyed; but these may be modified advantageously. I here propose that a commission, composed of seven or eight members, who voluntarily will undertake to perform the necessary researches, be formed, and of which I solicit the honour of being a member: this being, in my opinion, the best means of obtaining a solution.—This proposition, seconded by Dr. Dubois (d'Amiens) and Professor Velpeau, was—after an affirmative vote on the conclusions of the report—adopted, notwithstanding the opposition of Dr. Rochoux who said it was putting the light under the bushel, as three years probably would elapse ere the commission would make its report, and this would put a stop to all discussion on the subject.

Dr. Segalas read the first part of a memoir: *on the influence exercised by traumatic lesions of the spinal marrow on the functions of the genito-urinary organs.*—(This memoir, revised by the author expressly for the "*Medical Times*," will shortly be published; and is especially interesting, as the learned Academician has made this branch of the healing art his peculiar study, and numerous examples are recorded of successful operations performed by him.) After some remarks from Drs. Desportes and Prus, the discussion of this memoir was postponed, until the second part was read.

GARLAND DE BEAUMONT, D.M.P.B.L., & S. &c.
Honorary Physician to the Spanish Embassy.

NOTICES TO CORRESPONDENTS.

Mr. Newman—*An Index will assuredly be given with the Pharmaceutical Number.*

A Student.—*Lee on the Medical Institutions of France, Italy, and Germany.*

H. S.—*Many cases shew that wounds of the heart do not always produce instantaneous death. A penetrating wound of the cavity is an exception.*

M.D.—*The paper on the "Mona of the Romans" is not suited to our pages.*

Mr. H.'s *Memoir of Andrew Borde, the Physician and first "Merry Andrew," is, we fear, too long for our pages. We shall reserve it—with the author's permission.*

"A Surgeon."—*Mr. Wellbank is the author of an unpretending but good book on Syphilis. He was the pupil of Abernethy. Our remarks were not intended to disparage his claims because he was* not *an hospital surgeon. We would sooner see him on the Council than not.*

Dr. Strange *has mistaken our meaning. For the rest—the notice is very satisfactory.*

Mr. White *cannot do better than advertise.*

Dedo *mentions the ages of* 26 *and* 25 *fixed on the New Bill, for the M.D. and Surgeon respectively, will require changes in the Army and Navy—the eligible age for a medical appointment extending only to* 25 *years. He further suggests that, for the Army and Navy—as in the East India Company's Service—there should be no restriction of age, except from great youth or great age. Our correspondent is thanked for his other suggestions.*

A Chemist.—*A case occurs in Christison's work on Poisons, page* 384.

The Recent Conviction for Manslaughter.—*Dr Carter thus writes:*—"Two or three observations suggest themselves to me in reference to the late case of manslaughter, at Ely, and I am sure that your courtesy will either prompt you to satisfy my enquiries, or, if the details are unknown to you, you will give some of your correspondents an opportunity of replying, by giving insertion in your Journal to this communication. —Is it, then, really well-authenticated that a woman should have lived for seventeen days with the loss of nineteen feet of her intestines!! I never saw such an instance,—I never read of such an instance,—and I have conversed with several medical friends, and they agree with me that the case is without a precedent, at any rate, in their experience. I shall be glad, therefore, to hear that the details are well authenticated.—I am induced to enquire, further, the *cause* of the rupture in the vagina. The fœtus was of too early growth to have occasioned it, and I can scarcely comprehend—though it may not perhaps be impossible—that the lifting of a heavy weight should thus produce rupture; and I am unwilling to believe that the clumsy hand of the operator should have been the occasion of it; then, Mr. Editor, how came rupture there?—Then, again, with reference to the protruded intestine, I would enquire, by what anatomical adroitness did Mr. Garland contrive to dissect away so cleverly from the mesentery, nineteen feet of intestine, seeing that the mesentery is a tough, adhering membrane, which will separate itself only from the intestines—which it holds together—by a steady dissection with a sharp scalpel; I can understand a man using brute force enough almost to bring away the whole abdominal viscera *en masse*, but by what *hocus-pocus* a man can catch hold of the end of an intestine, and fetch away nineteen feet of it, cleanly detached from the membrane which holds it in situ, is, to me, altogether incomprehensible: hence, Mr. Editor, the object of this letter; and, though I am afraid I am too late in the day with it, still, I hope the answers to my enquiries will prove of sufficient interest to warrant its insertion."

Mr. Close.—*We desire information on the* Secret *Societies, in reference to medical appointments. We know nothing of them.*

A Country Practitioner.—*A Chemist may be indicted for manslaughter, whose malpractice is the cause of death. So, also, may an Apothecary or Surgeon.*

Dr. C. M. Bennett.—*We admit, with much pleasure, that many of the licensed private asylums are well managed; though many are not: and we shall have to complain of the bad system which allows* any *to deserve censure. Our remarks, last week, referred to* private unlicensed *houses, where there is no Government inspection allowed. We shall shortly return to the subject. We make our acknowledgments for the courtesy of Dr. Bennett's invitation.*

The Nottingham Lunatic Asylum.—*We have received three communications on the investigation that took place into the conduct of the superintendent, Dr. Prichard. We see really nothing in the case requiring* our *interference. It is human to err—though it is proper for vigilant authorities to restrain the tendency by a judicious exercise of power.*

X. Y. Z.—*Send the paper to R. J. Marchison, Esq., 3, Waterloo Place. It does not suit our pages.*

Juvenis.—*The Meath Hospital. It contains, we are informed, one hundred beds.*

Sir B. Brodie's Lecture and one or two other papers next week

Correspondents not noticed, are begged to think their letters declined.

THE MEDICAL TIMES.

SATURDAY. AUG. 31, 1844.

Faction is the madness of the many for the gain of the few.

WHO that has read, with us, the daily "*Times*," has not watched with an indescribable interest its recent gigantic developments of *Grahamphobia?* Whatever our afflicted contemporary's wanderings or shortcomings on other matters, here, at least, it shews a terrific consistency. As the eye of the poet in a fine phrenzy rolling, sees God in all of good, that of the leading Journal—no less discursive—recognizes Graham in all of evil. He is the *Times'* Manichæan counterpoise of political right—the *Times'* quiek embodiment of the "*bad principle*" in Legislation. Touch the Church, and the imp of darker powers is Graham: the Factories, and the child-destroyer is Graham: the Unions, and the rash dissolver of matrimonial ties is Graham: the Profession of Medicine—and its ruthless annihilator is Graham? At every turn, on every side, the *Times* is haunted by Graham, and avenges itself by a savage vindictiveness that no laxity of indulged venom mitigates, no recklessness of expended severity soothes. What Macnaughten was to Peel, the *Times* is to Graham, and if the Home Secretary be sent to his long *home* in some more than usually desperate moment,

a British jury must give *another* charitable acquittal on grounds equally well-sustained, and Bedlam get another inmate!

Before us lie the four medical articles which the *Times* has already launched at the Bill, or rather the *Minister*. We will not deny them *near* the customary *writing* cleverness of the Journal, but we avow they have not satisfied us of their *professed* argument that "the Bill" should be wholly opposed. The first diatribe (published Aug. 10) laboriously assails the whole measure, on the ground that "Sir James Graham stated its *principle* to be, 'to permit any man whatever to practice medicine.'" The assumption that this is *the* principle of the Bill is bold and ingenious, and a great aid to the writer's argumentative locomotion: were it also a *correct* assumption, we should be among those warmest in reprobation, not of parts, as now, but of the whole measure. A law whose main object, under present circumstances, is merely to give quackery impunity, or legalize it, would be a law not worth talking about. If it did not aggravate present mischiefs—and it possibly would not—it would not diminish them: it would, in truth, be legislation that did not legislate; action that did not act. Empirics, well enough off without it now—would not be *bettered then:* and honest men would be left just where they are—a place bad enough in all conscience. If such be, as our contemporary coolly affirms, "*the* principle" of the Bill, the less Sir James Graham bothers himself with it, the better for his own peace—and certainly for ours.

But if, acting more honestly, we consider Sir J. Graham's empirical provision as one point, in many, of his Bill, we shall be compelled to join the *Times* in *so far* giving the measure condemnation. As a *substantive* proposition, the quack emancipation clause is just simply unwanted. It is so much needless stir. It makes for the quack a rough way plain—but the rough way was never used. The laws against quackery, anomalous and ineffectual as they are, do neither good nor harm. They do not protect the Profession, nor are we aware that they injure it. They exist but on parchment. If touched, therefore, at all, it should have been for a *purpose*—to have made them more stringent; and the great fault of the measure is the omission, a negative fault—which accuses the Bill, not of going too far, but of not going far enough, and certainly leaves unvitiated whatever else the Bill has that is good. So that, in our humble opinion, the Profession is much more frightened than hurt by the quack clause: it is a mere "fortiter in *modo*," unless we look at it as an act of omission, rather than commission.

A question here arises—what amount of negative imperfections in a Parliamentary Bill shall justify our rejection of positive advantages? Shall we, because quack suppression is omitted in *proposal*, reject the whole Bill, to take our chance of a better? Or shall we accept that now offered—engrafting on it the improvements in our power? To guide us in settling these points a few things should be reflected on. *First:* what is the position of the Profession? The most urgent need of Legislation: with no power in our hands to secure it. We are daily inundated by new men with cheaply got diplomas. No guarantees for preliminary education, or medical competency, being demanded in some localities, the standard of qualifications in all has a tendency to be kept low, and as men of the least acquirements can purchase titles of greatest repute, the true M.D.—the hard working surgeon—the accomplished general practitioner—are confounded with the men who have bought themselves into similar titles and positions, are non-requited for their outlay of labour and fortune, and a species of social disorganization is thus introduced throughout the Profession. Then observe the endless dissunion of interests—the fierce opposition of opinions between the *grades* of our body; and again between the *members* of each grade. The surgeon boldly poaches on *medical* ground; he takes his fee for a case of pneumonia—though on that branch of practice no examining body has testified his sufficiency. He is a quack *Physician*. The Physician again will encroach on Surgical ground—and, for a guinea, not hesitate to order his old-fashioned poultice for an ulcered leg, although in Surgery no College has tested his competency. *He* is a quack *Surgeon*. Thirdly, the mere Apothecary does not scruple to act as a Surgeon—and the mere Surgeon as an Apothecary—the practice of either branch, in which they have not been examined, being in the eye of obsolete law, equally empirical. Then studies have been spent, and complete licenses secured in Scotland; the unlucky graduate is an illegal interloper in England. The same of the accomplished Englishman: in Scotland or Ireland he is a man of dubious competency, and the law calls him quack. Now, all these conflicting conditions of Medical Practice, imply conflicting interests in reference to any new law. Without, therefore, speaking of the still more interested corporate bodies themselves—there is amongst us *individually* a complete antagonism of feeling and interest, *in addition to all the natural diversities of mere speculative opinions:* so that it might be affirmed with truth, that taking *twenty* of our brethren, differently circumstanced as to education, every clause of the very best Bill would meet an opponent in one or other of their number. Now, if each one of us will demand a law for our *special* approval, and reject every Bill which displeases us in one, aye or two or three, points, it is very clear that the next ten years will be, like the last ten—full of professional dissensions, and Parliamentary failures; that, with our consent and assistance, we shall never have a law at all. And thus the very circumstances that make our Professional state so anarchical and diseased, and call so loudly for a remedy, remove that remedy far beyond our reach! Now, is it unseasonable to suggest that our wisest plan is individually to compromise a little, for each other's benefit? to sacrifice a small personal objection, to acquire a richer reward from the augmented general good? and that it would be better for us to give an aiding hand towards the completion of the law we want, (winning the privilege of *modifying* it to our advantage)—than by an indiscriminate unyielding resistance, to force on Parliament the duty of legislating *without*, nay *despite* us?

Now, what should have great weight with us in our choice of policy, is the disposition likely to be shewn by Parliament. The present Bill is, to us, but as a skeleton; it shews something of the proportions, but little of the precise shape or aspect it is likely to assume in passing through a Committee. We regret that these proportions are not more ample. We are sorry that Sir J. Graham has not ventured to deal, within even a bolder hand, with many of our medical anomalies, and despite the opposing influences of corporations, essay to force through Parliament a measure of even greater reconstructive power. What he would thus have lost in influence as a politician, he would have gained in character as a statesman. But now that the Bill is introduced, the fact becomes certain, that for years to come, no Government is likely to give a very much better Bill in *outline*, and that Parliament is not prepared to sanction anything very widely differing from the present Bill, as it may be modified by our exertions. Whigs and Tories, Radicals and Young Englanders, are already committed to its general support. Mr. Macaulay, the representative, on this subject, of the Whig party; Messrs. Hawes and Warburton for the Radicals, and Mr. Gally Knight were all, at least, as emphatic in support of the Bill as Sir James Graham. The best aspect, therefore, that offers, supposing us bent on wholly opposing the Bill, is, that we shall succeed, and leave ourselves as we are for more years than we know of. But there is a possibility—and that should not be lost sight of—of exerting our energies, and yet having the Bill carried against us in a *hostile* spirit. Better than either of these, would it not be to marshal our powers in a friendly way—first, to invigorate every clause that will guarantee, that the fresh members of our body shall be an honour to it by their attainments; secondly, to engraft on the Bill a much larger recognition of medical men's right to share in the management of their own corporate bodies; and thirdly, to urge Parliament to go its farthest length in *discouraging, disgracing*, and, if possible, *punishing* quackery?

Let us beware, then, how we go about defeating wholly the proposed law, because the *Times* hates Sir James Graham, and others, at the breach of some gratitude, have an interest in unsettled agitations. If we have not power to amend it to our liking, we may be assured, that we have less power to pass a bill of our own. The fate of two Medical Bills is already before the eyes of Parliament. Both were partially imperfect, it is true, but both could have been adopted with amendments, and would, by this time, have done a world of good, in raising the character of our body. The Profession was induced not to support them, and they were lost. For twelve years we have had in Parliament a gentleman who practised as a general practitioner, and was, in fact, a Member of the College of Surgeons; he was, also, the editor of a journal that, in part, lived out of the public discontents, and wish for Medical Reform. The denouncer of all sorts of shocking evils—the recommender of all sorts of remedies in the *paid* journal, he submitted to the *unpaid* Parliament no one measure of reform, (so dreadfully needed,) in days when reform was so rife and fashionable. He opposed Warburton—he opposed Hawes—he opposes Graham—he proposed nothing—he proposes nothing; if *he* have an interest in doing nothing, and in nothing being done for us, have *we*? Are we—a *scientific* community—to live, move, and exist in an atmosphere of political opposition for ever, because it suits the personal pique of this journalist, or the beggared finances of that? Are we to be known as the opprobrium of legislation?—the sunken rock which no statesman approaches but to founder on? If not, it behoves us to assume an attitude such as we have yet not taken; to square our *demands* with the suggestion of the most rigid moderation; to show both sides in Parliament, that far higher interests than the mercenary advantages of a class are concerned in our conciliation; to teach the country, that on a purely professional question, like this, we eschew in our conduct every thing of a factious or sectarian tendency—and that we are willing to give the Ministry on the new bill a warm and grateful support, *as the price* of the farther improvements

we ask to be engrafted on it. The question, as every man feels, being beset with almost insuperable difficulties, the Government will be bound to meet the candid and fair spirit in which we address it, by a conceding disposition on its side; and in this day of resisting influences, when nothing is done but by mutual compromises, we shall get what, if not the best Bill we could suggest, will be the best Bill attainable under the circumstances.

PHYSIOLOGICAL EXPLANATION OF SOME MESMERIC PHENOMENA.

To the Editor of the "Medical Times."

Sir,—In the last number of the *Edinburgh Phrenological Journal*, I observe an elaborate and clever article by James Simpson, Esq., Advocate, on my views and practice in Hypnotism, as personally witnessed by him during his late visit to Manchester. The article, as a whole, does great credit to the perceptive, reflective, and descriptive powers of its learned author. Few could have done so much and so lucidly with the opportunities he enjoyed; but it was not to be expected that he should have mastered the *whole* subject at once; and I am desirous, through your pages, of correcting the two chief errors into which he has fallen; especially as they relate to a department on which I contributed a paper in your 216th Number.

The points to which I refer, are the different modes of exciting the mental manifestations during the nervous sleep. In your 216th Number, I stated three different theories which had been advanced by others, namely:—1st, that they arose from the *un*expressed *will* of the operator exciting the ideas and propensities in the patients, from the power of the latter to read the secret thoughts and desires of the former; 2nd, that they arose from a magnetic or peculiar stimulus passing *directly* from the finger of the operator, *through the skull*, and stimulating the *portion of brain immediately subjacent to the point of contact;* 3rd, arbitrary association, by a system of training, or to previous knowledge of phrenology. I then adduced, what appeared to me, arguments sufficient to prove the untenableness of the two first theories; and, whilst I admitted the possibility or probability of the third, still I held it to be an arbitrary and artificial system, compared to that which I adopted, as the most natural and simple of all which have yet been propounded; because, arising from the anatomical relations of the physical frame. I endeavoured to explain the whole on the laws of sympathy, and association of ideas, connected with automatic muscular motion, which I shall presently explain briefly. It is a fact, obvious to every accurate observer, that, in all sensitive individuals, the various passions and emotions are pathognomically expressed by the muscles of the face, trunk, and extremities. This is what Sir Charles Bell called, the *anatomy of expression*. It, therefore, occurred to my mind, that, by titillating such points, either in the head, face, trunk, or extremities, as should excite certain combinations of muscles to act, this muscular action might re-act on the brain, and thus excite in the mind the ideas which usually preceded and excited these muscular actions. As expressed in my work on Hypnotism, page 147, "in this case there would be a sort of inversion of the ordinary sequence; what is naturally the *consequence* becoming the *cause* of cerebral and mental excitation." In this case, the attitudes and muscular expression of our *own bodies*, I presumed, would suggest the ideas to our minds, just as the effects are produced, through the eyes, by looking at any one pantomimically expressing any given passion or emotion. Thus, I presumed that putting a pen or pencil into the hand of a patient, at the proper stage of Hypnotism, would suggest the idea of writing or drawing, as would happen to him, when awake, by seeing any one else take up a pen or pencil; and, then, that the remarkable tendency, during this peculiar sleep, to imitate, or realize whatever idea is presented to the mind, would induce the patients to commence writing or drawing. I experienced no difficulty, to prove the correctness of my theory, of the possibility of suggesting mental emotions by muscular action, excited in different parts of the body; as my knowledge of anatomy, physiology, and previous study of pathognomy, enabled me at once to decide on the different points where, in this mode, I ought to be able to excite the leading mental faculties. Thus, I conjectured that stimulating such muscles as would cause the body to assume the erect posture, would excite pride and firmness; those which caused the opposite posture, veneration and benevolence: the closing of the fingers, pretension or acquisitiveness; and the opening of them, the opposite feeling: approximating the palms of the hand (whilst uplifted), veneration or devotion; and the same, by inducing genuflexion: and so on. On testing this, all these anticipations were realised.

I am aware that those who attribute the excitation of the feelings to sympathy, community of ideas, or thought-reading (amongst whom I must include my most respected friend, J. C. Colquhoun, Esq., and Mr. Prideaux), will instantly allege that *this* was the cause of my having realised such results. In addition to the arguments adduced in your 216th Number, *in opposition to this* theory, as regards the *patients of others*, I can adduce one which will at once distinctly decide the inapplicability of such being the case with my *own* patients. Thus I have requested others to will, and have myself willed with all my might, various manifestations, *without contact at all*, and also *with contact with different parts of the body*, but all such efforts have proved ineffectual; the results have always been null, or in accordance with some previous association, or in harmony with the muscular association which may have been then excited (probably for the first time during the Hypnotic state), by such contact or titillation. It is thus clearly proved that such sympathy, and power of reading unexpressed thoughts, without the aid of some positive impression on the senses, is not an attribute of my patients,

It is necessary, here, to explain that, at what I call the *second* stage of sensation during Hypnotism, the muscles subjacent to any point titillated instantly have a tendency to contract, or the patient manifests a tendency to *lean against the point touched;* and then the tendency to self-balancing, so remarkable in somnambulic patients, calls into action certain associated combinations of muscles; and, finally, as already explained, such muscular action, or attitude, creates or excites a corresponding idea in the mind of the patient, through the laws of sympathy and association.

In illustrating the above proposition to Mr. Simpson, I confined my examples to a few of the more leading and prominent feelings, believing *that* to be the mode calculated for *most* rapidly conveying to him my views of my subject. I find, however, at page 269, that he erroneously alleges that the eight he there names were "*all* the feelings that Mr. Braid could excite muscularly." In reply to this, I beg to state that, in addition to the eight referred to, Nos. 2, 9, 11, 12, 17, 18, 19, 20, 21, 22, 32, 33, may be excited by *muscular action only;* and *any* of the others, by proposing a leading question, *combined with contact with any part of the body*.

The other point on which Mr. S. is at fault, he refers to at page 271; namely:—the *inversion* of the results obtained by manipulating the respective points during the *third* stage of sensation, from what are realized during the second stage. His misapprehension, here, has arisen entirely from *not having made himself master of my definitions of these two stages*, which I shall now quote, from page 75 of your 216th Number:—

"The *second* stage is that where there is increased sensibility and slight rigidity, with a tendency to contraction in the muscles immediately subjacent to the point touched or titillated. The *third* stage is that where there is rigidity of all the muscles, or *rigid* catalepsy, with *diminished* tactual sensibility. In this stage, the patient may be pricked or pinched, with little or no feeling, but continued gentle pressure, or friction, will *reduce the rigidity in the subjacent muscles*, and the member will gradually be drawn in the *opposite* direction, in consequence of the continued *un*diminished action of *their antagonists.*"

The emotion excited by operating, during the *second* stage, may be called the *direct* mode; that during the *third*, the *in*direct,—because the latter is excited *by reducing the power of the antagonist muscles;* whereas, in the former, it is from the stimulus being applied *directly* to the particular muscles to be excited.

The fact of the opposite manifestations resulting from manipulating the head in the *third* stage, from what we realize during the *second*, clearly proves that the results do not arise from a stimulus conveyed DIRECTLY *from the point of contact to the* SUBJACENT PORTION OF BRAIN; but as the effects on the muscles are inverted (or reversed), so ought the points manipulated to be changed (or reversed), to produce the intended results. Now, this is precisely what happens,—the *same muscular action being excited* from *opposite points*, both in the head, trunk, and extremities, in the one stage, from what happens in the other. Still, however, the mental feeling is excited, along with this muscular action, *however, the latter has been excited;* and this is, I think, strongly corroborative of my theory.

I trust these remarks are sufficiently plain to make it obvious to any one that my having stated that, "in the third, or rigid and torpid stage of Hypnotism, the manifestations are reversed—the lower organs bringing out the higher manifestations, and *vice versa*,"—involves no inconsistency; neither does it warrant the inference at page 272, "on his own theory of suggesting ideas or feelings, by stimulating certain muscles, the notion of inversion seems an absolute inconsistency." The arguments quoted in the last paragraph are sufficiently explicit to clear up this point in my favour; and, in proof of the facility with which this may be demonstrated, I may remark, that on the first patient I operated on (after reading Mr. Simpson's paper) I called the attention of a friend to his remarks, and demonstrated to him the *inversion*, both on the head, trunk, and extremities;—nay, I even exhibited the opposite manifestations on the opposite sides of the body, at the same time, by manipulating alternately the *same relative points, in opposite sides of the head, trunk, or extremities.* This, of course, was done by permitting the whole frame to pass into the *third* stage, and then only rousing one-half, till it was in the *second* stage. In the evening of the same day, I illustrated the same practical facts to the entire satisfaction of Mr. Scott, a practical phrenologist, well known, both to Mr. Simpson, and Mr. Cox, Editor of the *Phrenological Journal.* The experiments, in this latter case, were performed on two patients who had never been so tested before, and who had never even seen or heard of such experiments; nor was there any auricular suggestion given as to what might be expected.

But, moreover, there is a particular state of the *reflective*, as well as of the *perceptive faculties, requisite to insure the success of these experiments.* Thus, for some time after passing into the sleep, the memory and judgment are sufficiently active to enable the subject to reason on the natural instinctive tendency of the perceptions, and to control and direct his actions accordingly. In this state, the subject will remember, after being aroused, all that has happened; and, during such stage, the attempts to excite mental manifestations will generally fail, unless with such as are quite in accordance with the *will of the subject.* When, however, the subject lapses into the deeper stage—during which he will *not* remember, *when awake, what had been done or said*—the reason seems also to be less active, whereas the imagination has become more vivid, and the consequence is, that he obeys the dictates of *instinct*, rather than of reason and reflection. Every idea, now suggested, partakes of all the attributes of present reality; and, accordingly, the subject acts as during a fit of monomania, being entirely absorbed in some particular contemplation, or in the execution of some special act, and hence the remarkable vigour and precision of such acts. Of course, those subjects—and there are many such—who do not pass into this deeper stage, cannot properly exhibit these manifestations, which are

so characteristically and beautifully done by those in the deeper stage.

I shall, however, give an additional illustration, which, I think, cannot fail to make any one comprehend my meaning, both as to *how* and *why* certain attitudes are produced in the *reverse* order, in the *third* stage, from what is realised by the application of the same means, during the *second* stage. Let us suppose a spring fixed perpendicularly, with two cords, passing over two pullies, placed to the right and left; and that one end of each cord is made fast to the point of the spring, and the other to scales for receiving weights. The two scales being loaded with weights, and equipoised, of course the spring will maintain its perpendicular position; but, if additional weight is put into the *right-hand* scale, the spring will assume a corresponding inclination, from the greater or additional weight drawing the spring in that direction. But, supposing that, instead of loading the *right*-hand scale with this *additional* weight, an equal amount *had been taken out of* the *left*-hand scale, there would still have been the same loss of equipoise, —an equal amount of inclination of the spring from the perpendicular; and this change would still have been in the *same direction*, as happened in the *former* experiment; namely,—to the *right*. There would, thus, have been produced the *same amount, and the same direction, in both experiments:* but the former I call the *direct* mode, because it arises from an *addition* of force on the right, *drawing* the spring in *that* direction; but the latter I call *in*direct, because, in this case, it arises from a *diminution* of the *antagonist* power, or that, on the left, *permitting* it to be drawn in the *opposite* direction.

Remembering the opposite results which arise from manipulating patients at these two different stages, mental and physical, and the modification which is characteristic of what I call the *first* stage; and keeping in view, also, the important fact, that these different stages *gradually merge into each other*, and, consequently, that it is only when the *exact nick of time is hit for manipulating, we can insure the successful and characteristic manifestation of the feelings* at first trials, we are furnished with a pretty rational solution of the cause why so many patients had been manipulated or handled, for so many years, without the characteristic feelings having been excited: and recorded, as has happened within the last three years, when manipulations have been made, and patiently persevered in, with the hope of eliciting them.

There can be no doubt of the power we possess of rousing the various feelings and mental manifestations, during Hypnotism, through muscular excitation only, through the laws of sympathy and association of ideas. But, in this manner, the *same* muscular motion may excite *different* feelings and ideas in the minds of *different patients*, according to their previous occupation and habits in respect to such physical efforts; *e.g.*:—set the subject to the exercise of moving his hand and arm with a rotatory motion, as if turning something, and then put the question, "What are you doing?" I know, from experience, that the answer will be in accordance with the usual ideas and occupation with which such motion is associated in such individual's mind, during the waking condition. Thus, an Italian boy would think he was grinding an organ; a cook, that she was winding her jack or coffee-mill; a blacksmith, that he was turning a grind-stone, or some other wheel he was accustomed to drive; a reeler, that she was winding; a person, accustomed to turn an organ for psalmody, would be inspired with devotional feeling; another, accustomed to playing or hearing waltzes, on the same instrument, would think of dancing; and so on. It thus plainly appears that, through the laws of sympathy and association, connected with muscular action, you may excite various feelings from the same point, according to circumstances. On this ground, therefore, I still consider that none of the experiments hitherto instituted give any decided proofs, of themselves alone, either *for* or *against* phrenology, or the existence of separate organs in the brain, for the manifestation of each of the mental functions. However, as it is the peculiar feature of this excitable state of the nervous system, that the mind should manifest itself as entirely absorbed in whatever individual passion or emotion it may be directed to, it appears, to me, to be quite possible to institute a series of experiments which might determine the relative powers or intensities of the feelings and propensities, which, being afterwards compared with the phrenological indications and known character of the subjects, would be a more decided test for or against phrenology than any hitherto applied. I intend, shortly, to perform such a set of experiments, with every possible precaution to guard against deception. They shall be performed before a number of respectable and intelligent gentlemen, when a faithful and minute record shall be taken for publication. This appears, to me, to be the only mode of determining this question in a satisfactory manner. The determination of what is true, from what is erroneous, is my sole object in entering into the enquiry; and my motto shall be

"Nothing conceal,
Nor set down aught in malice."

I remain, Sir,
Your most obedient servant,
JAMES BRAID,
M.R.C.S., Edin., &c.

3, St. Peter's-square, Manchester,
17th July, 1844

REPORT OF AN INTERVIEW WITH ALEXIS, THE CLAIRVOYANT, ON FRIDAY, JULY 20, 1844.

[We have received the present paper from a gentleman of very high respectability.—Ed.]

"Multa sunt Naturæ miracula incompertæ rationis, et in Naturæ majestate penitus abdita."

"——— and art thou shocked at mysteries
The greatest—thou—"

"——— Truths—
By truths enlighten'd and sustain'd, afford
An arch-like, strong foundation, to support
The incumbent weight of absolute, complete
Conviction; here, the more we press, we stand
More firm; who most examine, most believe.
Parts, like half sentences, confound, the whole
Conveys the sense."

The following report was written immediately after the interview, and has been corrected by most of the party who were present. Of that party, consisting of twenty-eight, seven ladies and eleven gentlemen were perfect unbelievers in the powers of mesmerism, and particularly in those of clairvoyance. The remaining ten, six ladies and four gentlemen, were not sceptical, some having seen cases of mesmerism, and two or three having witnessed successful exhibitions of clairvoyance.

Fair and courteous means were resorted to by the unbelievers to test the powers of Alexis as a clairvoyant, and detect what they believed to be imposture. The success of the greater part of the tests he was subjected to, was not only extraordinary but convincing—every one was satisfied, that there was no imposture, no collusion; but that there did exist a very wonderful, though inexplicable power; and as was observed by one of the gentlemen present, "it would be irrational to set down as imposture everything which we cannot account for; this principle would stifle all discovery."

An arrangement having been made for Alexis to exhibit his powers of clairvoyance to a party of ladies and gentlemen, on the afternoon of the 20th of July, a piece of fine chamois leather was procured, some cotton, such as is used for the wadding of ladies' dresses, three large silk handkerchiefs were got ready, and a very strong solution of gum was prepared. Neither Alexis nor Monsieur Marcillet had ever been in the house, or had been seen by any of the party, except two, and that only in public, at one of the exhibitions in Mortimer-street. The party, in the drawing-room, having assembled, to the number of twenty-eight, Alexis was introduced, and having been put into a state of lucid somnambulism by Monsieur Marcillet, his eyes were covered with two circular pieces of the chamois leather, well moistened with the gum. The leather was so placed as to cover the ball of the eye (the upper eyelid being closed over the ball), the eyebrows, and the cheek, down to the edge of the nostril; over the leather was placed a quantity of cotton, covering the whole, and extending to the mouth. The silk handkerchiefs were then tied over, so that two were across the eyes transversely, coming on each side below the nose, and by the corners of the mouth, and under the ears. The third was bound round the head horizontally over the other, covering the top of the nose, and was tied over the ears, keeping the other two in their position. There was thus left only space sufficient for respiration, and every one in the room felt certain that his eyes were covered in such a manner that it was impossible for him to see by any movements or contortions o tho cheek; he did not make any, nor did he attempt to displace the bandaging, and particular care was taken to prevent his interfering with it.

Being seated at a card table, a pack of cards were taken at hazard from among several other packs, in a card-box, belonging to the house, each pack being still in its stamped cover, so that the possibility of the cards having been tampered with, or even seen by Alexis, or Monsieur Marcillet, is out of the question. The cards had coloured backs, and were of the ordinary thickness of English playing cards. The cover being taken off and the pack placed on the table, Alexis observed, "they were not *ecarté* cards," and proceeded to separate with rapidity the small cards, which were unnecessary for that game, (all under seven, except the ace) from the rest, making two mistakes in his haste, which he himself observed and corrected. He then cut for deal with the gentleman who had sat down to play with him; he played four games, naming the cards in his adversary's hands, choosing cards from the whole pack when he required a few more cards, selecting trump cards for himself, and low ones of other suits for his adversary, naming the cards of both hands, those of his own having their faces to the table and unturned, and, in fact, satisfying the most sceptical, that the whole pack, with its back towards him, was as visible to him blindfolded, as if the faces of the cards were exposed to his common sight. He then played three games with another gentleman, and made two or three mistakes, such as selecting three spades from the pack, when he had thrown away three cards, believing spades to be trumps, when clubs were, and finding out his error, acknowledged he had mistaken the turned up card. He then named cards in his adversaries hands, mistaking, however, the knave of hearts for the queen, on one occasion. He also named cards with their faces on the table, selecting particular cards from the pack, and played his game, naming his cards without touching them.

No one else being desirous of playing with him, a book was taken at hazard off a table near at hand, which book it was impossible that Alexis or Marcillet could have examined previously. It was about to be opened by a gentleman, and given to him, but Alexis said, as soon as the book was brought near him, "*nous sommes dans le Department des Landes*," and putting it open on the top of his head, immediately said there was a picture of two men on stilts, and that they were *les habitants des Landes*, and that this was, also, the title of the descriptive part on the next page. This was so, and the work "Les François peint par eux memes."

Several sheets of paper, doubly folded, were then thrust into the closed volume, and opened at the part where the paper was inserted, the paper completely covering the letter-press; he then, with a pencil, wrote a line, which, he said, contained the words of a line of the printed page underneath; on removing the paper, it proved to be correct. He, also, pierced the writing paper with a pin, so as to transfix two or three of the words which he previously mentioned, correctly. During the whole of the exhibition, up to this time, it is to be recollected that the bandages were over the eyes.

The handkerchiefs were now removed; the gum having flowed a little from underneath the leather, the cotton was found gummed to the skin of the cheek, near the nose, and the leather adhered firmly in every part over the eye, so that there was not the slightest possibility of his seeing

in any way from under it. One leather was removed with much trouble by a sponge and hot water, at the same time, giving him pain. Calling Monsieur Mareillet to him, he desired him to magnetise the other eye to a state of insensibility, which, being done, the remaining leather was torn from the eye-lash, brow, and cheek, without his flinching or showing any feeling of pain, though the lids, lashes, and brows were much raised in the operation, and one or two of the lashes and hairs of the eyebrow were torn away. A sealed envelope was now given him by a gentleman; after examining it some time, he said there were two words, but they might, also, pass for one; that they were French; he said if the gentleman who wrote it, and who, he said, was so firm an unbeliever that his influence affected him, would go into the next room, and whisper it to the lady of the house, and she would come and give him her hand he would be able to write the word for her. This being done, he wrote the word *clairvoyance;* she said he was wrong. "True," said he, "I ought to have written it on the envelope, *clairvoyant*," and so corrected it. On opening the envelope, the word was found to be correct, written on a sheet of note paper, folded up.

Another envelope, sealed, containing a sheet of note paper, was presented to him, containing three words, one of which he was requested to read; after some time, he said he would take the last one. He held the hand of the lady who wrote the words, asking, "*Est-ce vous, est-ce vous-même qui l'avez ecrit?*" and then wrote down the word "Rossini," and said, "*Vous voyez que je fais l'fs comme la votre.*" A foreigner would generally have written it so, *ss*. He then said he would put a pin through the four first letters. On breaking the seal, and opening the envelope, the last of the three words was Rossini, and he had put the pin through the first four letters,

Other envelopes, containing paper, written upon, were shown him, but he made excuses for not reading them, that there were too many words. Monsieur Marcillet explained, and said, if a line of writing happened to be folded in the middle, the letters would cross over each other in so intricate a manner, that it would be impossible for Alexis to decypher them, and is a difficulty not likely to occur in a printed book. An instance of this occurred to the gentleman present, who had been at one of the public exhibitions. He had, on that occasion, written three words on a sheet of note-paper, and placed them in an envelope, and then examined it with a strong light, but no part of the writing was visible. It was submitted to Alexis. After a few moments, he said (not knowing, nor ever having seen the gentleman before), it is not English, nor French, but Italian, and said there were three words, the first beginning with a "C." He was desired to write down, and he wrote "Che," and then said, that it was impossible to make out the other two, but it looked like "ra—rasa;" that they were "*pliés l'un sur l'autre*," and he could not make them out; he was requested to stick a pin through them, which he did, and on opening the envelope it was found that the two words "*sara sara*" were folded over each other, so that they made "*ra sa rasa*," the sentence being, "*Che sara, sara.*" To return from this digression: Alexis made several guesses at one or two unsuccessfully, and gave them up. In reading from the book, he asked no questions; from the owners of the sealed packets various questions, as to number of letters, &c., and the suggestion naturally arises, and was put by one of the party, if he really can mentally see, why ask leading questions? To which it may be answered that he does not see with that facility which the natural common sight possesses, but only by a great effort of that second spirit, or power, whatever it may be, which he has, and which is not under the perfect control of his own will, but is directed to the effort in obedience to a superior and overruling influence—that of the magnetizer: for instance, one of the sealed packets given him contained the word "*L'Imagination.*" After some time, and asking if it was not a word of seven letters, then of ten, he wrote on the packet "Cr dul," perhaps meaning the word "*L'Incredule*," which does not resemble it. He was told the letters were not correct, but the packet was put aside, without a further attempt to decypher it.

The next questions put to Alexis were with the object of testing his power of visiting and describing different localities. He was asked to describe the room of a lady present. After some hesitation, he pointed out the position of the fire place, and that of the bed with regard to it, and made an attempt to describe some paintings on the chimney-piece. He said one was the portrait of a soldier, which was wrong, though one answering to his description was in the room beneath. Baffled in his efforts, and making several wrong descriptions, he said he would leave the room and return to it again later. An opera-glass case was then given him, containing some article, not a glass. After examining it some time, he saw it was something that was of two metals, something red and yellow, it was some thing wrapped up, but he could not say exactly what it was. It was wrapped in paper, and the paper was then removed, but it did not facilitate his saying what it was. This was an instance of complete failure; it was a gold ring with a gold hand, the two exterior fingers extended, the middle ones and thumb closed upon the palm—a Neapolitan charm against the Evil Eye. It was suggested by one of the ladies that the influence attributed to this charm counteracted his power also, and prevented his seeing the ring, and showed the efficacy of that protection so carefully used by the Neapolitans.

Deh guardiamci in tutte l'ore
Da cbi mal segno il Fattore.

He was then asked by another lady to describe her room; he said, after some reflection, that she was a Romanist, and describing her room correctly, said there was a thing on the chimney-piece which was black, of metal—it was iron, and proceeded to describe such particulars of it, that all present, though few knew the lady to be a Catholic, concluded it was a crucifix. He did not at first discover it, seeming to have a difficulty in finding a name for it, but at last said what it was—and that there was a figure in white on it, very small, and that a chaplet of flowers, or leaves, was on it; it was a crucifix, and the lady had that morning put a chaplet of flowers upon it.

(To be continued.)

OBSERVATIONS ON A WORK ENTITLED "CHEMISTRY," IN ITS APPLICATIONS TO AGRICULTURE AND PHYSIOLOGY, BY PROFESSOR LIEBIG, M.D., P.H., D.

(*From a Correspondent.*)

The external membrane, that receives the immediate contact of the air, is lubricated with a mucilaginous unctuous humour, such as Boyle has demonstrated, admits with the greatest difficulty the water to pass through. At every inspiration of atmospheric air, the sensibility of the coats of the arteries is awakened into action; radiant heat is absorbed, and, by the powers of expansion, accelerated by the hydrostatic pressure of the blood within the arteries, forces out the secretions, which, coming in contact with the atmospheric air, yield up their excess of carbon, hydrogen, and animal heat. The action of the lungs is, therefore, attended with the following phenomena: first, by alternate expansion and dilatation in a heated menstruum, the returned venous blood and the animalizing blood become more intimately incorporated, and are enabled to form definite combinations; secondly, fibrin, separated and acted upon as the sensible body, acquires molecular action, independent of the conflicting motions of the general mass, and is thereby enabled to concentrate and enlarge its parts, preparatory to its entering the glands, where other processes await it; thirdly, a portion of the atmospheric air becomes incorporated with the mucilaginous substance, and is from thence conveyed into the coats of the arteries, and thus disseminated throughout the whole animal frame; fourthly, the tonicity of the arteries being strengthened by radiant heat, and atmospheric air, in which the galvanic power is disposed, the arterial blood, gradually divested of its humours or excesses, is enabled to pass into the venous system, and to perform its secretions so long as the stimulant exists.

The vital powers are, therefore, disposed in the muscular and nervous systems, and are ever variable in their nature, and in the extent of their powers, as influenced by air, exercise, rest, digestion, &c.; for, although they govern physical action, yet are they wholly dependant upon the due maintenance of this action for their vital phenomena; the conjoint action of both is productive of the phenomena of the body,—increase, and propagation.

The very phenomena accompanying respiration, demonstrate the non-absorption of oxygen in the blood, which latter is the sustenance, and not the life, of the body. Malpius affirms that the chief action of the lungs consists in mixing the heterogeneous parts of the blood; Borœllius, that it consists in separating the humours; Liebig, that it consists in administering a perpetual supply of oxygen to the blood. Any one power manifest in the human system, is a sum of powers conflicting in their nature; the mechanical expansion of the blood is at one moment accelerated, and at the next moment retarded, by the acts of inspiration and respiration, and this conflicting and uniting process not only mixes the binary and ternary compounds of the blood, and separates the humours, but it also imparts sensible power to the muscular and nervous systems. The evolution of carbon, hydrogen, and vapour, is a proof that the contact of atmospheric air with the covering or the external membrane, is productive of change in the blood, but the action is directly exercised upon the mucus issuing from the membrane, and not upon the blood itself, and the respired material is carried off from this outer surface, and not direct from the blood, being immediately replaced by matter of like nature. It is said, that the greater part of the food of man consists of hydro-carbonates; but this is not the fact; for a much greater quantity of oxygen is taken into the human system in the shape of food, than is necessary for support, increase, and propagation. Water is the pabulum of animals, as well as of plants; it is the menstruum of the blood, and of the juices of the vegetable, and its excess is evolved from both in the form of vapour. In starch, sugar, gum, and pectine, oxygen also exists in a sufficient quantity to answer the requirements of life.

Liebig tells us that these substances cannot possibly be employed in the production of blood, because they add an excess of carbon to the nitrogenized constituents of food; and the compounds, contained in the food, already contain exactly the amount of carbon which is required for the production of fibrine and albumen; they are, therefore, converted into carbonic acid and water. Hence, Liebig infers that when these neutralized bodies enter the organic system, they for certainty undergo chemical action, whereby their elements are separated, and the carbon, combining with oxygen, forms carbonic acid. Let us put a case in point. During the sugar season in the West Indies, the natives and cattle feeding upon it get exceedingly fat, the cattle feeding almost exclusively upon the cane—the labourers eating it in excess. Here, then, we see a supply of carbon taken into the system far beyond its requirements; but the blood exhibits no manifestations of the presence of carbonic acid, although the carbon is deposited in large quantities as a constituent of fat: here, and in other instances which might be enumerated, it is employed in the production of blood, forms a prominent constituent of the blood, and contributes largely to the increase of the body. All compounds enter the arterial system in their neutral state, otherwise they taint the blood, or prove pernicious to the body; the tendency of a compound to acidity or alkalinity, is immediately counteracted by the secretions of the pancreas and biliary duets.

If intromission of atmospheric air through the external membrane into the arterial blood was actually effected, there is no reason why all other gases and gaseous compounds should not be received into the circulating fluid by inspiration. When Sir H. Davy took three inspirations of carbonic acid gas, mixed with about one-fourth of common air, the effect was a temporary loss of sensation, which was succeeded by giddiness, sick-

ness, acute pains in different parts of the body, and extreme debility. When he inhaled nitrous oxide, his first feelings were those of giddiness, but these were succeeded by a sensation analogous to gentle pressure on all the muscles, attended by a highly pleasurable thrilling, particularly in the chest and in the extremities; as the thrilling increased, so the muscular power became greater, increasing to an irresistible propensity to action. Others, who have inhaled it, have experienced the like effects. Again, when gaseous mixtures, containing more than the natural proportion of oxygen, have been inhaled, the stimulating effects upon the respiratory organs have been so great as to have produced inflammation.

These, and other facts, tend to confirm my views, that atmospheric air received into the lungs, acts as a direct and perpetual stimulant to the muscular and nervous systems; being, by this means, a co-operative cause of the phenomena of change in the circulating fluid, and of the formation of organic matter. The same effects are manifest, although in a very inferior degree, when the sensible faculties are awakened by outward affections.

Humboldt considers the galvanic fluid as the source of all nervous power, and the primary cause of irritability; he lays down three principles as necessary to excite irritability, viz.: oxygen, which forms combinations with different acidifiable bases; acidifying bases—,carbon, hydrogen, azote, and phosphorus,—of the fibre with which the oxygen may combine; galvanic fluid, producing the same effect in the animal economy as the electric fluid in the mixture of azote and oxygen: it combines the oxygen with the acidifying bases of the fibres. But here again, men run into opposite extremes, for the human body is no more to be compared to an electro-motive machine, than it is to a steam-engine. It is not denied that the galvanic fluid exercises a powerful influence over the muscular and nervous system; but the vital form proceeds in a great measure from the vital processes, which are more truly chemical than mechanical. Galvanic action is attended with chemical phenomena; vital action is attended with vital phenomena: the first separates and reunites the elements thus separated by chemical affinities; the latter separates, but does not always change the disposition of the elements of organic compounds, nor does it produce true chemical compounds, for bone is no true phosphate of lime, but a compound body, held together by the force of cohesion. Nervous energy is the result of co-operating causes; it is produced by muscular excitement, proceeding from food, exercise, or external influences, as well as from the aëreal food constantly administered through the medium of the lungs. The galvanic fluid is an effect, and not a cause, of vital action; but generated, it becomes, in turn, productive of vital phenomena. If, in the inorganic kingdom, the source of electricity is chemical and *mechanical* action, so it is in the human frame.

It is much easier for Liebig to lay down an axiom, founded on the limited knowledge we possess, than to establish it on a fundamental truth. He observes, that all vital energy arises from the mutual action of the oxygen of the air and the elements of the food; but he has not advanced one step beyond his predecessors, to prove that oxygen is actually absorbed by the arterial blood, nor has he even attempted to prove that there is an actual necessity for such an absorbing power to exist; he has not shewn that air exists within the lungs: that the degree of energy of the venous blood is increased in corresponding ratio with the enormous quantities of oxygen absorbed; he has not shewn that the temperature is raised, beyond the very slight increase of heat, consequent on the arterial blood being divested of its impurities, and, therefore, of accelerated action; nor can we learn from him what becomes of this absorbed oxygen eventually. He undoubtedly lays down correct laws of analysis, but none of them are confirmed by synthesis, composition, and reduction.

The notions put forth by a recent writer, that every action of every organ is attended with a loss of vital heat, are not borne out by the phenomena of vital action; for, by muscular action, heat is generated, not at the expense of the organ, but of the constituents of the blood. The act of digestion generates heat in the digestive canals, and consequent accelerated action. Every action of an organ is attended with replacement of heat, and replacement of fluid matter; but this replacement cannot be termed positive loss. With Liebig, he infers positive loss and replacement of substance, but this implies perpetual renovation, and replacement of all parts of the body, which, as I have previously observed, is incompatible with the phenomena of life. The membranous vessels, through which the arterial and venous blood flows, are well protected from abrasion by the rapidly circulating fluids; and it is only when the blood swerves from its neutral condition that abrasion and positive loss takes place. This is one of the accidents of life.

Again, the sensations of fatigue and prostration of animal powers, are produced from continuous excess of muscular and vascular expansion or contraction: the latter being occasioned by diminution of muscular and nervous power: the former by unnatural increase or prolongation of muscular and nervous action, by which the healthy tone of the body is disturbed. Violent exercise, such as running, dancing, fencing, states of fever, &c., induces muscular action, and preternatural increase in the general momentum of the blood in the sanguiferous system, attended by varying degrees of excitement, and evolution of heat, in all parts of the body, diffused through the circulation, not exempting the systemic capillaries. Preserved from the refrigerating influence of the atmosphere, every part of the animal frame may have the power of evolving sensible caloric; the digestive processes, of necessity, involve the evolution of heat.

Mr. Robinson supposes that the impediments offered to the advance of the arterial blood, caused by the contractility of the smaller arteries and capillaries, cause a diminution of discharge from, and consequently efflux to, the heart. But was a just measure of motion of the arterial fluid dependant on such an efflux, there must be a provision made by nature, whereby such efflux is regulated; otherwise, in repletion, the rush of arterial blood backwards to the heart would cause immediate death. On the other hand, the apparent diminution of discharge, is none other than natural expansion and acceleration, consequent on the increase of heat and muscular power; the arterial blood, evolving carbon with excess of heat, is enabled, in its more fluid state, to pass into the capillaries as venous blood. The loss of the blood from its first formation, and through its whole career of action, to its return to the heart, is the gain of the body, for it must be borne in mind that every action, and every result, depends upon the healthy circulation of the blood.

The obstacles to the free passage of the arterial blood are not so much to prevent the small arteries from discharging into the veins more than a limited quantity of blood, in a given time, as they are the natural results of the conflicting forces of expansion and contraction, manifest in the arterial system; resistance being gradually overcome, as the arterial blood loses its excess of carbon, and other matters, which, passing through the excretory ducts, become a portion of the system, or are gradually carried off; and this continued abstraction of mattersfrom the blood, during the whole of its course through the system, causes it to become more attenuated, and less complex in its composition, and, consequently, it encounters fewer impediments on its return to the arterial system.

Again, it is not by the force of action alone, that the course of the blood is regulated, for the blood and generating vapour, having a constant tendency to expand, exercise a degree of lateral pressure on the walls of the tubes; this is demonstrated by the act of perspiration, which, if enforced by the application of baths of high temperature, occasions a loss of much solid substance, passing out through the skin.

All the blood, arterial and venous, is subservient to the same end: it is the feeding and nutritive agent, carrying its contributions to the most remote extremities of the body; thus it is, uniformity of increase is maintained throughout the body, but, when the nutritive ducts become filled up by age or disease, local or general interruptions to the secretion take place, to the ultimate destruction of the body.

Dr. Murray thinks it doubtful, whether nitrogen and oxygen can, alone, form an insulated acid; hydrogen, he conceives, essential to its energetic action; and the farther question is raised: In what state does carbon exist in the blood? Is it merely held in mechanical solution? or is it combined with one or more elements? Liebig tells us, in a very authoritative manner, that it is united with oxygen, in the form of carbonic acid, but, in this state of combination, it is most decidedly inimical to the body, and if, as he observes, it is given off by the arterial blood in this form, the oxygen thus respired is a constant loss to the body, and, consequently, a loss of stimulating power. On the other hand, it is natural to presume, that oxygen, seeking to unite itself with its affinities, should attack the earths, calcium, sodium, &c., existing in the blood. The excess of carbon is deposited in every part of the body, in union with hydrogen, or else forms some indeterminate compound, and the same phenomena are observable in vegetable bodies, and light, in the latter, separates the oxygen from hydrogen, carrying the oxygen off, and leaving the carbon to unite with the nitrogen, and form woody fibre. An excess of carbon in the animal fluids is absolutely necessary, its antiseptic qualities counteracting the natural disposition of the animal fluid to become alcalescent, and putrify; but were carbon present, as carbonic acid gas, this antiseptic power would be destroyed; thus, the blood, seeking a fresh supply of this material, returns to the heart, and again issues forth, loaded with a fresh supply of provision for the system, gradually depositing it by the secretory vessels of the glands, which interwoven mass of filaments, saturated with juice of a particular kind, admits none but those to which it has an affinity.

While vitality exists in animals, oxygen pervades every part of the human body, directing and influencing the condition and combination of the other elements, and, in return, is influenced by them. Whatever quantities are consumed by animals, by inspiration, or in the food, add to the stimulating powers of the whole system, being united with every binary compound, in proportion to its affinity, or simply by cohesive force, as in the form of water and animal juices. In gelatine and albumen, we observe a fourfold compound: combinations in different proportions, and of which carbon is most abundant; and the sum of oxygen contained in this compound is held therein by mechanical combination, the albuminous products being capable of imbibing, and permanently retaining, a much greater quantity than they possess; and the act of fossilizing is the act of oxidation of animal or vegetable matter, the uniformity of composition and character, and uniformity of action manifest upon it, producing of necessity an uniform fossil or mineral result.

(To be continued.)

THE "PONS ASINORUM."

"There is such a thing as common sense."
ABERNETHY.

To the Editor of the 'Medical Times.'

SIR.—In several communications to your Journal, I have endeavoured to demonstrate, that the spleen is instrumental in propelling the blood through the liver. I shall now attempt to prove that there is nothing else that it *can* do; that it *must* be subservient to the circulation, or motion of the blood, and to it only.

Into the two halves of the heart,—the commencements of the pulmonary and general afferent vessels—nothing besides blood goes, and out of them nothing besides blood comes, except lymph by the lymphatics; and the same is true of the spleen—the commencement of the hepatic afferent vessel—that is, into it nothing besides blood goes, and out of it nothing besides blood comes, except lymph by the lymphatics. This being the case,

it must be *blood* which the spleen influences in some way or other, for there is nothing else for it to influence. I look upon the lymph as an immaterial and insignificant item in the argument. We have no more reason to suppose the spleen is for the purpose of influencing the lymph, than that the heart is. We never trouble our heads about *lymph*, when we consider the use of the heart, but only the BLOOD; and when we reason about the use of the spleen, it is not the lymph, but the blood, which is worthy of our attention.

The spleen then, if it is for the purpose of influencing the only thing that it can influence,—the blood (and no physiological reasoner can doubt that it is) must do so in some way in which blood *can* be influenced; and not in a way in which it *cannot*. What are the ways, then, in which blood can be influenced—that is, done something at? There are three, and three only. It can be influenced in *quality*, in *quantity*, and in *motion*. There is no fourth- way; and, therefore, the spleen (and all other organs too, into which nothing besides blood goes, and out of which nothing besides blood comes), must influence the blood in one of those three ways; that is, either in respect of quality, or quantity, or motion.

Now, if the spleen altered the blood in QUALITY, it must, to effect such alteration, either add something to, or take something from, the blood. But it can add nothing to: and what can it take from, the blood? Nothing besides lymph, or serum; and even this goes into the blood; so that in fact, the spleen takes nothing from it; no, not a grain nor a drop in a twelvemonth. As, then, the spleen neither adds anything to the blood, nor takes anything from it,—and as blood, to be influenced in quality, must have something either added to it or taken from it,—it is clear that the use of the spleen is not to influence the quality of the blood.

Again; if the spleen altered or influenced the blood in QUANTITY, it must either add to it, or take from it, increase or diminish it; for, if it did neither, the quantity would remain the same: that is, uninfluenced. Now it is plain, that the spleen can neither add to or increase, nor take from or diminish, the quantity of the blood: and, therefore, it must be for some other purpose.

There now remains only the MOTION of the blood, which the spleen can *by possibility* be for the purpose of influencing. We have already said that the blood can only be influenced in quality, quantity, and motion; and, as the spleen *cannot* influence it in either of the two former respects, it *must* in the last. Now, just as the spleen must, influence the blood *itself* in some one of three ways in which blood *can be* influenced, so must it influence the *motion* of the blood in some one of the ways, in which motion *can be* influenced. What are the ways, then, in which the motion of the blood can be influenced? Firstly, motion of the blood can be *produced* or *generated*; secondly, motion can be *accelerated*; thirdly, it can be *retarded*; and, fourthly, it can be *stopped*. Now I say that there are only these four ways, in which it is *possible* for the *motion* of the blood to be influenced; and I defy any one to define a *fifth*; or to mention any other way, in which the blood *itself* can be influenced, besides quality, quantity, and motion.

But, although there are *four* ways in which it is *possible* for the motion of the blood to be influenced, there are only *three* ways in which there actually *are*, or *could* be, organs or instruments for the purpose of influencing it. There is no organ, instrument, or apparatus, which is for the purpose of *stopping* it. Such a thing would be incompatible with life:—for the motion of the blood *is* life, and its cessation is death.*

The spleen, then, must indubitably be for one of three purposes: it must either generate, accelerate, or retard, motion of blood. It generates motion. There is no fact connected with the spleen that does not tend to prove that it generates motion. I maintain that there is as good, as abundant, and as convincing evidence, that it, the spleen, the commencement of the first or hepatic afferent vessel, is subservient to the propulsion of the blood through the hepatic vascular system, as that the right half of the heart, the commencement of the second or pulmonary afferent vessel, is subservient to the propulsion of the blood through the pulmonary vascular system, or, as that the left half of the heart, the commencement of the third or general afferent vessel, is subservient to the propulsion of the blood through the general vascular system. This evidence, however, I need not adduce here. It is to be found in various numbers of the "*Medical Times*," and also in a small publication entitled "*The Spleen, a permanent Placenta—the Placenta, a temporary Spleen*."* In this letter, I have merely attempted by a little simple reasoning to prove, that there is nothing that the spleen *can* influence except the motion of the blood. The argument may be recapitulated in a few words, as follows:—Nothing besides blood goes into the spleen, and nothing besides blood comes out of it; therefore, the spleen must do something at the blood, for there is nothing else for it to influence. Blood can only be influenced in quality, quantity, and motion; the spleen cannot influence it in quality, or quantity: therefore, it must in motion. Motion can be generated, accelerated, retarded, and stopped; there can, however, be no organ for the purpose of stopping it: therefore, the spleen (and all its kindred) must either generate, accelerate, or retard it.

The whole doctrine, from beginning to end:—firstly, that the spleen is the commencement of the hepatic afferent vessel, and *generates* motion; secondly, that the thyroid gland is the central capillary nucleus of an apparatus of blood-vessels, which *accelerates* motion; and thirdly, that the thymus is the central capillary nucleus of another apparatus of blood-vessels which *retards* motion,—the whole doctrine, I say, from beginning to end, is simple as a, b, c;—unfortunately however, it is *new*; and a new doctrine, like new wine is apt to give weak stomachs the belly-ache. It is only time that can give either of them the right flavour, and prevent it from exciting nausea and other unpleasant symptoms. It took a quarter of a century to convince the learned that the blood moves, and that the heart propels it; and now they believe, and have done so for the last two hundred years, that the left half of the heart propels the blood through two vascular systems, although at the same time they see that the right half propels it through only one. But as Junius says—"*When once men are determined to believe, the absurdity of the doctrine only confirms them in their faith.*"

I am, Sir,

Your obedient Servant,

JOHN JACKSON.

August 16. 1844.

* If *sleep* be a state intermediate between life and death, it ought to depend upon a slow motion of the blood; and he, who understands the use of the *thymic apparatus of blood-vessels*, cannot doubt that it does. "Largiorem thymum atque glandularum thymo analogarum in omnibus quæ sopiuntur animalibus observavi atque hyeme magis florere." —says Pallas.

MEDICAL PUBLISHERS AND MEDICAL MEN.

To the Editor of the "Medical Times."

SIR,

I see that a humorous *personage*, yclept "John Churchill, Esq., Publisher," adopting a hint from Professor Holloway (who offers £50 for every case where his ointment does not cure, IF *properly applied*), has been making offers sympathetically, falling down from one hundred and fifty to fifty pounds alone, to some unnamed "Charity," IF (satisfactorily to himself) he shall be proved a mendacious tradesman, on evidence of his own procuring and managing. Being one of those, unfortunately, who was left minus a very ugly debt, when "John Churchill, Esq.," took the benefit of the Act, may I remind him, through your valuable columns, that I am still alive,—and that a juster claimant than any "*Charity*," for his spare fifties, exists in the breeches'-pocket of

"AN UNPAID CREDITOR?"

[Our correspondent adds a postscript, longer than his note. He begins with a rambling political allusion to the follies of the day, among which he classes "over-production, springing from the habit of doing great things with a floating capital of bubbles and suppositious expectations;" continues with a number of references, equally beside the question, and equally unfitted for our pages; and adds an emphatic warning to ourselves, against the untradesmanlike mendaciousness with which Mr. C. (like a monomaniac) is, eight hours in ten, assailing the *Medical Times*. All these, with the concluding observations, referring to the former state of insolvency jails as schools of high feeling, we must decline without notice, simply expressing in a kind spirit, our deep regret that Mr. Churchill, whom, for the sake of the Profession, we should be glad to speak of as a respectable publisher, has been so operated on by bad associates, as to indulge in such small habits, so unworthy of an honourable rivalry.—ED.]

* Highley, Fleet Street.

THE EDINBURGH VETERINARY COLLEGE.

PROFESSOR DICK.

The affairs of this Institution, or rather of this gentleman, are at present exciting so much attention amongst our veterinarian and medical readers in the north, that a short sketch will form no unacceptable contribution. The details we shall have to give, will also have the advantageous effect of directing public attention to the manner in which such establishments are formed and conducted.

Mr. Dick, who is the projector, founder, professor, examiner, and sole proprietor of the Edinburgh Veterinary College, is of Celtic origin, having been born in the city of Aberdeen, the *keenness* of whose natives is proverbially reported to be so great, that no Hebrew has ever ventured to establish himself within its precincts; and he assuredly well maintains the reputation of his natal town. Of his early career little is known, except the circumstance that he was once a blacksmith's pupil, a fact which we mention to his honour not his disparagement, and in this light we trust it will be considered. It speaks well for Scotch energy, and Scotch approbation of worth—that as S——, the Edinburgh professor of Midwifery, honourably raised himself from the condition of a journeyman baker, and H———, the London Physician, from having once filled an humble position in the warehouse of a Liverpool merchant, so Mr. Dick's rougher energy and talent should similarly not escape their reward.

The air of Aberdeen was not, as we have heard it erroneously (perhaps sarcastically) alleged, too keen for Mr. Dick; but certainly it was in a moment auspicious for his future fortune, that at an early period of life he exchanged it for the more southern latitude, if not more genial temperament of the Scottish metropolis, where the combined business of a blacksmith and farrier, which he had previously pursued, was exchanged for that of the latter, alone. But this, though he experienced more success than usually falls to the lot of adventurers in Edinburgh, was not sufficient for his ambition; and he accordingly, after practising for a few years as a veterinarian, conceived the bold project of at once raising *himself* to the altitude of a college. The few who know how such things are managed in the metropolis will feel no surprise at the attempt; yet with the inhabitants of the Scotch capital, and many living at a distance from the scene, it was long a subject of mystery and wonder; though this feeling will possibly subside after a perusal of these observations.

The "Professor," (Mr. Dick,) having first obtained his appointment from himself, announced a few lectures, dignifying the room in which they were delivered as the Veterinary College. A few friends, chiefly medical practitioners, were summoned together at the beginning of the course, to give an imposing appearance to its opening; and the same number were afterwards assembled at its close to witness the distribution of certificates and a few prizes to those who had had the good fortune to attend in the interval. The lectures were in

the interval regularly delivered. To do the "Professor" justice, he did not, like many of his metropolitan brethren, deliver merely an introductory leeture and leave the others to exist only in the estimation of his readers: the blank was filled up, and a tolerably lucrative occupation the professor found it. But this did not satisfy him: instead of granting gratuitous ecrtificates, the brilliant thought was started, that he might issue productive diplomas; and this was no sooner eonecived than carried into execution, as it had the merit of at once bringing an additional number of pupils for an increased period to the lectures, and in the shape of fees for diplomas, an incrcased quantity of grist to the Professor's mill. A manufactory of diplomas was accordingly established: and a lucrative speculation the Professor must have found it, as thirty or forty, at the rate of ten guineas apiece, were frequently granted at the termination of a course. Solid pudding, too, was followed by pleasing praise; the affairs of the Session being regularly wound up by a vote of thanks to the ingenious Professor for so cleverly taking eare of himself.

Such was the palmy state of matters when they arrested the attention, perhaps aroused the apprehensions, of the London Veterinary College; but as in answer to inquiries names were freely given, and a dozen often paraded at the foot of the diplomas, no suspieion existed in the breasts of the unsophisticated Southrons, that the whole establishment of their northern rival was concentrated in the person of Professor Dick. Nay, so unsuspicions were those worthy gentlemen, that they actually invited the northern Professor to become a corresponding member, or form some like association with their board; and if rumour is to be credited, it was only the cupidity of Dick himself which gave rise to the collision which now threatens, or lately threatened, to break up his institution. The Professor at once acquiesced, and readily gave in his adhesion to their views: but *cui bono?* soon became an important question with him, and great was his disappointment on learning that the connection was to be only honorary. The Scotchman had no idea of such an association; and when he asserted his claim to a participation in the profits, that investigation was instituted, which all but terminated in the overthrow of his establishmcut.

The Professor, on his part, not inclined to succumb without a struggle, defended himself with equal courage and address. As he at first refused to act in unison with the London College, unless its proprietors gave him a share in its emoluments; these, in their turn, evinced their determination to render theirs, the only College in the Kingdom for the granting of diplomas; and since this would wholly have overset the Professor's speculation, he buckled on his armour most doughtily for the conflict. But the odds were strong; the London College was a much more powerful establishment than his; and he was on the eve of being borne down in the unequal strife, when he luckily thought he might engage the Highland Society of Scotland on his side.

The Society consists, for the most part, of a number of dull country squires, whose principal object in the association is the fattening of beef, and figuring at balls; and as the Duke of Richmond, its President, is said not to take the smallest concern in any matter about which he is not personally interested, the Duke, *totidem verbis*, refused to interfere in Mr. Diek's matter.

The Professor was not, however, baffled. We know not whether he ever heard of Sir Robert Walpole's declaration, that "every man has his price;" but if ignorant of that profound conclusion, he certainly acted as if entitled to the merit of its original discovery. He wisely thought that it was better to part with a portion of his future emoluments than be deprived of the whole; and he accordingly hied off to Sir Charles Gordon, the Secretary of the Society, with the resolution, if need were, of imitating the example of that odoriferous quadruped which, when hard pressed, is said to bite off that musky receptacle for which it is chased, and so escape with life.

Fortuna favet fortibus: the Professor met with even more luck than his bravery merited. The Highland Soeicty of Scotland, like many others with titled nobodies at their head, is in reality governed by its Secretary, who, by dint of a few friends in the Committee, contrives to become what Sir Walter Scott terms "the tongue o' the trump to them a';" and Mr. Dick had no sooner divulged the first part of his proposal—which was that the futnre appointment to his ehair, and the future possession of the Collcge (after his decease) should be vested in the Highland Society—than Sir Charles greedily grasped the patronage proffered. "Here," he said, hastily summoning together a few of his colleagues, "here's a pretty story! The Duke of Richmond, our President, is betraying us, and turning over to the Veterinary College of London, what should be the lawful patronage of the Highland Society of Scotland!" And great was the hubbub thus excited: the members present immediately acquiesced in Sir Charles's views, a sub-committee was quickly assembled, the Duke was as speedily memorialised, and his Grace eventually was glad to eompromise, and retain possession of his Presidency, by acquiescing in the views of the Secretary, or rather in those of Mr. Dick.

Mr. Dick certainly is entitled to considerable applause for his dexterity on this occasion; but there is little doubt that but for the eagerness with which Sir Charles Gordon swallowed the first part of the bait, the Professor would have been glad to offer terms much more liberal, and compound for the retention of his monopoly by the sacrifice of some of his own, as well as his heirs' advantages. In the possession of his "College" he may now be considered secure. Under the patronage of the Highland Society the leetures will be delivered, eertificates dispensed, and diplomas dealt out more successfully than ever; although those in possession of the secret will henceforth be induced, possibly to form a more moderate estimate of the worth of these documents.

Mr. Dick is a man of energy, and, we believe also the result of natural ability, and long experience of considerable merit in his art. It is to the system, and not the man, that objurgations in the preceding lines apply. A school of veterinary science may have been needed in Edinburgh, and Mr. Dick is entitled to praise for having instituted it; but what we object to is, the foisting of a private establishment on the world as a public institution, and the signing of diplomas by men of whom the public know nothing, and who may know just as little of the art for proficiency in which they certify. The Professor himself may be, and doubtless is, qualified to form a correct opinion of the abilities of his pupils; but this is more than can be predicated of the dozen of individuals who so boldly adhibit their names to his parchments; and, to say nothing of the suspicious circumstance, attending the conduct of a Professor issuing diplomas to his own pupils, the praetiee is at best but a revival of that foul system of vending degrees, by which the Universties of Aberdeen, St. Andrews, and latterly, some of the German Universities, have been disgraeed.

Personally, Mr. Dick is a man whose robust, athletic, and bustling, frame, might have been anticipated from his professional avocations. He is a member of the Town Council of Edinburgh; and, unless belied, is just as ready, *pro bono publico*, to sell a ehair or a church, as to vend a diploma. He is a Whig-Radical in politics.

HOSPITAL REPORTS.

KING'S COLLEGE HOSPITAL.

Concussion of the Brain.—Thomas Ball, ætat 19, porter, was admitted into King's College Hospital, January 14th, under the care of Mr. Partridge. About half an hour before his admission into the hospital, he accidentally fell off the leads of a house in the neighbourhood, a height of about sixteen feet; in his fall, his feet became entangled in a rope; the back part of his head reached the ground.

On his admission, he was quite insensible, and there was considerable hæmorrhage from the right ear; he was rather drunk at the time the accident happened: about half an hour after his admission, he vomited three or four times, the fluid vomited looking like beer, and smelling of spirits. Has passed his urine without difficulty; has had no motions. The skin eool; pulse slow; he was placed in bed; no bruises about the head, exeept a slight grazing of the skin over the occipital protuberance.—Ordered.

℞ Spt. Ammon. Aromat. mxx.
Seeundis horis.

The body warmer to the feel; to be well clad with blankets.

January 15th.—Has continued in a drowsy state since his admission: he answers questions with tolerable facility when he is roused; he does not recolleet anything of the accident. Pulse 60, labouring; respiration, 12 to the minute, feeble, rather slow, not attended with stertor. Pupil acts naturally. Groans when the abdomen is pressed: has taken no food.—Ordered:

℞ Hyd. Chloridi. g. v.
Statim.

Till this evening, the hæmorrhage from the ear had continued.

℞ Haust. purgans ℥iss.
Post horas tres.

16th.—Pulse 60; respiration 12; answers questions put to him rationally; when roused from his drowsiness, says that he has occasionally severe pain in the forehead; bowels not open; has not taken anything except a small quantity of beef tea. He vomited repeatedly last night, but not today. Pupil contracted, and does not appear sensible to the light. Has been talking incoherently at times since yesterday.—Ordered:

℞ Enema Communis lbj.
Statim.
℞ Hyd. Chloridi. gr. vi.
Statim Sumend.
℞ Haust. purgans ℥j. post horas quatuor
sumend. et quartis horis repetat.
si opus sit.

17th.—Is still in the same drowsy state. Was found lying on the left side (had previously been lying on his back) with his eyes closed; was easily roused, and then talked rationally and eoherently. If allowed to remain quiet for a time, he falls back again into the same drowsy state, from whieh, however, he ean again be roused by questions. Pupils natural in size, and act regularly on the admission of light. Complains of pain in the forehead, but especially on motion. Neither the head nor the scalp is hot. The surface of the skin, generally, is of the natural temperature. Bowels freely opened by the medicines; the evacuations were eopious, dark, and very fœtid. Tongue is moist, and white. Urine was thick yesterday, but this morning is elear: is conscious when he passes his urine. Pulse 60, of the same character. Respirations slow, and appear to be performed by the intereostal and abdominal muscles, the diaphragm acting but little. Has not been sick since the last report. Ordered to have his head shaved. Swallows without difficulty.

17th, half-past eight, p.m.—There is considerable heat of scalp; the skin is of natural temperature; pulse 70; respiration 12; each respiration appears to be attended with a slight effort. He lies groaning, and when asked, complains of severe pain in the forehead; he talks incoherently; thinks that he is at his usual employment; passed his urine this morning, but not since; the bladder is not distended; bowels open this morning, but not since; pupils eontraeted and sensible to light.

18th.—During last night, eomplained of great pain in the head; has passed his urine very freely, and quite eonscious; the urine contains pink lithates; bowels open; has less pain in the head; pupils quite natural; answers questions rationally, and recognises his friends and attendants.

19th.—Pulse 60; respiration 14; skin cool; pupils acting; complains of the same pain in the forehead; had a little hæmorrhage from the right ear last night; was delirious last night and the night before; he appears unconscious, also, at times, during the day; answers questions readily.

20th.—Pulse 60; respiration 15; complains of less pain in the head; still wanders a little at times, but not so much as he has done; passes about three pints of urine in twenty-four hours;

it has an acid reaction, is quite clear when passed, but becomes turbid, as it cools, and again becomes clear on the application of heat; nitric acid and liquor ammoniæ throw down no precipitate; bowels not open; has taken a small quantity of solid food to-day.

21st.—Pulse 60; respiration 12; still complains of pain in the forehead.—Ordered:

℞ Hyd. Chloridi gr. v.
Statim Sumend.
℞ Haust. purgans ℥j.
Post horas tres.

22nd.—Is much more lively; the pain in the forehead is better; passed a good night; bowels freely open; pulse 70; respiration 15; still wanders a little during his sleep.

23rd.—Pulse 60; respiration 15; appetite good; sleeps well; the pain in the forehead has nearly left him, but he feels rather giddy when he rises up in bed; he still forgets occasionally for a few moments; bowels are not open.

24th.—Pulse 70; respiration the same; complains of pain in the forehead, and giddiness when he rises up; bowels not open for two or three days; appetite good; tongue moist; wanders occasionally. —Ordered:

℞ Ol. Ricini ℥j.
Statim sumend. et repetat. post
horas tres si opus sit.

25th.—Bowels have been open three or four times since yesterday; sleeps well; appetite good; does not wander at all; tongue white, but moist; pulse 75; respiration 16.

26th.—Bowels freely open this morning; tongue is still white'; sleeps well; appetite good; there is no disturbance of intellect.

27th.—Bowels not open since yesterday; pulse 78; respiration 16; sleeps well; appetite good; complains sometimes of a buzzing noise in the right ear; tongue slightly coated.

February 2nd.—No change since the last report; still complains of the buzzing noise in the right ear.

5th.—Is to sit up for two hours during the day.

7th.—Is sitting up to-day; complains still of buzzing noise in the ear, but no pain. Made out-patient, February 28th.

Remarks.—Was this a case of simple concussion? or must we suppose, from the large and repeated bleeding from the ear, and from the long continued drowsiness, the laboured breathing, the slow and heavy pulse, that there was some fissure of the cranium, or superficial injury of the cerebrum? Was there concussion of the upper part of the spinal cord?

The treatment consisted, mainly, in a close watching of the symptoms, perfect rest, and regulation of the bowels. The patient appeared at the hospital at intervals, for about six weeks after he was discharged, as an out patient, when he was dismissed from further attendance, being quite recovered.

PERISCOPE OF THE WEEK.

Use of baths.—[This and the two following articles comprize the principal contents of the last number of the *Lancet*.]—Sir George Lefevre; in an article entitled "On the use and abuse of domestic remedies;" strongly recommends the use of a shower bath, which, he says, can be employed with advantage and comfort in many cases where the space is too limited for the establishment of a plunging-bath, and he observes that its refreshing effects in warm weather contribute much to the perfection of the animal functions even in the most healthy state. A morning shower-bath, or, if that cannot be accomplished, one taken after the morning fatigues are over, as a part of the *ante prandium* toilette, will often secure a pleasant sensation for the evening, and add a charm to the *dolce far niente* of the remainder of the day. It is a restorative of strength in those cases of languor, attended without actual disease. Delicate females derive the most pleasurable advantages from its use; and even during pregnancy it is not counter-indicated, if proper precautions are adopted. The proper hour of the day for it is immediately after rising, or before dinner, and it may be used every other day with advantage. It should not be administered however without certain precautions, and should be progressive as regards its temperature. When first used, this should vary with the season of the year. If it be commenced in summer, Sir George Lefevre recommends that the water be placed over night in the bed-chamber, so that it may possess the same degree of temperature. The cold should not be such as to produce a shock in the first instance, but when the system has been initiated into its effects by degrees, the calorie should be lowered daily, so that the fluid may be cooled down to the freezing point, without any risk of producing discomfort, but the certainty of luxurious sensation. If commenced in the colder season, the water should at first be raised to a comfortable temperature, and afterwards gradually cooled down to the same extent as in summer. It is necessary to rub the body smartly during the drying process, and that too in a room free from cold draughts and currents of air. A flannel dressing gown should be put on immediately afterwards in the winter season, and rest indulged in for some time. This remedy is of great utility in nervous headaches, and those produced by frequenting crowded assemblies, and indulging in the luxuries of the table, and also in hypochondriasis.

Warm baths.—In the same communication, Sir George Lefevre says, warm baths should never be indulged in after hearty meals, even at many hours distance. The most proper time for them is once a week, at the toilette hour before dinner. It should not be indulged in more frequently, as it may tend to relax the system and induce debility. The most comfortable degree of temperature is about 90° of Fahrenheit, and the time of immersion should be from ten to fifteen minutes. Where the bath is used medicinally for rheumatism, it should then be taken in the evening, and the patient be put to bed immediately afterwards. Those persons in whom the warm bath causes uncomfortable feelings, as languor, weariness, and restlessness, should not persist in its use. The warm bath, employed for about half an hour, care being taken to avoid all chills on leaving it, is very serviceable in preventing the injurious consequences resulting from catching cold.

Sea-Sickness a Remedy for Jaundice.—Mr. Perey narrates a case of jaundice which had existed for three or four months, and was cured by a violent attack of sea-sickness, followed up by brisk aperients. Within twenty-four hours, several small gall-stones, and a quantity of inspissated bile were discharged, and the patient soon recovered.

Vaginal hysterotomy.—A case of exceeding importance in a medical and medico-legal point of view, has been placed on record by Dr. Bedford, in the *New York Journal of Medicine*. Dr. Bedford, who is the Professor of Midwifery at the University of New York, was called in consultation to Mrs. M——, the mother of two children, and then in labour. She had been suffering for the previous fourteen hours from strong expulsive pains, which, however, had not caused the slightest progress towards delivery. On making an examination, per vaginam, he distinctly felt a solid resisting tumour at the superior strait, through the walls of the uterus, but could not detect the os tincæ. In carrying the finger upwards and backwards towards the *cul de sac* of the vagina, he could trace two bridles, extending from this portion of the vagina to a point of the uterus, which was quite rough, and slightly elevated; this roughness was transverse in shape. Cicatrices, also, were clearly discovered, the state of the parts thus giving evidence of prior violence, which had resulted in the formation of these bridles and cicatrices, and also in the occlusion of the uterus. On enquiry, it was ascertained that the previous labours had been of short duration, and were not instrumental, neither had the patient sustained any injury therefrom. This evidence was confirmed by the attendant physician. Further questioning elicited the fact, that this condition had been produced by probing some time previously with a piece of whalebone, to bring on a miscarriage. The instrument had been used several times, producing considerable pain, followed by a discharge of blood. It was further ascertained, that the patient had miscarried *on five occasions previously*, from the use of drugs, furnished her for that purpose by a Madame Restell, practising? in New York. It being evident that an operation was imperatively requisite, a bilateral section of the os uteri was made in the following manner. The patient was placed on the edge of the bed, on her back; the index finger of the left hand was introduced into the vagina as far as the roughness, which was supposed to be the situation of the os tincæ; and then a probe pointed bistoury, the blade of which had been previously covered with a band of linen to within about four lines of its extremity, was carried along the finger until the point reached the rough surface, into a very slight opening in the centre of which it was inserted, and then an incision was made of the left lateral portion of the mouth, a similar one being made in the right side before the instrument was withdrawn. The posterior lip was also incised. The head soon made progress, a vigorous full grown child was born in a short time, and both mother and child did well. In concluding the details of this peculiar case, Dr. Bedford states certain information which he afterwards obtained from the mother, respecting the practices of this Madame Restell, who, it appears, carries on her business with as much publicity as if it were altogether legalized. Her advertisements, it is said, are to be seen in the daily papers; there she invites the base and the guilty, the innocent and the unwary, to apply to her. She tells publicly what she can do, and, without the slightest scruple, urges all to call on her who may be anxious to avoid having children. Dr. Bedford's patient stated that she knew several females who were in the habit of of applying to Madame Restell for the purpose of miscarrying, and that she scarcely ever failed in affording the desired relief. Among others, she cited the case of a female who was five months pregnant; Madame Restell probed her, and she was delivered of a child that, to use her own expression, "kicked several times after it was put into the bowl." The proceedings of this mercenary and heartless woman must necessarily result in a prodigal destruction of human life; and it is certainly a most extraordinary and unaccountable fact, that the legal functionaries have not arrested her progress, nor does it say much for the morality of New York that its press should insert the advertisements of a wholesale murderess —thus tempting to the commission of more crime.

Molar pregnancy.—Under this title, Dr. Bedford, of New York, details, in his edition of "Chailly's Midwifery," a most melancholy case of mistaken diagnosis. He was called in to visit a young lady, the daughter of a dignitary of the English Church, who was in the last stage of phthisis. It appeared that when about eighteen years of age, an attachment was formed between her and a young barrister, which resulted in a matrimonial engagement. Shortly afterwards, her health began to decline, the catamenia became irregular, the abdomen enlarged, the breasts swelled, there was more or less constant nausea, loss of appetite, &c.; and soon scandal spread the report that she was pregnant. The tale reaching her intended's ears, the engagement was broken off. Medical advice was sought, and the diagnosis of pregnancy was unhesitatingly pronounced, and was afterwards confirmed at a consultation. The father immediately broke up his establishment, and took his daughter to America; but while on the voyage out, the same opinion was expressed by a physician who was on board, and who was called to her on account of excessive sea-sickness. Dr. Bedford having received this account of the case, proceeded to investigate its nature, by placing the hand upon the epigastric region, the thighs being previously flexed upon the pelvis; he then distinctly felt an enlargement, which from its circumscribed character and position, he recognised as the uterus. The abdomen was exceedingly tympanitic, and as much distended as it usually is at the seventh month of gestation. On a vaginal examination, the enlarged uterus was plainly felt, and it presented a hardness to the touch, which Dr. B. had never before met with. It was

not the hardness of scirrhus, nor was there any pain experienced on pressure. The os tincæ was slightly dilated, and perfectly circular, and projecting through it was a small body which seemed of a calcareous nature. The uterus could be readily grasped between one hand applied to the hypogastric region, and the finger introduced into the vagina; it appeared to equal in size the fœtal head at full term. It was more rounded in shape than is usual in pregnancy, and on introducing a finger into the rectum, the same hardness of tumour was felt as in the vagina. Dr. Bedford gave it as his opinion that pregnancy did not exist, and that the enlargement of the womb depended on some internal growth, the nature of which could not be determined. At the same time, he also stated the fatal nature of his patient's illness, and obtained a promise from the father that the body should be examined after death. The case terminated fatally a few weeks afterwards, and the *post-mortem* examination disclosed that the uterine enlargement was in consequence of a fibrous tumour, which occupied its whole internal surface; the small body which had been felt projecting through the os tincæ, was a calculous concretion, of which there were several attached to the tumour. The narration of this case carries with it its own comment.

KERATOPLASTY.—Dr. Kissam operated on an Irishman, 35 years of age, who had lost one eye entirely, and had the other affected with staphyloma and adherent iris, by dissecting away the projecting part of the cornea, and transplanting part of the cornea of a young pig, which he carefully laid over the aperture in his patient's eye. It was secured in situ by two ligatures, on a line with the angle of the tarsæ. The ligatures were cut short, and the lids carefully closed. After twenty-four hours, violent chemosis was found to exist, the partial subsidence of which twelve hours later, allowed the ligature to be removed, and it was then ascertained that the transplanted membrane adhered to that of the patient. In the course of two or three days the inflammation diminished, and then were clearly revealed the wonderful powers of Nature in adapting herself to contingencies. The chemosis was so great, that the raised conjunctiva seemed as a cushion, to protect the transplanted membrane from irritation by the moving tarsæ; but, more important still, it overlapped the added cornea, so that like surface was applied to like surface, and thus united. The vitreous humour, however, was diseased, and vision, although improved, was imperfect. The superadded cornea was ultimately absorbed, and the aperture in the real cornea contracted somewhat.

ACTION OF CONEIA ON THE BLOOD, &c.—Professor Hunefeld states, in *Simon's Beitrage zur Physiologischen und Pathologischen Chemie und Mikroscopie*, that a very striking change in the blood takes place on the addition of coneia. It is changed into a dirty, reddish-yellow, greasy mass, in which blood-corpuscles cannot be detected by the microscope. The muriate of coneia does not produce this effect. Serum and albumen also coagulate on the addition of coneia, as do creosote, oil of turpentine, oil of bitter almonds, and some other etherial oils; whilst others, as the oils of rosemary, peppermint, camomile, valerian, petroleum and citron, are not coagulated, except water be also added, and the mixture shaken. These differences deserve investigation. Coneia, accordingly, deviates from the other alcaloids in these re-actions, and approximates, as would be expected, to the etherial oils.

CALCULUS IN THE BLADDER.—A case of a very large calculus in the bladder, is reported in the *Medico-Chirurgical Review*, from the Melville Hospital, at Chatham.—The patient, a corporal in the Mounted Coast Guard, was under the care of Dr. Rae, deputy inspector; he had suffered for many years from the complaint, and was unable to hold the water for more than a quarter of an hour at a time. On sounding him, a large stone was found, round the apex only of which the instrument could pass; and, examined by the rectum, the finger could neither raise nor pass beyond the stone. When the operation was performed, the stone was found to be of great size, with the thickened coats of the bladder permanently contracted on it. It was found impossible to extract it, the forceps only breaking away fragments from the lower part, and, accordingly, after the patient had been one hour and twenty minutes on the table, the bladder was washed out with warm water, an elastic tube with lint placed in the wound, and he was carried pulseless to bed. Warm punch was administered, and warmth applied to the feet; an anodyne was afterwards given, and in a short time he rallied. The wound was purposely kept open, the stone was occasionally felt, and became looser and less firmly embraced by the bladder. Several kinds of forceps and crushing instruments were employed on other occasions, but failed. After a time, Mr. Fergusson, of King's College, who was attending a lady at Chatham, brought with him two pairs of forceps, lined in their points, and one with a peculiar hinge, with which he had extracted several large stones. On minutely examining the situation and size of the calculus, he was of opinion that it might be extracted, though, probably, with some difficulty. Dr. Rae having requested him to operate, Mr. Fergusson introduced a pair of his own forceps, and was not long in extracting, although the instrument slipped twice. Several small pieces were removed by the scoop, after which the bladder was washed out with warm water, and the patient, who complained of pain in the back and wound, was put to bed. He had some wine, and a morphia draught at bedtime. Next day, he was free from pain and fever, and ultimately recovered. The stone, including the fragments, weighed eight ounces, and, allowing half-an-ounce for loss, must have been altogether near nine ounces in weight. It was smooth externally, and composed of circular layers, seemingly of triple phosphate formation, but hard and firm in its interior.

CASES OF MIDWIFERY.—Dr. Buswell has recorded, in the *American Journal of Medical Sciences*, several cases of labour, which terminated fatally without any apparent cause. The first case was that of a black girl, sixteen years of age, in whom gradual dilatation of the os uteri took place, but was unattended with pain of any consequence. The head partly descended, but became impacted in the brim of the pelvis. The child, being dead, was taken away by cephalotomy. The umbilical cord and placenta were in a state of sphacelus, and were removed by hand. The uterus did not contract afterwards. The duration of the labour was eight days and a half. The mother never rallied, and died at the end of three days. The appearances after death were not described. The subject of the second case was a black woman, twenty-two years of age, in labour with her second child. When the physician was called, she was found just dead, having been five hours in labour altogether. All means for resuscitation proved unavailing. She had enjoyed good health previously, and had not had convulsions or other symptoms to account for death; nor could any cause be discovered at a careful *post-mortem* examination. The child, which was dead, was extracted by the forceps. The third case was that of a feeble Dutch-woman, of small stature, thirty-five years of age, in labour with her first child. The membranes ruptured early, but labour continued for two days and a half before the os uteri was sufficiently dilated. The pains were severe, and accompanied with great prostration. Attempts at delivery with the forceps were made, but failed; the child was brought into the world with the scissors and crotchet, but with great difficulty, on account of its large size, and the contracted state of the pelvis. The placenta was removed after the lapse of an hour; the uterus did not contract, but remained loose and flabby, without hæmorrhage, and the patient died in half an hour. During the latter part of labour, she was very much prostrated, and sunk doubtlessly from her enfeebled condition not enabling her to bear up against the exhausting influence of the long continuance of her labour, and the severity of her pains. In another case, that of a female, twenty-six years of age, in labour with her first child, every thing went on as usual, until about the time the os uteri became fully dilated, when she complained of chilliness, which was relieved by a little warm tea. The pains were exceedingly violent, and during one of them, she gave a violent spring, and extended herself at full length on the bed. There was not the slightest sign of spasm; muscles all relaxed, and the pulse, respiration, and the sounds of the heart entirely absent; pupils natural. Attempts at resuscitation having completely failed, the child was removed, dead, by the Cæsarian section, an hour afterwards. On examination of the body, the brain and uterus were found perfectly healthy, but the heart exhibited extensive disease of long standing, of the semilunar valves of the aorta.

CASE OF TWINS—*Injudicious use of secale cornutum.*—Dr. Burwell has narrated, in the *American Journal of Medical Sciences*, a case of twins, occurring in the person of a young Irishwoman, in labour for the first time, which derives its principal interest from the injudicious exhibition of the ergot of rye. The first child was a footling case, and after labour had continued some time, the pelvis and body were expelled as far as the cord, which pulsated freely. This was at two in the afternoon; the pains then suddenly ceased; after a short delay, *ergot was given, and repeated without effect:* no contractions followed, and the *child's head was above the superior strait.* The uterus, as felt through the abdominal parietes, was tense and hard. A small quantity of blood was abstracted, but the pulse falling from 85 to 75, the arm was tied up. The pulsation of the cord becoming more feeble, attempts at delivery were made, but unavailingly, and the child died. The body so completely occupied the cavity of the pelvis, that no satisfactory examination could be made. The abdomen and thorax were, therefore, eviscerated, after which, on introducing the hand, the neck was found bent strongly backwards to the right side, above the superior strait, and its chin was not to be felt; while, upon its neck, and beneath the chin, rested the occiput of a second child, occupying the left iliac cavity, with its body bent to the right side of the uterus, which was strongly contracted upon its contents. The second child being ascertained to be dead, the head was perforated, and brought into the hollow of the sacrum; this allowed the footling to be brought down, and detruncated, after which the second child was delivered by the forceps, and then the head of the first child. The instrumental delivery occupied two hours: the placenta came away in fifteen minutes, without hæmorrhage. Had the secale, which was so improperly exhibited in this case, succeeded in exciting uterine action, in all probability rupture of the uterus would have followed.

DECOMPOSITION OF MERCURIAL PREPARATIONS BY THE PRODUCT OF FERMENTATION.—Physicians, says Dr. Riegel in the *Jahrbuch fur praktische Pharmacie*, who are generally but little versed in the knowledge of chemico-pharmaceutical phenomena, by which they ought, nevertheless, to be principally guided in prescribing, are in the habit of ordering mercurial salts, and particularly the bichloride, in conjunction with certain vegetable syrups, such as that of dulcamara, &c. Now it is precisely preparations of this sort that are chiefly liable to spoil after being sent to patients, because they are generally prescribed in rather large quantities, and, requiring particular care for their preservation, they seldom fail to become deteriorated in the hands of persons who are strangers to the art of pharmacy. Dr. Riegel has made a series of experiments, from which it results that yeast and some other fermentable bodies are capable of effecting the reduction or decomposition of mecurial combinations. His results are confirmed by experiments previously made by Dr. Schacht and Wackenroder, and demonstrate the necessity of no longer prescribing compound syrup of sarsaparilla with corrosive sublimate in large bottles, as has been the practice hitherto.

ASBESTOS IN DENTAL PRACTICE—A correspondent of the *Forceps* says that the use of asbestos in those cases of caries where the cavity of the tooth so nearly approaches the nerve, as to render it sensitive to the application of the instrument, and liable, therefore, to be affected by the transmission of caloric through the dental stopping, might

probably be advantageously extended. It is important that the material employed should be as indestructible in the tooth as the gold with which it is to be covered; that it should not be liable to absorption through the medium of the vessels of the bony structure of the tooth, and that it should be as nearly an absolute non-conductor of heat as possible. Filamentous asbestos, which very much resembles floss silk, or very fine cotton, possesses these several indispensable requisites in an eminent degree. There are various qualities of asbestos; that however which is used to prevent the transmission through the metallic stopping, to the barely protected nerve beneath, of the two sensations arising from the action of heat and cold, should be very fine in its filaments, delicately pure and white, and scarcely distinguishable from the best kinds of untwisted silk. Previously to its application, the cavity should be well cleansed and dried, as in ordinary cases of caries. A sufficient quantity of the mineral to fill about one-sixth of the space of the cavity, when well compacted beneath the gold, made very soft and pliable, should then be placed upon the parts adjacent to the nerve, and the operation finished by the introduction of the metallic stopping in the usual manner.

STRYCHNINE IN CHOREA.—Dr. Rougier has tried this powerful remedy in ten cases, and the result of his experience has enabled him to proportion the dose of this energetic medicine, in cases of this kind, with more precision and exactitude than have hitherto been obtained. His patients were chiefly young boys from six to sixteen years of age. The duration of the disorder varied between one month and four years; the longest duration of the treatment being two months, and the shortest, six days. The whole of these cases were cured, one only suffering a relapse, and that yielded to a repetition of the treatment. Eight out of ten of these patients were treated by strychnine alone, the others took at the same time sedatives and camphor. The strychnine was always administered in pills, and very small doses. One remarkable phenomenon was observed in all cases; viz., an increase of the symptoms under the influence of the first doses of strychnine. The greater number experienced tetanic spasms, sometimes very alarming, but which yielded soon to the ingestion of a glass of cold water. After these first accidents the movements became more regular, and the disease disappeared. Dr. Rougier has been led to conclude that, in order to obtain the specific action of stychnine on the complaint, it should be carried to the extent of producing a species of tetanus, or at least of augmenting, in a sensible degree, the energy of the involuntary movements. A relapse may be safely guarded against by continuing the medicine for a few days after the disappearance of the symptoms, in gradually diminished doses. The success obtained by M. Rougier, is such as may encourage practitioners in a trial of this new treatment, but they should never lose sight of the fact, that a medicine possessing such violent energy as strychnine, requires great vigilance on the part of the physician.

TUMOUR OF THE PALATE.—A woman of strong constitution was admitted into the Hotel Dieu, and placed under the care of M. Blandin, for a tumor of the palate, of apparently recent formation. It occupied the palatine vault to the right of the median line, which it passed; commencing at the centre of the vault, it extended itself to the inferior border of the velum palati behind; it pressed against the right tonsil, and its height was about even with the borders of the upper teeth. It was slightly elastic; the mucous membrane of the palate, which covered it, was soft, smooth, and rather whiter than on the opposite side. Neither the teeth nor the dental arches were deformed; the tumour occasioned no pain, but it materially obstructed articulation and deglutition. What could be the nature of this tumour? It presented all the characters lately assigned to fibrous tumours, but it had made, in a short time, such rapid progress, as to excite suspicion of its malignancy, and render its removal desirable. A crucial incision was made upon the vault of the palate, and it was easily and promptly removed. It was found to be encysted, and its removal gave rise to no hæmorrhage. On examination afterwards by the microscope it presented, nevertheless, a number of cancerous globules, very distinctly marked. The wound occasioned by the operation rapidly cicatrised, and the patient went out completely cured.

GOSSIP OF THE WEEK.

UNIVERSITY OF LONDON.—EXAMINATIONS IN BOTANY, FOR THE DEGREE OF BACHELOR OF MEDICINE.—The Questions in all Pass Examinations will be limited to a selection from the matters referred to in the following Syllabus:—1st, Definitions and Explanations of these terms:—Achenium, Achlamydeus, Acotyledonus, Aculeus, Æstivatio. Alatus, Albumen, Alburnum, Alternatus. Amentum, Amphitropus, Anatropus, Antitropus, Apocarpus. Arillus, Atropus, Axilla, Bractea, Bulbus, Calyx, Cambium, Capitulum, Capsula, Carpella, Cariopsis, Caudex, Cellularis, Cilia, Cincinnatus, Cirrus, Coccus, Commissura, Connectivum, Convolutus, Cordatus, Cormus, Corolla, Corymbus, Cotyledon, Cremocarpium. Crenatus, Culmus, Cuticula, Cyma, Deciduus, Dehiscentia, Dentatus, Diadelphus, Dichotomus, Dicotyledonus, Didynamus, Digitatus, Discus, Dissepimentum, Distichus, Drupa, Ductus, Duramen, Emarginatus, Embryo, Endocarpium, Endogenus, Epicarpium. Epidermis, Epigynus, Equitans, Etiolatus, Exogenus, Folliculus, Foramen, Forbilla, Frons, Funiculus, Fusiformis, Gemma, Germen, Glandula, Glans, Gluma, Hastatus, Hilum, Hypogynus, Imbricatus, Incisus, Indehiscens, Inferior, Intercellularis, Involucrum, Involutus, Jugum, Labiatus, Lanceolatus, Latex, Legumen, Lenticella, Liber, Lignum, Ligula. Limbus, Loculicidus, Lodicula, Lomentaceus, Lyratus, Medulla, Monadelphus, Moniliformis, Monochlamydeus, Monocotyledonus, Mucronatus. Nectarium, Nucleus, Oblongus, Oppositus, Orthotropus, Ovarium, Ovatus, Ovulum, Palea, Palmatus, Panicula, Papilionaceus, Pappus, Parenchyma, Parietalis, Partitus, Pedatus, Pedicellus, Pedunculus, Peltatus, Pepo, Perianthium, Pericarpium, Perigonium, Perigynus, Perispermum, Petiolus, Phyllodium, Pinnatus, Pinnatifidus, Pistillum, Placenta, Plumosus, Plumula, Pollen, Polyadelphus, Pomum, Pyxidium, Racemus, Rachis, Radicula, Radix, Raphe, Raphides, Receptaculum, Reniformis, Revolutus, Rhizoma, Ringens, Samara, Septicidalis, Serratus, Sessilis, Siliqua, Silicula, Sinus, Spadix, Spatha, Spermodermis, Spica, Spongiola, Stamen, Stipitatus, Stoma, Strobilus, Superior, Sutura, Syncarpus, Syngenesia, Tegmen, Teres, Testa, Tetradynamus, Thyrsus, Torus, Truncatus, Tuber, Turis, Umbella, Umbilicus, Unguis, Utriculus, Vagina, Valvatus, Valva, Vascularis, Vena, Vernatio, Verticillatus, Vitellus, Vitta.—2nd, Diagnoses of these natural orders, and genera of British Plants:—RANUNCULACEÆ: Ranunculus, Hellebrus, Delphinium—PAPAVERACEÆ: Papaver, Chelidonium—CRUCIFERÆ: Cardamine, Alliaria, Sinapis, Cochlearia, Thlaspi, Isatis, Raphanus—CARYOPHYLLEÆ: Dianthus, Alsine—MALVACEÆ: Malva—LINEÆ: Linum—LEGUMINOSÆ: Ulex, Trifolium, Astragalus, Vicia, Onobrychis—ROSACEÆ: Prunus, Spiræa, Potentilla, Rubus, Rosa, Pyrus—CUCURBITACEÆ: Bryonia—UMBELLIFERÆ: Hydrocotyle, Eryngium, Apium, Œnanthe, Angelica, Pastinaca, Daucus, Caucalis, Myrrhis, Conium, Coriandrum—VALERIANEÆ, Valeriana—COMPOSITÆ: Senecio, Bellis, Anthemis, Carlina, Centaurea, Carduus, Lapsana, Cichorium, Lactuca—GENTIANEÆ: Erythræa, Gentinat:——CONVOLVULACEÆ: Convolvulus, Cuscuta—BORAGINEÆ: Borago, Lithospermum—SOLANEÆ: Solanum, Hyoscyamus—OROBANCHEÆ: Orobanche—SCROPHULARINEÆ: Digitalis, Veronica—LABIATÆ: Mentha, Salvia, Thymus, Lamium, Teucrium—PRIMULACEÆ: Primula, Samolus—EUPHORBIACEÆ: Euphorbia, Mercurialis—AMENTACEÆ: Salix, Quercus—CONIFERÆ: Taxus, Pinus.—ORCHIDEÆ: Orchis, Epipactis, Malaxis, Cypripedium—IRIDEÆ: Iris, Crocus—AMARYLLIDEÆ: Narcissus—LILIACEÆ: Fritillaria, Allium—COLCHICACEÆ: Colchicum—JUNCACEÆ: Juncus—AROIDEÆ: Typha, Arum—CYPERACEÆ: Cyperus, Scirpus, Carex—GRAMINEÆ: Anthoxanthum, Alopecurus, Agrostis, Arundo, Avena, Poa, Triticum, Hordeum.

UNIVERSITY INTELLIGENCE—UNIVERSITY OF LONDON—BACHELOR OF MEDICINE—(First Examination)—Examination for Honours; the names are arranged in the order of proficiency.—*Anatomy and Physiology*: William Cadge, (Exhibition and Gold Medal), University College; Arthur Charles Copeman, (Gold Medal), King's College; John Braxton Hicks, Guy's Hospital; Henry Isaac Fotherby, Guy's Hospital; William Henry Greenwood, Guy's Hospital; Charles Elam, Leeds School of Medicine; John Ody, King's College; Peter Martin Duncan, King's College.—*Chemistry*: T. F. Grimsdale, (Exhibition and Gold Medal), University College; John Ody, (Gold Medal), King's College; William Henry Greenwood, Guy's Hospital; Arthur Chas. Copeman, King's College; Charles Reeve Matthew, University College; John Braxton Hicks, Guy's Hospital.—*Materia Medica and Pharmaceutical Chemistry*: John Braxton Hicks, (Exhibition and Gold Medal), Guy's Hospital; William Henry Greenwood, (Gold Medal), Guy's Hospital; Henry Isaac Fotherby, Guy's Hospital.

ROYAL COLLEGE OF SURGEONS OF ENGLAND.—Gentleman admitted Members, on Friday, August 23rd, 1844:—G. Leith, J. F. Rowlands, B. W. Costerton, T. Palmer, J. Rider, J. H. Dwyer, W. G. Sedgwick, R. Brent.

APOTHECARIES' HALL.—Gentlemen admitted Members, 22nd August, 1844:—John Allen Walmsley, Henry Billinghurst, Thomas Stafford Lee, William Sheppard.

UNIVERSITY OF ST. ANDREWS.—GRADUATION OF DOCTORS IN MEDICINE.—On Tuesday, the 6th instant, the Senatus Academicus of this University, after a strict and searching examination, conducted by the Professors of Anatomy, Chemistry, and Humanity, Dr. Robertson, Professor of Surgery, Edinburgh, and Dr. Hannay, Professor of Medicine, Glasgow, in the presence of the Senate, conferred the degree of Doctor of Medicine upon the following gentlemen:—William T. Reardon, L.A.C., Ireland; James W. Thorne, M.R.C.S., Devonshire; Robert Chambers, M.R.C.S. (England) Denbigh; John George Landie, Edinburgh; Thos. E. White, M.R.C.S., Dublin; Richd. Youl, M.R.C.S., London: William Rogers, Surgeon R.N., Lanarkshire; Matthew Buchan, Edinburgh: Francis H. Baxter, M.R.C.S., Dublin; Henry Moon, M.R.C.S., Lewes, Sussex; James B. Eames, M.R.C.S., Killeah; Edward Lloyd, M.R.C.S., Tamworth; Evan Pierce, Denbigh; William D. Hemphill, L.R.C.S.I., Clonmel; George Rosa, L.R.C.S.E, Edinburgh; Robert Walker, L.R.C.S.E., Liverpool; John Norton, M.R.C.S.L., Liverpool; George Robinson, London; James E. Huxley, M.R.C.S., Middlesex; Robert Cockerton, Essex; John E. Currey, Waterford; George M. Saunders, M.R.C.S., London.—The examiners were engaged from nine in the morning till nine in the evening, and the degree was afterwards conferred in public, on the successful candidates, by the Principal of St. Mary's College, the Rev. Robert Haldane, D.D., in the large hall of the University Library. Twenty-eight candidates presented themselves for the degree, which, with twenty-five who offered themselves at last graduation day, in May, make fifty-three who have submitted to examination in this University during the present year, of which number, forty-five obtained the degree, and eight were remitted to their studies. The examinations of this University have been gradually increasing in severity, and are now highly respectable tests of medical and surgical knowledge.

MEDICAL REFORM.—A meeting was held on Monday last, at three o'clock, at Exeter Hall, called by the *soi disant* Medical Protective Assembly. From the interest inspired by the New Bill, and the extent of notice given, it was expected, that there would have been a very large meeting—an expectation the less unreasonable, since the meeting called at the Crown and Anchor, at our suggestion, a year since, numbered more than 300 attendants, after a notice of only four days. To our great surprise, however, the Assembly's great meeting was held in a small room (No. 6) in Exeter Hall, and numbered exactly eighty-three persons present, many of whom appeared to have been present merely through a very natural curiosity. Mr. D. O. Edwards, and several other gentlemen, had been invited to take the chair, but very peremptorily declined, and the managing persons were obliged to induce poor old Mr. Carpue to take into his hands the government of the meeting. Mr. Carpue rose, related how much he had travelled and seen without seeing better accomplished men than the English medical practitioners. A long report was read, but no statement of accounts was given. A remonstrance, contemptuously rejected by the College of Surgeons, was shewn, and with a dramatic air, its length exhibited by Mr. Hunter, who regretted that the room was so small he could not give a notion of the document's size. Several resolutions were hawked about the room to get gentlemen to speak to them in vain, and an urgent appeal was made by Mr. Cooper to the gentlemen present to "come on the committee," to which the happy response was hummed, "Dilly! Dilly! Dilly! come and be killed!" Mr. Ancell, who was present, declined to take any share in the proceedings. After moving and seconding a few business resolutions, "a committee of the whole house" (*totidem verbis*) was moved, at Mr. Wakley's suggestion, and that gentleman addressed an audience thinned down to thirty, despite his earnest entreaties, that his hearers would not leave. The Hon. Member seemed much disappointed at the sorry result of all his expenditure of time, labour, and money, in getting the command of an association that, in the young days of its independence, shewed so much promise.

Mr. Chalmers has been elected Honorary Surgeon to the North Dispensary, Liverpool, to supply the vacancy occasioned by the death of Mr. Tetlow.

PROMOTIONS.—Assistant-surg. James Allen (1837) to the rank of Surgeon.—Assistant-surg. W. P. Banks, M.D., (1838) of the Fearless, to the Crane.

OBITUARY.—In London, Mr. James Crichton, Colonial Surgeon, Perth, Swan River, Western Australia.—At Southampton, Edward Pridham, Esq., late of Topsham, near Exeter, Surgeon, who, for nearly 50 years, stood high in his profession.

Metropolitan Mortality for the Week ending Saturday, August 17.

Causes of Death.	Total.	Average of 5 Springs.	Average of 5 Years.
ALL CAUSES	936	900	946
Zymotic, or Epidemic, Endemic, and Contagious Diseases	208	191	178
SPORADIC DISEASES—			
Dropsy, Cancer, and other Diseases of uncertain or variable Seat	103	106	111
Diseases of the Brain, Spinal Marrow, Nerves, and Senses.	111	159	157
Diseases of the Lungs, and of the other Organs of Respiration	194	233	286
Diseases of the Heart, and Blood-vessels	32	19	21
Diseases of the Stomach, Liver, and other Organs of Digestion	85	88	69
Diseases of the Kidneys, &c.	8	5	5
Childbirth, Diseases of the Uterus, &c.	11	9	10
Rheumatism, Diseases of the Bones, Joints, &c.	9	5	6
Diseases of the Skin, Cellular Tissues, &c.	1	1	1
Old Age	63	56	71
Violence, Privation, Cold, and Intemperance	21	25	26

No. 259. **SUMMARY.** SEPT. 7.

CLINICAL LECTURES ON SOME IMPORTANT POINTS OF SURGERY, BY SIR B C. BRODIE, BART.:—
Treatment of Stricture of the Urethra, continued—Instrument invented by Mr. Stafford for its Division—Dangers attending its Employment—New Mode of Operating in such Cases—Danger of Lithic-acid Deposit—Mode of Treatment to be adopted for its Prevention—System of Diet to be enforced—Cases of Congenital Contraction of the Urethra cured by Operation—Stricture of the Female Urethra—Excrescences at its Orifice—Their Mode of Treatment 459

CLINICAL LECTURES ON MEDICINE; Delivered at the Great Charity Hospital, at Berlin, by DR. SCHONLEIN, first Physician to the King of Prussia:—
Disease of the Left Lobe of the Liver, and Atrophy of the Spleen—Diarrhœa—Discharge of the Food in an Undigested State—Condition of the Blood—Œdema—Bronchial Irritation—Enlargement of the Pylorus—Death by Exhaustion 460

ACTION OF AMMONIA UPON THE PROTOCHLORIDE OF PLATINUM, BY DR. MICHAEL PEYRONE, of Turin, late of the Giessen Laboratory 461

PARISIAN INTELLIGENCE:—
Dr. Jadelot on Chorea—Symptoms—Forms—Terminations—Causes—Treatment 463
MM. Delaporte and Cigalla on Pestis—Its Antiquity—Causes—Propagation—Incubation, and probable Duration 464
Academy of Sciences; Sitting of the 26th August 465
M. E. Peligot on the Theory of the Fabrication of Sulphuric Acid 465
Researches on Chemical Types 466
Dr. Baudelocque on Two Cases of Imperforate Anus 466
Professor Barkow on a New Ganglion 466
Academy of Medicine; Sitting of the 27th August—Death of Dr. Lagrange 466
Dr. Segalas on the Influence of Traumatic Lesions of the Spine on the Genito-Urinary Organs—Discussion thereon 466

SELECTIONS FROM GERMAN JOURNALS, BY SIGISMUND SUTRO, M.D.:—
Combinations of Oxido of Nitrogen with Acids 466
Ileus, Terminating Favorably 466
On Pancreatitis, and on its Distinction from Hyperæmia Pancreatis 467
Creasote against Teleangiektasia 467
Case of Poisoning by Radix Sambuci 467
Cure of Incipient Pulmonary Consumption 467
On the Efficacy of the Mineral Springs of Kreuznach .. 468

THE PHYSIOLOGY OF MATERIA MEDICA, as Established by the Latest Researches in Organic Chemistry, Physiology, Pathology, &c., by PROF. T. F. SOBERNHEIM .. 468

TO CORRESPONDENTS 468

LEADER:—
Sir James Graham and the "Times" 469
Poor Law Medical Relief 470

THE COLLEGE CHARTER 471

SIR JAMES GRAHAM'S BILL 471

ADDRESS TO MEMBERS OF THE COL. OF SURGEONS 472

REPORT OF AN INTERVIEW WITH ALEXIS, THE CLAIRVOYANT, ON FRIDAY, JULY 20TH, 1844 472

CASE OF TETANUS CAUSED BY CARIOUS TEETH; by H. RAYNES, Esq 473

HOSPITAL REPORTS:—
King's College Hospital 473
St. Bartholomew's Hospital 474

CASE OF OVARIAN EXTIRPATION: by Mr. Atlee, of Lancaster, Pensylvania 474

PERISCOPE OF THE WEEK:—
Muscular Enteritis 475
Inversion of the Uterus 475
Ligature of the External Iliac Artery 475
Polypus Uteri 475
On the Extraction of Retained Placenta in Cases of Abortion 475
Ovarian Disease 475
The Bilateral Operation of Lithotomy 475
Use of Vegetable Acids in Acidity of the Stomach 475
Ovarian Disease 476
Poisoning by Acetate of Lead unattended bs Fatal Symptoms 476
Disease of the Maxillary Antrum .. .. .. : 476

GOSSIP OF THE WEEK 477

A SELECT PRACTICAL FORMULARY 478

METROPOLITAN MORTALITY TABLE 478

A COURSE OF CLINICAL LECTURES ON SOME IMPORTANT POINTS OF SURGERY,

Delivered at ST. GEORGE'S HOSPITAL, by Sir BENJAMIN C. BRODIE, Bart.

Reported by G. SAYLE, Esq. M.R.C.S., late Curator of the Museum of St. George's Hospital School.)

Lecture XVI.

There are still a few points remaining, Gentlemen, with respect to the treatment of strictures. At our last lecture, I promised to mention to you those cases in which the ordinary means of treatment were insufficient, but these are comparatively rare. In an old standing case, you may have the stricture so hard and cartilaginous, and occupying so large a portion of the canal, as to prevent the introduction of an instrument in the ordinary way: or it may be a case which has been mismanaged, and false passages made, so that the instrument readily slips into them, if great care be not taken. Mr. Stafford invented an instrument, shaped like a catheter, and having a stilette at the end to cut through the stricture, and he recommended its use in the treatment of common stricture. I am not disposed to recommend it in ordinary cases: 1st, because they may be cured without it; 2nd, because you are always liable to inconvenience from cutting instruments in the urethra, and, if employed in the manner he directs, there is great danger. I know a case where the patient died from this mode being adopted; the surgeon had cut through the urethra behind the stricture, and death was produced by the effusion of urine into the cellular tissue. The late Mr. Andrews told me of a similar case which came under his notice; but a modification of this instrument may be employed with advantage. Some time ago, there was a patient in the hospital (a veterinary surgeon), who had an old standing stricture, and no one had been able to pass an instrument into his bladder. When I first attempted it, the catheter went, not into the bladder, but into a false passage, between the urethra and the rectum; this perplexed me very much, as, notwithstanding I made repeated trials, I never could succeed in passing it; previous to coming here, he had been at St. Bartholomew's, under Mr. Earle, but no one had ever succeeded in getting the catheter into the bladder. I, therefore, had the patient tied up as in the operation for lithotomy, cut down into the perinæum till I reached the membranous part of the canal behind the stricture, and made an opening in it large enough to admit of my finger being introduced, which I passed forward to the posterior part of the stricture; I then passed down the urethra a straight tube, having a lancet at the end, attached to a screw, by which it could be made to project any required distance. This was pressed against the anterior part of the stricture (the lancet protruding), till I could feel the point pricking my finger at the posterior part. Here, then, was the stricture cut through without danger or difficulty, and a gum catheter being introduced, he was so far cured as to be able to keep himself well by occasionally passing a bougie himself. You see, in this operation, the finger at the back of the stricture guides the instrument, so that there is no danger of running it into the cellular membrane. The gum catheter should be left in for several days at first, but in a short time he may be allowed to pass it himself. Previous to the case I have just mentioned, I performed the following operation, but which is not so good as that just described. A man in the hospital had a troublesome stricture, and no instrument could be got into his bladder; I partially succeeded once or twice, but gave him no relief, and after he had been in a long time I adopted the following method. Finding the former plan of no avail, I had him tied up as for lithotomy, cut down to the membranous part of the urethra behind the stricture, then told him to strain as in making water; feeling the urethra thus dilated on my finger, I made an opening into it, and then passed a gum catheter into the bladder, by means of the opening in the perinæum. After this, I went into the country for a short time, and, when I returned, I passed a catheter through the regular passage at the first attempt, without any difficulty. This patient comes here now and then, just to show himself, and is in the habit of passing the instrument for himself. The former operation, however, is best. By it a cure is effected at once, and there is no danger in the operation. As I told you, on a former occasion, there was an operation termed "cutting out the stricture," but the surgeon never knew what he did cut into. Sometimes he did, but more frequently he did not, divide the stricture, so that he might occasionally do good, whilst he would more frequently do harm, and the patient died; under such circumstances, it is not worth while describing the steps of the operation, as it is never practicable. I told you, after the last operation, the water must be drawn off from time to time, otherwise you are apt to get deposits of lithate of ammonia, or soda, round the edges of the wound, which will be sufficient to prevent its healing. Lithic acid looks like small grains of cayenne pepper; when lithate of ammonia is present, the urine looks clear at first, but becomes thick after standing a few hours, forming, what is called, an uncrystallised, amorphous sediment. Sometimes, you will have a red deposit, making the chamber-pot look like a pink saucer; at other times, it will be yellow. The treatment is to be on the same principle in all cases: attention to the patient's diet, avoiding all acids, wines, and malt liquors, cyder, perry, sweetmeats, fruits, and everything acid. He should, also, take daily exercise, for those persons who do not perspire are always subject to deposits of lithic acid. The perspiration is acid, and the getting rid of it in that way (whatever may be the acid it contains) certainly lessens the quantity of lithic acid in the urine. Great attention should also be paid to the state of the bowels, keeping them constantly open; this should always be seen to, even if there is no deposit, to prevent its recurrence; but, when there is deposit, whether it be lithic acid, or the uncrystallised lithate of ammonia, something more is necessary. You must give him alkalies in large doses, for the quantity generally given is too small: let him take twenty grains of the bicarbonate of potass., both after breakfast and dinner, to neutralise the acid in the stomach, for I have no doubt it is the superabundant muriatic acid left in the stomach after meals, which gives rise to the lithic acid in the kidneys: you may give magnesia or soda, and the former does very well when the patient is subject to costive bowels: indeed, the muriate of magnesia is even better than muriate of potass; it is also better than the preparations of soda. Always, in these cases, give the salts of potass in preference to those of soda, because the former produce a very soluble, the latter an insoluble, compound with lithic acid, which might accumulate, and form stone in the bladder. There is a stone in the museum, which I bought at the late Mr. Heaviside's sale; it is composed of a nucleus of lithic acid, thickly incrusted with lithate of soda; and, although I could not obtain its history, I believe it was formed in this way. Gouty patients should also take potass, for, if you give them soda, you feed the chalk-stones, whereas the potass goes off in the urine. You will sometimes meet with cases, where the patient has alkaline urine, with stricture. This requires very prompt attention, because alkalies will produce great irritation of the urethra, and you will not cure the stricture, so long as this is allowed to remain. Such a patient should be allowed full nourishing diet, take orange marmalade, wine, &c., and you may give him ten minims of muriatic acid, twice or three times a day. The following is a very nice drink for such a patient:—

℞ Acid. nitric. dil. ʒiis.
" muriatic. dil. ʒviij.
Syr. aurantii
Aq. fl. aurant. āā ℥j.

Water sufficient to make up an old fashioned pint, of sixteen ounces, of which let him take a small wine glassful, three or four times a day. All patients, having acid or alkaline urine, should be furnished with red and blue litmus paper, and taught the use of these tests, as they will be able to tell when they require excess of alkali, or acid, in their diet. I should mention, by the way, that patients with lithic acid in the urine, especially if it be in the form of lithate of ammonia, are benefitted by taking alterative pills, made as follows:—

℞ Extracti acet. colchici
Pil. hydrargyri ăă gr. j.
Extr. colocynth. comp. gr. ij, M.

Ft. pilula omni nocte sumenda per vices decem.

Those persons, more especially, who are of a full habit, will be benefitted by this remedy. In one of the first of these lectures, I believe, I told you of a case of congenital contraction of the orifice of the urethra, which proved such a constant source of irritation, that it terminated in malignant disease of the penis, and destroyed the patient's life. Since then, another case of the kind has come under my notice. A gentleman, thirty years of age, has had a small orifice of the urethra from birth, which has always caused him to make water with difficulty; latterly, it got worse, till at Christmas last, when he was seized

with perfect retention. The surgeon, who attended him, passed a catheter, and drew off his water, which gave him temporary relief; he then resorted to mechanical dilatation, and, when I saw him, the parts were very sore, but still he could not make water. I treated it in the following way, and cured it. I introduced the blade of a pair of scissors, and cut through the lower part of the urethra, for about three-quarters of an inch, in the line of the frænum. The incision being made carefully in this direction, there was no hæmorrhage; but, had I cut through the substance of the glans, it would have bled. I then introduced a piece of lint, leaving room enough for the urine to flow. In five or six days, it came away, and, since then, a piece has been introduced daily, and the parts are nearly healed, and he makes water without difficulty. There can be no bad result from this operation, but I have seen the parts totally destroyed by ulceration, when mechanical dilatation has been resorted to. You might, perhaps, suppose it would interfere with procreation; this, however, is not the case. I know a gentleman on whom the operation was performed some time ago, and he has more children than he knows what to do with. Stricture in the female urethra is not common. I have seen a few cases; when it occurs, it is entirely different from the disease in the male. There is a small compressor urethræ muscle, much the same as in the male; but, so far as I know, it is never the seat of stricture. In the female, it is always the anterior part of the canal which is affected; this produces constant inconvenience, the same as when it occurs in the male, and I know nothing of you can do for this, except keeping it moderately dilated with bougies. I say "moderately," because, if you attempt to dilate it to any considerable extent, you will produce swelling and inflammation. There is a disease to which the female urethra is liable, which never occurs in the male. The patient complains of a great deal of pain on making water, which is sometimes effected, not without difficulty. If you examine the urethra, you will find a little red, vascular, tumour, as red as a cock's comb, and looking very much like it; or there may be specks of increased vascularity near the orifice, not projecting at all, whilst the former vary in size, from a split pea to a horse bean, and if you touch them, they bleed. When they protrude externally, they are easily cured: snip the tumour off at its base, with curved scissors; and when the bleeding has stopped, touch the part with nitric acid, or caustic potass; but you must be prepared with an antidote, to prevent its burning contiguous parts. If you employ the nitric acid, it should be a solution of bicarbonate of potass: if caustic potass, then use vinegar. When it occurs within the urethra, it is more difficult to manage, for you cannot get at it with scissors. You must then gently dilate the urethra, and by careful examination make out to which surface it is attached. Suppose (as is most usual), it be the lower surface, you must be provided with a small canula, stopped up and rounded at one end, open at the other, having a handle fixed at a right angle to the open end. Having introduced this into the urethra, slide in a stick of caustic, and the tube will protect the remaining part of the urethra; but its lower surface, being deficient, allows the caustic to be applied to the part affected; if you employ caustic potass, or nitric acid, you must take the same precaution as I mentioned before. The application generally requires to be repeated several times. Although this will effectually cure the disease, still it is sometimes very troublesome, as great care is required not to burn more than is necessary: at the same time, taking care entirely to remove the disease. The canula should be allowed to remain in a short time after the caustic has been removed, and the patient should not make water; but, occasionally, in spite of all your care, the disease will, after a time, be regenerated; and I am disposed to think it is produced by disease in the kidneys.

MATICO.—Dr. Jeffreys says that is the under and reticulated surface of the leaf which should be applied to leech-bites, cuts, and other recent wounds, and not the upper.

CLINICAL LECTURES IN MEDICINE.

Delivered at the GREAT CHARITY HOSPITAL, Berlin, by Dr. SCHONLEIN, first Physician to the King of Prussia, founder of the Natural System of Medicine in Germany, and Professor of Pathology and Therapeutics in the University of Berlin.

(Prepared from the German, expressly for "The Medical Times.")

LECTURE XVIII.

Disease of the Left Lobe of the Liver, and Atrophy of the Spleen.—Diarrhœa.—Discharge of the Food in an undigested State.—Condition of the Blood.—Œdema.—Bronchial Irritation.—Enlargement of the Pylorus.—Death by Exhaustion.

May 6th, 1842.—Charles Neundorf, messenger, 53 years of age.—The patient had a remarkably bloodless, cachectic, appearance, such as is observed in individuals who have lost much blood.—We shall, first, consider the manner in which the disease developed itself.

The remarkable, pale, appearance of the patient will first lead us to an examination of the organs of the chylopoietic system; the more so, as the patient states that he, first of all, perceived a pain in the left hypochondrium, for which powerful abstractions of blood had been instituted, and which had certainly removed it for a time, but that it had again returned, though in a more mitigated form; for the patient states that he neither experienced vomiting nor nausea, and only complained of an uneasy sensation in the left hypochondrium. We shall, for the present, confine ourselves to the existing phenomena, without descending into a more minute examination. A degree of distension is perceptible in the right hypochondrium, as also in the centre of the abdomen; on applying the hand, we perceive, through the relaxed intestinal walls, a hard and distended mass, which belongs, apparently, from its position and shape, to the liver. This organ is considerably increased in size, so that it projects for two or three inches below the false ribs; it feels hard to the touch, resisting the pressure of the hand; the greater portion appears tolerably uniform to the feel, with the exception of the locality towards the linea alba, where it is uneven, and painful upon pressure. The examination, therefore, leads us to infer an increase in bulk of the liver, and a morbid deposit in its left lobe. Nothing, on the other hand, can be perceived in the left hypochondrium, where the patient more particularly complains of pain; on the contrary, that side is rather contracted and soft, and nothing abnormal can be felt, even on violent pressure; we are, therefore, inclined to infer the opposite condition to that which was found in the right hypochondrium, namely: a diminution of volume, or atrophy, of the spleen. These are the symptoms exhibited by an examination of the abdomen; namely:—1st, positive symptoms with regard to the liver; 2ndly, negative symptoms with regard to the spleen. To the material symptoms, we must join the functional ones. These are found to be very slight, in proportion to the former: no disagreeable taste; appetite tolerable; no unpleasant sensation in the region of the stomach, after meals; no nausea or vomiting; the tongue tolerably clean, only of a pale, anæmic colour, looking like maecrated flesh; the bowels are somewhat relaxed, but acting in small quantities, only, at a time; the urine is quite clear: judging from the extent of disease of the liver, we should have expected a dark urine, similar to brown beer, but its colour is perfectly normal. No anomaly exhibits itself in the organs of the chest. On the other hand, we find a remarkable disturbance in the vascular system, and even in the constitution of the blood: the exsanguious colour, the pale skin, with the transparent veins, the bloodless lips and tongue, the small, feeble pulse,—all indicate great derangement of the circulatory apparatus. This anæmic state can not be attributed to the former abstractions of blood, since they were instituted upwards of twelve months ago, and were no so very copious that the loss could not have been again supplied, if the chylopoietic organs had been healthy.

Twelve leeches have already been applied to the left hypochondrium, and we shall, for the present, order a mucilaginous beverage, until we have a more perfect insight into the disease.

May 7th.—Our yesterday's examination of the patient led us to the conclusion, that some organic disease of the liver exists, namely: hypertrophy and scirrhous degeneration of the left lobe, and, as an antithesis to it, contraction of the spleen. The consequence of this degeneration exhibits itself in the constitution of the blood. We added, that it was remarkable that this state should only have been attended by a very slight functional disturbance in the chylopoietic system; the only morbid symptom being an increased discharge by stool, in small quantities. On a more minute examination of the matter evacuated, it shews, however, that the functional disturbance is, in fact, considerable, although apparently so slight. The food the patient takes, is discharged again in an undigested state; thus, we have found portions of fish and potatoes, which he had taken yesterday, in the excrements, in an unchanged condition; the latter further contain but very few constituents of the bile, which is not surprising, when we consider the extent of the affection of the liver. A remarkable, and, physiologically speaking, a singular fact is shewn, in the simultaneous absence of pigment of the bile in the skin, as well as in the urinary secretion, the presence of which is stated, by some medical men, to be a characteristic feature of diseases of the liver. On further investigation, the following additional facts have been ascertained: the patient has been addicted to rather intemperate habits; he used formerly to suffer from hæmorrhoidal flux, which, at first, took place at pretty regular intervals, but which has altogether ceased of late. We know the relation and influence of these two circumstances upon the glandular, chylopoietic viscera, and especially upon the liver. A restoration of the tissue of the liver and the spleen may certainly be considered to be beyond the boundary of medical art; we shall, therefore, be obliged to give up the hope of a radical cure. There are two circumstances, which afford us indications in the treatment:—1stly, the deficiency of bile; 2ndly, the degeneration of the blood, as a consequence of the affection of the spleen and the liver; a third circumstance may be joined to this, which, however, is as yet only to be feared, namely: the apprehension that dropsy will take place, for we have learned, just now, that a swelling of the lower extremities has occasionally exhibited itself.

The first indication is not to be met by bitter, or tonic, remedies; it is bile which is wanting, and that in a fluid form: (℞. Fellis tauri rec. ℥ss., aq. menth. pip. ℥iij. Mix.; to be taken daily;) the second indication demands the administration of iron, and, perhaps, the best form is that of ioduret of iron, administered in the shape of pills, as it is so apt to be decomposed by other substances: (℞. Iodii puri gr. xij., limat. ferri gr. xx., sol. pulv. gummi mim. q.s. ut fiat. massa, et divide in pilulas No. LXXX.; four pills to be taken morning and evening.)

May 9th.—Dr. Simon has chemically and microscopically analysed a small portion of the blood of the patient. The result of this analysis has confirmed the inferences which I drew from the colour of the skin, the character of the pulse, and the state of the functions of the liver and digestive organs:—

The Blood of the Patient contains,—		Healthy Blood contains,—
880.	Water	791.9
112.0	Solid constituents	208.1
3.0	Fibrin	2.0
55.1	Albumen	75.6
45.8	Hæmatoglobulin	112.3
8.9	Extractive matter and salts	14.2

The water is, therefore, very much augmented in the blood of our patient, while the albumen and the blood-globules have considerably diminished. Chyle-globules were observed in it (under the microscope) in great quantity. The blood-globules rapidly precipitated themselves from the blood, when drawn; the mechanical cohesion of the blood was considerably diminished (a circumstance which is of the utmost importance in appreciating the character of the *crusta phlogistica*); four liquid intestinal evacuations have taken place

since yesterday (in these, we find pigment of bile, but it is artificially produced, since the patient has daily taken ℥ss. of ox-gall.) Nothing further presents itself to-day, to guide us in our treatment, and we shall, therefore, continue the same remedies, especially as no change can as yet be expected from their use.

May 10th.—A few new points are to be added to what we have already said of the morbid symptoms, one of which does not surprise us, inasmuch as we have before indicated it as a possible result of the malady, namely: the dropsical swelling of the feet. It cannot create surprise, considering the quality of the blood, as described, and the degeneration of the liver. The patient, to-day, complains greatly of this swelling of the feet, although it is but moderate. We shall not, here, administer hydragogue remedies ; this infiltration is evidently a consequence of the degeneration of the blood. The second circumstance, which we shall have to investigate more minutely, is the state of the respiratory organs; not only because the patient complains of a troublesome cough, which has greatly disturbed his sleep, but also because we know, that this derangement may readily have an injurious influence upon the higher act of purification of the blood, within the lungs. A clear, sonorous, sound is audible in both sides of the thorax on percussion, and auscultatation gives only a trifling crepitation, in a limited part of the upper lobe of the left lung, upon expiration ; a rather dry rhonchus is, on the other hand, heard in the right lung, both during inspiration and expiration ; we may, therefore, pronounce the affection of the bronchial mucous membrane to be principally in the right lung.

We shall not have to make any material alteration in the treatment ; let the patient continue the use of the ox-gall, and the iodide of iron, in the same doses ; but I shall add tinct. opii benzoic. gtt. xij., partly with a view to moderate the intestinal evacuations, and partly with a view to alleviate the pain. On account of the cough, let the patient take an anodyne *linctus* with liq. ammon. anisat.

May 20th.—The rapidity, with which tenesmus exhibits itself, after taking food (frequently scarcely half an hour elapsing), and which is accompanied by the evacuation of the undigested aliment (without, therefore, its having gone through the act of stomachic digestion), as well as the excrements being deficient in bile, and exhibiting themselves in flocculent masses (which, probably, consist of the epithelium cells), create a suspicion, that the scirrhous affection of the small lobe of the liver has already advanced towards the pyloric orifice of the stomach, and that it has there terminated in ulceration of its coats, so as to cause the food to pass through, as it would along a leather pipe, and to be evacuated in an unchanged condition. Similar phenomena are observed in individuals who have formerly suffered from vomiting and constipation, in consequence of contraction of the pylorus, and where, as soon as the latter has been enlarged by means of ulceration, the vomiting ceases, and continued diarrhœa ensues instead of the former constipation. From the reasons already stated, we had prescribed ox-gall and iron, at first in the form of the ioduret, and subsequently combined with lactic acid, which is one of the most digestible preparations of iron,* without the treatment having been followed by any favorable result ; the infiltration of the lower extremities has made great progress ; the irritation of the bronchial membrane, however, has disappeared. I am, therefore, inclined to continue the gall, but to discontinue the iron, and instead of it, to add to the former, extract. cascarillæ (℥ij.) in order to check the frequent intestinal evacuations, which are so troublesome to the patient.

May 21st.—The number of intestinal evacuations has diminished within the last twenty-four hours, but it is a question, whether this is to be attributed to the effect of the remedies employed, or to the smaller quantity of aliment taken, since we know that the quantity and frequency of the stools stand in relation to the food taken.

We have already said that the normal functions of the stomach, in our patient, are greatly disturbed. It becomes, then, a question: is this disturbance occasioned by the circumstance that the normal opening (the pylorus) cannot close itself, which is frequently the case in ulceration of this part, especially as a consequence of scirrhus ? or, is the disturbance of the mechanism occasioned by the circumstance, that an anomalous connection exists between the stomach and the colon transversum, which may not only be a consequence of simple ulceration, but also of scirrhous degeneration? in which case, the contents of the stomach would immediately get into the colon transversum (the older physicians used to call this *lienteria spuria*). The solution of this question may be accomplished : 1st. by the locality of the scirrhous tumour, but this will always prove a doubtful means of diagnosis, as I have already explained on several occasions ; or, secondly, by instituting the following experiment with the patient, which I have found of use in several cases : namely, to discontinue all medicines, and to mix the food of the patient with some harmless colouring matter, as, for instance, indigo, carmine, &c., in order to see, whether the excrements will exhibit the colour of such substances, immediately after having taken the food. We shall try this experiment with our patient.

May 24th.—We made the above experiment with the patient, by administering to him a colouring matter, in order to see whether such would exhibit itself immediately after the first evacuation. The result of this experiment, which was performed with indigo, was unsatisfactory, and we yesterday caused his soup to be coloured with gr. vj of cochineal. Seven intestinal evacuations have taken place since, but the colouring matter only appeared in the last (nearly twelve hours after the use of the cochineal), from which it would appear, therefore, that an immediate connexion does not exist between the stomach and the lower part of the intestine, and that the disturbance is seated solely at the pylorus, and which must already be in a state of ulceration.

The strength of the patient constantly declined, whilst the intestinal evacuations continued with the same frequency. Claret was given as a beverage ; tonics as well as stimulants were administered, and subsequently, on account of the frequent cough, a mixture composed of: ℞. Liq. ammon. anisat. ℥ij, aq. cerasi. ℥j, syrup. althææ ℥ij. Mix. To be taken in teaspoonfuls. A complete collapse took place on the 30th of May, and the patient sunk on the afternoon of the day following.

Epicrisis.—A hard tumour was distinctly felt, during lifetime, through the intestinal folds, which we judged to be partially seated in the liver, and partially in the stomach; and the latter organ we considered to be so much implicated, that the pylorus had been destroyed, owing to which the food was evacuated in an undigested state, without being able to remain in the stomach and to go through the process of digestion. For a long time we were doubtful, whether this disturbance in the mechanism of the stomach proceeded from a destruction of the pylorus, or from an abnormal communication of the lower curvature of the stomach with the colon transversum. In order to determine this point, we had recourse to the experiment of administering coloured food to the patient, in order to see what length of time would elapse, before its evacuation. This experiment proved, that no such immediate communication existed between the stomach and colon, but that the seat of the disturbance must be sought for in the pylorus alone. We further asserted, that the liver must have become useless for the purpose of secretion of the bile, inasmuch as the intestinal evacuations did not contain any of this fluid; finally, we assumed the spleen to be in an atrophied state.

Let us now see, how far the post-mortem examination has confirmed our diagnosis! At the locality, where we felt the hard tumour during life, a scirrhous degeneration was found, intimately connected with the pylorie orifice of the stomach and with the small lobe of the liver, and which I do not doubt to have originally proceeded from the stomach (the less so, as some little fungoid tumours, of the size of a pea, were found scattered over the mucous membrane of the stomach), and that the liver was only secondarily affected. The mass in the interior was already in a state of ulceration. The pylorus, in consequence, was so much enlarged that a finger could easily penetrate through it.

The destruction, which took place at the pyloric part of the stomach, extended itself deeply into the left lobe of the liver, and only one portion of the right lobe appeared to be healthy. The spleen was very small, contracted, and nearly resembling leather. It is remarkable, and as such ought to be particularly noticed, that no vomiting had formerly taken place, in spite of this extensive disease of the stomach. The lungs were œdematously infiltrated, and the bronchial mucous membrane congested in some points. No anomaly in the other organs.

* The patient, since the 18th of May, has taken the following powder :—℞ Ferri lactici gr. ij., sacch. alb. gr. x., mix. three times a day.

ACTION OF AMMONIA UPON THE PROTOCHLORIDE OF PLATINUM.

By Dr. MICH. PEYRONE, of Turin, late of the Giessen Laboratory.

Translated at the Author's request for the "Medical Times," By Dr. SHERIDAN MUSPRATT.

(Continued from page 444.)

Before proceeding with my researches, I must say a few words upon the preparation of the salt of Magnus, and also upon the body of Reiset, which is obtained from it, as these remarks are attached to some questions which I intend to consider hereafter. If the reader remembers the details which I particularly laid stress upon, when speaking of the direct preparation of the yellow substance, he will get a clear insight into the method of obtaining the green salt of Magnus. I shall here remark, that this salt is far from being an immediate product of the action of ammonia on the protochloride. The formation of the yellow substance, and the white body which is obtained from it by the action of ammonia, appears to me to place this fact beyond any doubt. When this supposition is adopted, it naturally follows that the green salt of Magnus is no other than the product of a union of my white protochloride with protochloride of platinum.

$$\underbrace{Pt.\ N^2\ H^6\ Cl.}_{\text{Protochloride of Platinum base.}} + Pt.\ Cl. \text{ giving } \underbrace{2\ Pt.\ N\ H^3\ Cl.}_{\text{Magnus's Salt.}}$$

The procedure to be undertaken for its preparation, becomes, therefore, very simple. It is only necessary to add a new quantity of protochloride of platinum to the mother liquor, from which the protochloride has separated, to obtain immediately the salt of Magnus. One might raise an objection to my theory, on the ground that a greenish substance is, also, sometimes formed without the addition of protochloride of platinum. This substance is, however, manifestly a mixture, upon the nature of which I cannot, at the present time, confidently speak ; but it is perfectly different from the salt of Magnus, which is deposited in such beautiful needles when protochloride of platinum is added, in small quantities, to the mother liquor, from which the white body has been obtained. The salt, obtained in this way, is perfectly fit, after edulcoration, for the preparation of the body of Reiset. It is only necessary to submit it, in the heat, to the action of ammonia, and to add more and more of this alkali, till the whole is dissolved. The solution, obtained by this treatment, furnishes, on evaporating to dryness, a substance which dissolves with a yellow colour in cold water, and, on gentle re-evaporation and cooling, four sided needles deposit, which, when re-crystallised, are perfectly pure. These crystals are, in this state, of a fine straw colour, and perfectly transparent. The preparation of this body is also very simple; but I must here remark that caustic ammonia is to be employed, and not the carbonate, as in other similar cases. The green salt dissolves, likewise, in the carbonate of ammonia, but, in using the carbonated alkali, the body of Reiset is always obtained, mixed with a powder that effervesces with the acids, and from which it is only with great difficulty separated.

The analysis of the body of Reiset afforded me the annexed results :—

0·7777 grm. substance gave 0·4535 grm.=58·31 per cent. platinum.

0·3938 grm. substance gave 0·2244 grm.=58·27 per cent. platinum.

0·7040 grm. substance gave 0·2244 grm.=3·85 per cent. hydrogen.

0·5486 grm. substance gave 0·1971 grm. water=3·99 per cent. hydrogen.

0·4683 grm. substance gave, on precipitating with nitrate of silver, 0·3986 grm. chloride of silver=20·99 per cent. chlorine.

These numbers express the formula :—

$$Pt.\ N^2\ H^6\ Cl.$$

		Theory.		Found.	
1 equiv.	platinum	1233·26	58.58	58·31	58·27
2 "	nitrogen	354·06	16·83	"	"
6 "	hydrogen	75·00	3·56	3·85	3·99
1 "	chlorine	442·65	21·03	"	20·99
		2104·97	100·00		

As this body not only possesses the same constitution as my protochloride, but also,—with the exception of its colour, which is always, more or less, straw-yellow, and a somewhat less solubility in water and alcohol,—all the same properties, I shall not speak further on it, but will at once proceed to the analyses of the sulphate and nitrate.

SULPHATE OF REISET'S PLATINUM BASE.

$$Pt.\ N^2\ H^6\ O + S\ O^3$$

I always obtained this salt in the form of yellow, but perfectly translucent, quadra-octahedrons, by simply treating the body of Reiset with sulphuric acid, of mean concentration. I avoided the method of M. Reiset, which, as I remarked in the commencement of this treatise, consists in treating the radical with sulphate of silver. My preparation evidently shews, that the combined action of acid and oxide of silver is, in no way, necessary for the production of this salt.

Analyses of this Salt.

0·5443 grm. salt gave 0·2950 grm.=54·19 per cent. platinum.

0·5390 grm. salt gave 0·1845 grm. water=3·80 per cent. hydrogen.

0·5020 grm. salt gave 0·1687 grm. water=3·73 per cent. hydrogen.

0·5258 grm. salt precipitated by nitrate of barytes, gave 0·3395 grm. sulphate of barytes=22·20 per cent. sulphuric acid.

0·361 grm. salt precipitated by chloride of barium, gave 0·2305 grm. sulphate of barytes=21·95 per cent. sulphuric acid.

The numerical results agree with the formula:—

$$Pt.\ N^2\ H^6\ O + S\ O^3$$

Composition in per cents.

		Theory.		Found.	
1 equiv.	platinum	1233·26	54·48	54·19	"
2 "	nitrogen	334·06	15·64	"	"
6 "	hydrogen	75·00	3·31	3·80	3·73
1 "	oxygen	100·00	4·43	"	"
1 "	sulph. acid	501·18	22·14	22·20	21·95
		2263·50	100·00		

NITRATE OF REISET'S PLATINUM BASE.

$$Pt.\ N_2\ H_6\ O + NO_5$$

The preparation of this compound is perfectly analogous to that of the sulphate: it consists in simply treating the body of Reiset with nitric acid. In regard to its properties, they are quite identical with those of my nitrate, with the exception of the yellow colour which always accompanies the former. The two are also alike in composition, as will be seen from the following analytical results:—

0.5236 grm. salt gave 0.2635 grm.=50.32 p. c. platinum.

0.3031 grm. salt gave 0.1532 grm.=50.54 p. c. platinum.

0.4812 grm. salt gave 0.1392 grm. water=3.21 p. c. hydrogen.

0.4774 grm. salt gave 0.1385 grm. water=3.20 p. c. hydrogen.

0.5302 grm. salt gave, when burned in an atmosphere of carbonic acid, 99 cubic centimetres nitrogen: thermometer 51.8°: barometer 331'''=21.68. p. c.

These numbers correspond to the formula:—

$$Pt.\ N_2\ H_6\ O + NO_5$$

Composition in per cents.

		Theory.		Found.	
1 equiv.	platinum	1233.26	50.55	50.32	50.54
3 "	nitrogen	531.09	21.77	21.68	"
6 "	hydrogen	75.00	3.07	3.21	3.20
6 "	oxygen	600.00	24.61	"	
		2439.35	100.00		

I treated, according to the method of M. Reiset, the sulphate with caustic barytes, and obtained, after some experiments, a solution in which neither barytes nor sulphuric acid could be detected by the re-agents. This solution is highly caustic, and, when placed on the tongue, leaves a red spot, like potash or soda, under the same circumstances. It precipitates the metal, in an oxydized state, from the salts of silver, and immediately gives salts with the acids. The platinum base is very soluble in water, less so in alcohol, and possesses the capacity of crystallizing out of these two liquids. It absorbs carbonic acid, with such avidity, from the air, that it is almost impossible to obtain it in a pure state. The analysis of an apparently fine sample of this base gave: 62.68 p. c. platinum, 3.77 p. c. hydrogen, and the enormous quantity of 11.64 p. c. carbonic acid.—I evaporated a quantity of it to dryness, in an atmosphere of hydrogen, over a water-bath: but this method was also unsatisfactory, as a greater or lesser portion was always observed to be decomposed.

In the preceding paper, the facts, stated, evidently shew the existence of two bodies—one of a green, and the other of a yellow colour : both possessing the same constitution, and behaving in an analogous way towards ammonia, by producing always two compounds—one yellow and the second white : which, also, are of the same composition.

What view are we to take of these two bodies? Must we consider them as the same substance, capable of assuming two different states ? Or, are they to be considered as two bodies differing in nature ? In other words: Do the yellow and the green bodies possess the same molecular constitution? And, if this question be answered in the negative, what constitution are we to assume for their derivatives?

The solution of these questions is surrounded by difficulties, which I appreciate in their fullest signification, and particularly in the present state of my investigation, which is far from being complete. I shall not shield myself under the garb of *isomerism*, as this is, in my opinion, an empty name, to which there is to be attributed no meaning whatever; but I will present, without reservation, that view which appears to me the most probable, and which, besides, is founded upon facts, the truth of which cannot easily be confuted.

I think I have shewn that the yellow substance is the only immediate product formed by the action of ammonia upon protochloride of platinum, and that the salt of Magnus is only formed by the further action of protochloride of platinum upon my white body. This being assumed, it becomes, in a high degree, probable that the salt of Magnus is no other than a peculiar compound of my white body with protochloride. in equal equivalents :—

$$Pt.\ N_2\ H_6\ Cl. + Pt.\ Cl.$$

or, in fact, a double protochloride ; and by adding two equivalents of ammonia to the above formula, the other body is obtained:—

$$Pt.\ N_2\ H_6\ Cl., Pt.\ Cl. + 2\ NH_3$$

This hypothesis seems to me the most intelligible, and the only one which explains the gradual formation of the two bodies. Notwithstanding, a thorough study of their properties is required, to explain fully this subject.

I shall now, cursorily, glance at a new series of compounds—an investigation not yet complete, but which is, in a high degree, interesting to the chemist. If a stream of sulphurous acid is passed into a solution of perchloride of platinum, until the menstruum no longer gives a precipitate with chloride of ammonium, and the liquid be left in a well-corked flask for some days, and then treated with ammonia, no less than three bodies are produced, in which the chlorine is wholly replaced by sulphurous acid.

The first of these bodies is nearly insoluble in water; the second dissolves more readily, and, on cooling, crystallizes in small, colourless, perfectly diaphanous needles, which attach themselves to the rim of the basin in a stellated form; the third is copiously soluble in water, does not crystallize, but, on evaporation, deposits as a white powder. All these bodies, when brought into contact with hydrochloric acid, lose their sulphurous acid, and protochlorides are formed, which do not possess anything in common with the ones already described. The first two shoot out into strongly shining crystals, of a lemon and orange-yellow colour. The third protochloride deposits in the state of a yellow powder, which has a great resemblance to my yellow body. I shall soon recur to this subject.

The preceding researches were all performed in the laboratory of Professor Liebig, whose excellent advice I have enjoyed, without interruption. I hope he will allow me to return him publicly my thanks, not only for the interest he has taken in the investigation, but also for the kindness which he has heaped upon me, during my residence in Giessen.

ON THE INFLUENCE EXERCISED BY TRAUMATIC LESIONS OF THE SPINAL MARROW ON THE FUNCTIONS OT THE GENITO-URINARY ORGANS, WITH THE ANALYSES OF THE DIFFERENT SECRETIONS.*

By —— SEGALAS, M D., Member of the Academy of Medicine.

(This memoir, read before the Academy of Medicine, was revised by the author expressly for the *Medical Times*.)

Being consulted by two colleagues, for patients affected with disease of the urinary organs, caused by a traumatic lesion of the spinal marrow, I was enabled to study attentively, and for a considerable length of time, the effects produced, and was thereby led to conclude, that the ideas generally received are erroneous, and consequently dangerous in a practical point of view. In order to ascertain how far this opinion was correct, I had recourse to a method of investigation formerly frequently employed by me,—experimentation on animals,—and this not only confirmed, but likewise furnished further arguments, in favour of my opinion. This gave rise to the following memoir, which is but a recapitulation of the cases I observed, the experiments I performed or analysed, and the conclusions to which I have been led.

In the first place, I will give the details of the cases, and, on account of their importance, will do so at some length. Almost always incurable, the traumatic lesions of the spinal marrow cause, *immediately*, paralysis of the lower part of the body: *consecutively*, infirmities which render life a burden, and, finally, death ;† my two patients still live, although the accidents occurred several years ago, and are in such a state as to be able to enjoy the comforts of life.

CASE 1.—On the 8th of July, 1839, Lamarre, a shoemaker, ætat 43, of short stature, fell into a cellar at St. Denis; he was raised in a senseless condition, and the next day brought home to Paris, where he was soon after seen by his medical attendant, Dr. Leroux, of Rennes; he remarked, that the spinous processes of the fifth and sixth dorsal vertebræ were very prominent, accompanied by paralysis of the inferior extremities, with loss

* In the chemical portion of the memoir, the author was assisted by Dr. Favre.

† M. Brachet thus concludes his remarks on a case of paraplegia, produced by a traumatic lesion of the spinal marrow, which he observed in one of Dupuytren's wards, at the Hotel Dieu: "It is not necessary to add that the utmost care and attention of the eminent surgeon could not prevent a fatal termination; it only prolonged the life of the poor patient upwards of a month."

of sensibility as high up as the umbilicus; ischuria; retention of fæces; violent priapism, without the patient being aware of it. Dr. Leroux relieved the patient by emptying the bladder and rectum, after which he performed phlebotomy, and prescribed various remedies in order to prevent the development of inflammation of the spinal marrow, and to forestal, if possible, by these means, the fatal consequences attendant on this disease.

Being called in, on the third day after the accident, my examination of the patient, with Dr. Leroux, confirmed the foregoing remarks; besides which, we ascertained that the urine was normal, at least, so far as its physical character was concerned, and that the priapism was more intense during catheterism than at other times: and this circumstance made us resolve to perform this operation from time to time only, and to remove the catheter as soon as the bladder was empty. We should here bear in mind the remark made by Dupuytren, and so often quoted:—that the catheter soon gets covered with incrustations, when allowed to remain in the bladders of patients affected with traumatic paraplegia. Now, I consider this to be owing to the catarrh produced by the presence of the catheter. It is probably because the instrument was withdrawn in our patient, as soon as the bladder was emptied, that the urine was found to be in its normal condition a fortnight after, when examined by Dr. Donné with a microscope, and that it continued so all the time I visited the patient, that is to say, about six weeks.

At the period that I ceased my visits, the primitive accidents produced by the lesion were unchanged, and already a consecutive one had appeared—a gangrenous eschar of the integuments covering the sacrum. A few days after its appearance, it sloughed off, and was followed by an ulcer, which soon increased in size and depth, without the patient experiencing the least pain. In this stage of the affection, Dr. Leroux, whose attention to the patient is beyond all praise, invented an apparatus composed of a pair of stays and straps, with which he raised the patient, and thus prevented the injurious effects caused by compression on the sacrum. This apparatus answered perfectly the proposed end, for the wound soon assumed a healthy aspect, diminished gradually in size, and finally cicatrized.

Fifteen months after, the patient, being in a condition to do without surgical attendance, resolved to leave Paris for the country, where he has remained ever since. At his departure, the retention of the fæces and ischuria no longer existed; priapism was not so violent nor so frequent, and took place only when the catheter was introduced; the paraplegia, however, was still as at first. To-day, from the account transmitted to me by Dr. Leroux, the state of the patient is as follows: immobility and insensibility of the lower extremities complete, but they experience from time to time electrical shocks, which make them start, but without any other sensation being perceived, except a sort of tremor in the abdomen; the fæces are still retained; but, instead of ischuria, there is a slight incontinence of urine; the paralysed parts, as well as the remainder of the body, have not fallen away; the priapism has disappeared, and the delighted invalid, adds Dr. Leroux, in conclusion, experiences sexual desires.

Case 2.—In May, 1840, M. Tainturier, a jeweller, aged 37, having climbed up a tree, lost his equilibrium, and fell off a branch, about twenty, or twenty-five, feet from the ground, on his loins. Immediately, he felt a tingling sensation in the abdomen and lower limbs; and, when he attempted to rise, he found himself incapable, on account of the paralysis of the inferior extremities. Blood was drawn from the arm, after which he was transported from St. Maur to Paris, in a boat. Examined on his arrival, no contusions were to be seen; no symptoms of fracture of the lumbar or dorsal vertebræ; and the fall appeared to have produced only a concussion of the spinal marrow; the desire of voiding his urine was, however, no longer felt, and, towards evening, the bladder was found distended to such a degree as to necessitate the use of the catheter; purgatives, likewise, were requisite, in order to evacuate the intestinal canal.

Local bleedings, baths, and stimulant liniments, moxas, &c. were employed successively, but without producing any beneficial effect; so that, six months after, the lower limbs had recovered neither their sensibility nor their mobility. The legs and feet, affected with œdema, retained hardly any heat; they might be pinched without the patient feeling it, and their insensibility was so great, that one of his great toes was deeply burnt, without his being aware of the fact. An eschar, which appeared fifteen days after the accident, has left an ulcer not yet healed; the bladder continues to be paralysed, and, from the commencement of the treatment, a catheter has been kept constantly in that organ, being changed only every ten or fifteen days. To the ischuria vesicalis, there is now added another symptom—an alteration in the urine; this liquid, after remaining in its normal condition for three months after the fall, became subsequently catarrhal; the sediment increased gradually in quantity, and the catheter was surrounded with phosphatic incrustations.

Dr. Gratiot, being called in at this stage of the disease, prescribed for the paralysis of the bladder, and of the lower limbs, tinctura cantharidis, combined with strychnia. Ten or twelve days after, the urine escaped without the help of the catheter; the instrument was, therefore, removed; but to the ischuria vesicalis, as in the preceding case, an incontinence of urine succeeded. On the other hand, sensibility returned, first in the upper part of the thighs, and afterwards in the knees, the legs, and the feet; some weeks after, the patient began to move his limbs, to raise them from his bed, and, finally, he succeeded in creeping about on crutches. The œdema of the legs and feet gradually diminished, and, at the same time, the heat returned.

This was the state of M. T., when I was requested to see him last year, in order to relieve, if possible, the disorder of the genito-urinary organs. On my first visit, I discovered a large calculus, encysted in the prostatic portion of the urethra; consequently, I proceeded to perform lithotrity, and, during several sittings, broke it to pieces with my metral percussor (*brise-pierre metral*), and removed numerous portions of a stone of a phosphatic nature. At the present moment, there is nothing either in the urethra or the bladder, yet the incontinence persists; the patient, however, feels somewhat more the passage of the urine, and can retain a small quantity in the bladder. The general health continues the same. As to the genital functions, erections manifested themselves a few days after the accident, but were neither frequent nor inconvenient; they take place somewhat oftener now, and copulation is possible; but, though the patient experiences the sensation which accompanies it generally, yet he asserts that ejaculation does not take place; the testicles have retained their normal size. With the exception, however, of the paraplegia,—an affection, to a certain extent, local, the moral and physical condition of the patient is quite satisfactory.

These are the details of the two cases of traumatic lesion of the spinal marrow, which I have had an opportunity of observing. It may be perceived that, in both, ischuria vesicalis was the immediate consequence of the accident; that incontinence of urine took place subsequently, and at a very late period; that the urine remained for a considerable length of time in its normal condition;—that in one—the second—it became at last catarrhal, and a phosphatic calculus was formed consecutively, because the catheter was not removed; in the other, on the contrary, there was not the least symptom of calculus;—that Lamarre experienced frequent and violent erections, immediately after the accident, which, however, decreased gradually in length and intensity, and finally disappeared: whilst M. T. presented nothing extraordinary in this respect, either immediately after the accident, or at a later period. Both appear, notwithstanding, to have retained, or rather to have recovered, sexual desires, but the genital functions were very different; in one, the patient—whose lesion was situated at the union of the dorsal and lumbar vertebræ—was capable of performing the generative act, whereas, in the other,—whose lesion was in the dorsal region,—erection no longer takes place, and, consequently, copulation is impossible.

(To be continued.)

PARISIAN INTELLIGENCE.

(FROM OUR OWN CORRESPONDENT.)

Paris, Sept. 22, 1844.

On Chorea, by Dr. Jadelot, physician to the Children's Hospital. As with the generality of nervous diseases, the seat of chorea is still unknown; and though fortunately it is seldom mortal, yet when death does take place, the *post-mortem* examinations indicate no lesion to which it can be attributed. It is true that, in many cases, alterations of the brain have been observed, but they are far from being constant; indeed, in most cases, nothing at all is found offering the least analogy with the phenomena remarked during the life of the patient. It is, therefore, quite superfluous to occupy your time in describing these pathological lesions, since they may exist without chorea, and *vice versâ*. I will, however, add that partial, chronic, chorea may be caused by some organic affection of the brain.

Symptoms.—They may be general, or limited to certain parts only. In most cases, the disease comes on suddenly by twitchings of the face, slight tremors, or convulsive movements in the lower limbs, according to some authors, in the upper, according to others, which increase gradually in intensity. When it is limited, the convulsions are observed principally in the limbs. If they affect the arms, these parts are carried to and fro, with more or less rapidity, according to the intensity of the disease; voluntary motion is difficult, if not impossible, and that which takes place is excessively fantastic. If seated in the lower extremities, the leg for instance, it is agitated, while the patient is lying down, by a trembling movement, and sudden jerks in the part; but it is when the patient endeavours to walk about, that the symptoms become curious and characteristic. The affected limb is drawn inwards, raised with an effort, and thrown forwards suddenly by a movement of circumduction, similar to that the mower gives to the scythe. Finally, if both legs are affected, walking is performed by a series of jerks or jumps, and offers a certain analogy with the movements performed by the puppets, which children cause to dance by means of a bit of thread. When the chorea of the lower limbs has reached its maximum of intensity, the child can no longer stand, and in spite of all his efforts, and the support given by surrounding objects, his limbs bend beneath the weight of the body, and he falls on the ground. Chorea of the muscles of the face is not uncommon; that of the trunk never takes place except when the disease is general, and, therefore, is less frequent and more serious. The other symptoms are: increased sensibility and susceptibility; fits of anger produced by the slightest cause; and, if the disease last some time, modification of the intellectual powers, such as loss of memory, and even a certain degree of imbecility or idiotism; finally, cephalalgia, which evidently exists sometimes, notwithstanding the contrary opinion lately announced by M. Rufz.

Forms.—The disease may assume the acute or chronic form. In the former, the convulsions seldom present the same degree of intensity in all the stages, but decrease and increase by turns, and, at length, disappear as the disease is overcome; the duration of this form, when an appropriate, active, treatment is employed, is about six weeks or two months. In the latter, the disturbances of the motor powers are not so intense; but they last longer, and the cure is sometimes very difficult, increasing with the duration of the affection; it is chiefly in this form, that the diminution of the intellectual powers is observed. In general, the disease is limited to one side of the body; and what is extraordinary, the mental affection does not succeed to the acute, but appears in the chronic, form, from an early period.

Terminations.—Chorea may end in various ways.

Very often it leaves after it an excessive nervous susceptibility, jerking movements of the face, eyes, lids, &c.; relapses are very common, and they generally take place in summer, during the warm months. It may likewise terminate in restoration to health, or in other diseases, such as hysteria, epilepsia, &c.

Causes.—Violent affections of the mind, principally anger; childhood: almost unknown under six years, it is generally observed between six and fifteen. As to imitation, can it produce the disease? This opinion, after having been admitted for a considerable length of time, is now generally abandoned.

Treatment.—There are few diseases in which more medicines have been employed than in chorea, and all, in the opinion of the authors who recommend them, with success. As in almost all other nervous affections, blood-letting is more injurious than useful. *Baths*, from 64½° to 68° F., in which the patient is plunged suddenly, have produced often fortunate results; cold affusions are likewise useful; but I prefer baths. Different *antispasmodics* are employed: moschus, camphora, valeriana; this last I have found very beneficial, the dose in proportion to the age and constitution of the patient, and the intensity of the disease: the oxydum zinci has, of late, been highly lauded; but several facts seem to prove that the eulogiums given have been somewhat premature. *Narcotics:* combined with the former, to which, perhaps, they ought to be preferred; the most useful are: belladonna, and especially opium and its various compounds. *Purgatives:* several eminent practitioners have employed them; Sydenham administered emetics and emeto-carthartics, and experience has proved that, united with antispasmodies, they succeed very often. Finally, I will enumerate *tonics*, such as cinchona, and the preparations of ferrum; and sulphur baths, prescribed by Dr. Baudelocque, instead of the ordinary ones, appear in the hand of this practitioner to have been advantageous.

On Pestis.—The following report, by Dr. Pariset, on two memoirs, from MM. Delaporte and Cigalla, and for which I am indebted to the kindness of the author, was read at the sitting of the Academy of Medicine, on the 20th August. The memoir of M. Delaporte is divided into four chapters, in which he treats of the focus, the causes, the reproduction, and, finally, the period of incubation. In the 1st chapter, the author seeks to prove that the plague was known among the ancients, and quotes, in support of this opinion, the enigmatical words pronounced by the Sybil, a very equivocal phrase, from Herodotus, and some passages taken from Holy Writ. The Scriptures, it is true, speak of diseases, characterized by shiverings, fever, buboes, anthrax; but the two first are observed in almost all affections, and, when accompanied by the two last, though they indicate the presence of a malady of a peculiar nature, still they may belong to some other, with as much probability as to the plague. I see some symptoms of plague, but not the plague itself. The workmen employed in the Paris' slaughter-houses often present these signs, and yet who would assert that they are affected with the plague? Is it not rather a mitigated from of glanders? Hippocrates and Galen did not describe this disease, and yet the latter studied at Alexandria. Volney and M. Delaporte conclude, from the admirable hygienic rules which govern Egypt, that the plague existed formerly, and that these rules were instituted against it. Unfortunately, history does not come to the support of this opinion, and the possibility of a fact is not sufficient to establish its reality. But, admitting such to be the case, what does it prove? Nothing more than that Egypt has always been, what it is even now, a real focus of the plague, to which opinion I give my ready assent. Again, it is equally certain that this disorder may be generated in many places, and on many occasions; this was Dehaen's opinion, and it is likewise mine. Manuscripts, discovered in 1831, prove that the affection was seen here and there, at various periods, and especially at Marseilles, A.D. 503. I, therefore, do not gainsay the possibility of its having made more frequent apparitions, this being but of secondary importance; but it is not less certain, that the first epidemy was that which originated in Lower Egyyt (A.D. 542, or 543), and from thence extended itself to Europe, making numerous victims, and lasting upwards of half a century. This fact is so well authenticated, that no cavilling can overthrow it; for my part, I suppose nothing, invent nothing: I take the facts furnished me by history, and draw therefrom the conclusions which I consider exact, and which, therefore, are *post-conceived*, not *pre-conceived*, as it has been asserted. But, asks M. Delaporte: Is Egypt the only focus of the plague? May not Constantinople be considered as a secondary one? After weighing the opinions *pro* and *con*, he abandons the subject without coming to a decision. I purpose examining this question presently; all I will now add is, that the solution of this problem is not of greater moment than that of the preceding; for, let the origin be what it may, the principal object is to ascertain the precise causes, so as to be able to attenuate or destroy them, should such a thing be possible.

The second chapter contains the enumeration of the causes:—*infection:*—M. D. had opportunities of observing the potency of this cause at Alexandria, Jaffa, Smyrna, Constantinople, Rhodes, and Jerusalem. In these different places, in cities and villages, he remarked, everywhere, narrow, tortuous, and generally unpaved streets; stagnant pools; houses of mud and dirt as habitations, and dead bodies of animals as food, for the poor; and among the higher classes, he saw ground floors, low, moist, and obscure; burial grounds here and there; vegetable and animal matter in a state of putrefaction on the surface of the soil, and even in the interior of the houses. What M. D. says of Alexandria, is applicable to Cairo, Damietta, Rosetta, and the neighbouring small towns and villages, which are, to a certain extent, buried in the midst of pyramids of dead bodies, contained in earthern coffins, cracked by the heat, and dissolved or rather disjointed by moisture. The other causes are: *heat and moisture*, both of which hasten considerably the decomposition of animal matter; *electricity*, whose action though as yet but little known is still constant; all those agents, comprized by hygiene under the denominations of *circumfusa*, *percepta*, *ingesta*: among the last, M. D. mentions how badly the poor are fed, for they live on snails collected on the sea weeds, muscles gathered in the mud, rotten fishes, flesh of sick animals, putrified meat sold in the bazaars, bread made of beans, peas, bad wheat, seeds of the cotton tree, or linseed when deprived of its oil, &c.; and among the *gesta*, fatigue, exhaustion caused by forced marches, over-work, and finally long-continued fasting or vigils. I purposely omit the considerations drawn from the *age*, the *sex*, the *races*, the *constitution*, the *morbid conditions*, &c. because it is impossible to appreciate them exactly; and because they may perhaps be excluded from the number of causes, so little do they augment the power of the others. This established, be certain that if you meet with the chief causes at Constantinople, Smyrna, Larnaca, Jaffa, Jerusalem, you will likewise observe them in every part of Egypt; and if it be true that their presence is necessary to deteriorate the organisation, and produce the dire affection called *plague*, be persuaded that even should they not give rise to the disease at Constantinople, Smyrna, Jaffa, Larnaca, or Jerusalem, they would inevitably cause it in all its force in Egypt, whose soil being so level, pulverulent, and porous, is saturated with animal matter, especially human bodies, impregnated during 100 days by water from the Nile, gently heated by the mild weather in winter, and finally, during several months, exposed to the scorching heat of the sun. Every where else, the heat, though great, is not excessive; the moisture does not penetrate so deeply; the corpses of men and of animals are not so numerous; the surface of the soil,—not so level, is purified by frequent showers, dried, refreshed and scoured, by balmy winds. In Egypt, on the contrary, the water, which penetrates the earth, remains there a considerable length of time, and seems to have been concentrated there during the mild heat of the winter, merely to prepare, to ripen, and to hasten putrefaction: hence, the reason of the dampness of the nights, caused by the moisture, collected in the atmosphere during the intense heat of the day, falling during the night in heavy dews. All these causes which, according to M. Delaporte, concur in giving rise spontaneously to the plague, are to be found accumulated in Egypt, and that on a continuous space of several hundred square leagues, a circumstance met with no where else: so much so, that the marvel would be, not the presence of the plague in Egypt, but its non-existence. Thus, during the French expedition in Egypt, it was seen, says Desgenettes, in upwards of one hundred different places at the same time, though they had no communication with each other, or with distant parts; and, in January, 1830, I witnessed a similar fact, in a village on the Delta. These observations, to which thousands of others may be added, authorise the conclusion: that if Egypt is not the only known focus of the plague, at least it may be considered as the principal one, a fact which did not escape the genius of Montesquieu, for he positively announces it in his *Esprit des Lois.* This disease is, therefore, the inevitable result of what M. Delaporte calls infection; but, in admitting this, we must not lose sight of other subsidiary causes, which are, in Egypt: excessive poverty, uncleanliness, sufferings, far beyond what is to be seen in any other country. However extraordinary it may appear, it is not less certain, that some authors have doubted the possibility of the disease being produced by infection; to refute this assertion, M. Delaporte quotes authentic facts, and among them one related by Dover (a pupil of Sydenham, and inventor of the powder which still bears his name), where the whole of his ship's company were affected with the plague, at Guayaquil, in South America, from having slept in a church where they had opened the tombs. But, can infection, and especially that produced by human bodies, as A. Paré asserted, alone give rise to the plague? —According to those authors, who deny the power of infection, the disease is produced by the waters of the Nile: waters of so agreeable a flavour, that they are employed for domestic use, and so wholesome, that no one, as yet, has ever asserted that they are noxious, notwithstanding the slime they contain. Nay, more: the large squares in Cairo, covered by water during the inundations, and left to dry gradually when the waters return to the bed of the river,—these squares are surrounded by dwellings, in which, seldom, if ever, intermittent fevers, caused by the exhalations from the slime, are to be seen. The water becomes unwholesome, from the filth thrown into it from the neighbouring houses, and it becomes stagnant, from the accumulation of the ruins of houses which it has thrown down. There are, it is true, in certain parts of the Delta, swamps in which the water stagnates, when the Nile retires, and where it becomes corrupted from the dirt thrown into it, and from the carcases of animals allowed to rot in it. The danger, therefore, results, not from the water itself, but from the substances allowed to sojourn in it; for, in the regions through which it flows ere it reaches Egypt, the plague does not exist. Moreover, the fact of that disorder reigning chiefly in the low, damp, filthy parts of the cities, inhabited by the poor and needy, confirms, rather than invalidates, what has just been asserted.

The third chapter relates to the mode in which the disease is propagated: and M. Delaporte is a partisan of contagion, or rather transmission, a word conveying a better and a more general meaning. But how does this take place? Is it, as Fracostor affirmed, and Somoilowitz repeated, by the touch? M. D. partakes of this opinion, with considerable restrictions, however; for he states, that simply touching the patient is not dangerous. But, to be enabled to say that this is, or is not, the case, and to decide a great number of subsidiary questions concerning the mode of its propagation, it is necessary to ascertain two things of which we are as yet entirely ignorant, and of which we shall, perhaps, for ever remain so: viz., the nature of the pestilential virus, and the aptness of our economy to absorb it. They, however, as so variable, the former in its composition, the latter in its degree, that, in all probability, we shall never be able to establish by them a general rule, an invariable law which shall be

the same in every case. Nevertheless, M. D. admits, with Deidier, Fodéré, Larrey, &c., when the disease is serious, and in its expansive stage, that prolonged contact, on a large surface of the hand, moistened by perspiration, and especially if deprived of its epidermis, may communicate the plague from one person to another, the more readily if the air of the room is not sufficiently renovated. The disease may. likewise, be transmitted through the medium of the respiratory or digestive organs. I have seen cases in which the physician caught it, by having inhaled the warm and fœtid breath of a pestiferous patient; and Berthollet says, that the saliva is the vehicle by which the pestilential virus is introduced into the economy. It appears, however, that the principal mode of transmission is in the clothing worn by the patients, the linen impregnated by the emanations proceeding from their bodies. History abounds with facts in support of this opinion; and it was thus, that, in past times, the plague was generated, travelling from place to place, and devastating all Europe. I will mention only the two following facts:—On the 5th of April, 1835, two patients died in the hospital, at Cairo, of the plague, leaving their shirts, drawers, &c., impregnated with perspiration; two condemned criminals were immediately dressed in them, and put, thus clothed, in the beds of the unfortunate victims, while still warm. On the 19th, one caught the plague and died; the other did not fall sick before the 21st: he recovered. This some will think a doubtful experiment. Here, then, is another, perhaps less so. The Abyssinian Christians have always some of their sect at Jerusalem, to take care of the Holy Sepulchre. The plague declared itself in Jerusalem. The Abyssinian monks, far from fearing it, on the contrary, considered it as a means of opening for them the gates of Heaven. Some were attacked and died; the remainder, in the hope of becoming eternally happy, took their clothes, and, having dressed themselves in them, got into the beds in which their comrades had breathed their last. All died in the space of a few days: they were seventeen in number. Here, a reflection may be made: fear, which is placed among the causes of the plague, in this case was absent. Experience teaches us, that the clothing left by pestiferous persons ought to be burnt, or purified by repeated washing, and a long exposure to the air; on the contrary, if they are carefully folded, and packed up in boxes, closets, or trunks, and kept from the air, not only is the virus,—with which they are penetrated,—preserved, but it becomes much more energetic, and is far more dangerous than it was originally; combinations take place which chemistry has not yet studied, and of which it will never know either the force or the duration. But M. D. admits, that the transmission of the plague, or contagion, is not constant and inevitable, and most extraordinary exceptions exist in this respect. Is it not astonishing, that a pregnant woman, not affected with the plague, gives birth to a child with the disease, and *vice versâ*? It is especially with the plague, that these anomalies exist, and whatever hypothesis is adopted, they cannot be explained, and prove only what I said concerning our profound ignorance as to the nature of the miasmata, and our aptness to absorb them. There is a last mode of transmission, which M. Delaporte rejects entirely: that is to say, in goods; for my part, I will not pronounce so positive a negation; for if, as early as 1448, the Venetian republic, which may be considered as then very experienced in mercantile matters, thought it necessary to take certain measures against this dangerous disease, probably it was because they had been taught, by the misfortunes which befel them, how much was to be feared from merchandize coming from the East, and especially from Egypt. At this epoch, all European commerce was concentrated in the Mediterranean; consequently, the chances for the development of the plague were far more frequent in Italy and Spain. The discovery of the East and West Indies opened other channels for commerce. This cause, among many others, has considerably diminished the danger of this mode of communication, and though certainly much less than formerly, still it is enough to create suspicion. At no very remote period, the plague was transmitted to the Bermudas in a bale of cotton; from Patras to Messina, in bits of old rags; from Naples to Rome, in textile substances; and from Marseilles to Randol, in the following curious manner:—the inhabitants of the latter place stole a parcel of silk, which, on being opened, produced the plague, fatal to all who were attacked. I believe that, during the last century, the porters of Marseilles, employed in moving the bales of cotton, were frequently affected with anthrax; and if, as Lancisi affirms, the wool and the hemp, brought from Egypt to Constantinople, have more than once communicated the plague to the workmen employed in handling them, what must we conclude? That, apparently, there are some goods which are not quite harmless:—a conclusion which naturally gives rise to another—that the abolition of lazarettos would be premature, if not injurious. It is a remedy which must be used in proportion to the disease; but, to give up employing the former, before destroying the latter, would be the height of imprudence and inhumanity.

In the last chapter, M. D. treats of the period of incubation; and, here, I will add what M. Cigalla says, in a memoir he presented on the 7th July.—In this paper, M. C. speaks of the appearance of the plague in the Cyclades, 20 different times, from 1832 to 1844. It came each time from Turkey or Greece; 12 cases took place at Syra, which is the most frequented; 3 at Hydra; 2 at Soyathos; 2 at Thera or Santonin; and 1 at Poros. The first plague came from Constantinople, and declared itself in 1832: the last in 1839. This fact controverts what Artin Bey, now prime minister of Mehemet Ali, viceroy of Egypt, told me, viz.: that, during the last eight years, the plague has not been seen at Constantinople, Smyrna, Candia, or even in Greece, whilst, during these eight years, the plague did not leave Egypt. All of these plagues were brought by ships, and yet, on an average, the loss supported by the crews was not very great, since, in the 12 years, only 27 men died, and one alone, the last, put on shore at Poros, propagated the disease to the family where he was; from thence it extended itself to other inhabitants, and, notwithstanding every precaution, 150 persons died in the island. But, if we consider these different plagues separately, they seem to have been sporadic: similar to those, whose origin is enveloped in so much obscurity, and which appear here and there from time to time. Other facts have likewise been recorded by M. Cigalla. In 1819, a Turkish vessel arrived at Santonin, coming from Candia; its cargo consisted of soap, and manufactured objects; no sick person among the crew: an inhabitant of the island, George Segalas, went on board, and bought some goods; on his return home, he fell sick of the plague and died. At the same time, the disease declared itself in the vessel; all communication was intercepted between it and the shore, and the family of the first victim was sequestered, and obliged to undergo a quarantine of ten days. When returning home, the house was cleansed out, and the dust and dirt thrown into a neighbouring yard; two children, during their gambols, stirred up the refuse, became ill, and died; they were followed by Madame Segalas, and seven other persons. The clothes of the victims being burnt, and the house once more well cleansed, the disease was put a stop to. Here, the period of incubation was probably more than ten days.—The plague was in a town of Turkey, called Socia. Dr. Manfredi, physician to the governor, in order to avoid the danger, went, with his daughter, his son, aged fifteen, and his servants, into the country. A dog, belonging to the young lad, and of which he was very fond, after having been missing two days, came home; his master, on caressing the animal, perceived that it was affected with a bubo in the groin, and informed his father, who ordered it to be killed immediately; but, on the intercession of the child, he consented to spare its life, but shut it up in a room. These precautions were unavailable; for the boy was taken with symptoms of the plague: cephalalgia, fever, vomiting, &c., and died on the third day; the dog expired at the same time as his master. The daughter and a servant were shortly after attacked with, and became victims to, the disease. Dr. Manfredi, now childless, in order to save his own life, and that of the other servants, fled from Turkey to the island of Nio, near Santonin. Here, a dog communicated the plague. In another case, this took place by a cat, though the animal, as has been already mentioned in a former instance, was not itself ill.

The two memoirs end by considerations on the length of time that incubation may last. M. Delaporte, from facts observed by him, thinks it is about seven days; whilst M. Cigalla says, it is from seven to fifteen days, but adds, that it may be longer, and that the question is yet undecided. Indeed, he forgets that the plague, which declared itself at Syra, in 1832, appeared sixteen days after the landing of the passengers, and that the ship came from Constantinople; the incubation, here, must at least have been twenty days. Again, without quoting the facts recorded by Evagrais, Massuria, Diemerbroeck, Schnarrer, &c., I will only mention the following. In 1819, a young Swede arrived at Marseilles, coming from Alexandria; while performing quarantine, he had the plague, and left the lazaretto after having recovered; now, at this epoch, steamers did not exist, and the passage was seldom performed under thirty days.—As to the length of the quarantine: the French and English governments have imposed one of twenty-one days, voyage included. At Triest and Leghorn, more rigorous measures are enforced. Now, the above may be considered sufficient to conciliate commercial interests with those far more important, viz.: the non-propagation of the disease in Europe?

Academy of Sciences; Sitting of the 26th August.—Professor Dumas in the chair.—Wm. Chas. Henry, Esq., addressed, in the name of Peter Clare, Esq., one of the executors of the late Dr. Dalton, the following document:—"I hereby certify, that John Dalton, D.C.L., L.L.D., F.R.SS. L. & E., M.R.I.A., Member of the Institute of France, President of the Literary and Philosophical Society of Manchester, died on Saturday morning, the 27th July, 1844, aged 77 years, 10 months, 22 days."

On the Theory of the Fabrication of Sulphuric Acid.—Memoir read by M. E. Peligot.—According to the author, the phenomena which take place during the fabrication of sulphuric acid, are: 1° the sulphurous acid decomposes the nitric acid; the former is converted into sulphuric, the latter into hypo-nitric acid; 2° the latter is changed, on coming into contact with water, into nitric and nitrous acids; 3° the nitrous acid, by the addition of a greater quantity of water, is transformed into nitric acid and binoxyde of azote; 4° the binoxide, mixing with atmospheric air, reproduces hypo-nitric acid, which is changed by water, as just stated, into nitric and nitrous acids. Thus, the sulphurous acid acts incessantly, and exclusively, on the nitric acid constantly reformed during the various phases of the operation. These different reactions may be expressed by the following formulæ:—

$$\begin{aligned} Az\ O^5\ Aq + S\ O^2 &= S\ O^3 + Aq^4 + Az\ O^4 \\ 2Az\ O^4 + Aq &= Az\ O^3 + Az\ O^5\ Aq \\ 3Az\ O^3 + Aq &= 2Az\ O^2 + Az\ O^5\ Aq \\ Az\ O^2 + 2\ O &= Az\ O^4 \text{ \&c.} \end{aligned}$$

Nitric acid of commerce, marking from 27° to 28°, and containing about 34 to 27 per cent. of anhydrous acid, is energetically decomposed by sulphuric acid, reddish vapours of hypo-nitric acid are disengaged, and the sulphurous is converted into sulphuric acid, the temperature augmenting during the whole of the reaction; the liquid assumes the following colours:—dark-green, pale-green, orange-yellow, and, finally, when all the nitric acid is decomposed, it becomes perfectly white. If the quantity of water be greater, the liquid becomes of an indigo-blue, owing to the dissolution of nitrous acid in the diluted nitric acid. Very diluted nitric acid, containing 8·5 per cent., is unchanged by a current of sulphurous acid, at the ordinary temperature; but when heated to 140° F. or 176° F., it is converted into sulphuric acid. When there is only 2 per cent., no action is produced when cold: but, heated to 176° F., sulphuric acid is formed. From these experiments, it may be concluded: that the sulphuric acid, produced when there is an excess of sul-

phurous acid, contains no nitric acid: and when this occurs, in all probability, this acid is under the form of a solution of the crystals, studied by M. Provostaye, and which is decomposed only at the boiling point of mercury.

Researches on Chemical Types.—Memoir read by M. A. Cahours.—The author concludes: 1° that salicylic acid is mono-basic; 2° that, when combined with chlorine or brome, it loses 1, 2, or 3 equivalents of hydrogen, which are replaced by 1, 2, or 3 equivalents of brome or chlorine; 3° that, when heated with the base, it loses $C^4\ O^4$, and is converted into hydrate of phenyle; 4° the chlorated and bromated acids, produced, are changed, in losing $C^4\ O^4$, into chlorated and bromated compounds, proceeding from the hydrate of phenyle, and which M. Laurent has described in a memoir, published in the *Ann. de Chemie et de Physique*; 5° chlorous acid changes salicylic acid into a *chloranile;* 6° chlorine and brome, in the action on the salicylate of potass, give results similar to those produced when they come into contact with salicylate of methylene and salicylic acid: two molecules of hydrogen are disengaged, and replaced by two of chlorine and brome; whence the formulæ:—

$C^{28}\ H^6\ O^6$	$C^{28}\ H^6\ O^6$	$C^{28}\ H^6\ O^6$
K	$C^4\ H^6$	$C^8\ H^{10}$
Br^4	Br^4	Br^4

$C^{28}H^6\ O^6$ indicating salicylic acid; 7° finally, the author states, that he is endeavouring to discover a method, by which indigo may be constantly converted into salicylic acid.

On Two Cases of Imperforate Anus: by L. Baudelocque, D.M.—1st, a child, 2 days old, had not yet evacuated any meconium; several enemata, being administered, were returned as given; there was agitation; incessant cries; abdomen tense; symptoms of cerebral congestion. The finger, introduced into the rectum, indicated the presence of a membrane, situated at about an inch from the anus, which, when pierced, allowed the meconium, and a great quantity of gases to escape. The child soon got well, the opening having been prevented from closing, by the introduction of the little finger from time to time.—2d Case: A child, three days old, presented the symptoms just enumerated, rectum ending in a cul-de-sac, one inch from the anus; an opening, being made, allowed nothing to escape, nor could the finger, when introduced into it, discover the colon descendens, and, as the child began to vomit meconium, enterotomia was performed in the manner recommended by Callisen, as follows: the child being placed on the right side, a longitudinal fold of the skin was raised on the left, and a transversal incision, one inch in length, was made mid-way between the false ribs and the os ilium; the aponeurosis of the obliquus externus, and some of the fibres of the quadratus lumborum, muscles, were next divided, and then the colon, distended with meconium, and of a greenish hue, became visible; the intestine was now seized and opened,—allowing a great quantity of meconium and gas to escape; it was then fixed by several sutures to the skin. The consecutive accidents were: erysipelas, stopped by a blister, and enteritis and peritonitis, which yielded to an application of six leeches; so that the child is now (8th day) as well as can be expected; it has gained flesh; the stools are normal and regular; but the mucous membrane protrudes, as in all cases of artificial anus. The author concludes with the following remarks: 1° Sabatier, Boyer, and subsequent authors, founding their opinion on the supposed mobility of the descending colon, said that the intestine ought to be fixed to the skin by sutures; this opinion is erroneous; the colon is motionless, being firmly fixed, anteriorly by the peritonæum, posteriorly by an abundant cellular tissue; had the suture not been employed in the second case, neither enteritis nor peritonitis would have taken place; 2° the incision of the colon had better be made transversely, than longitudinally, because the lips of the wound will not retract so much after the operation; 3° the inferior portion of the colon ought to be examined, so as to ascertain if a communication cannot be established between that intestine and the rectum. Finally, says Dr. B. in terminating, I purpose, in six months or a year, endeavouring to form every anus in its normal position; and would recommend all accoucheurs to introduce the end of a finger into the rectum at the birth of the child, for the irritation, thus caused, is sufficient to produce an evacuation, if no obstacle exists.

On a new ganglion.—Professor Barkow, of Breslau, addressed a note containing the description of a ganglion discovered by him, and which he calls the *arythenoidian ganglion.* Situated at the upper edge of the cricoid cartilage, and of a round or oblong form, it gives rise to numerous minute filaments, distributed in all directions, and penetrating as far as the mucous membrane of the larynx.

Academy of Medicine—Sitting of the 27th Aug.—Dr. Ferrus in the Chair. The President informed the Academy of the loss they had experienced, in the death of Dr. Bouillon-Lagrange, M.A.M., and that the Assembly was represented at the funeral by Dr. Dubois d'Amiens, and several members, who had assembled spontaneously, to follow to their last abode the remains of our colleague.—Dr. Dubois d'Amiens read the speech he had delivered on that occasion, and in which he stated that Dr. Bouillon-Lagrange was physician to Josephine.—Dr. Husson remarked that Dr. Floreau was the medical attendant of that empress, and who, having partaken of her favours during her days of prosperity, did not forsake her when adversity succeeded.—Dr. Ferrus confirmed this fact.—Dr. Dubois d'Amiens stated, that he had been informed of this circumstance by the family of Dr. B., and that a letter from Prince Eugene, thanking him for his attention to his mother, is preserved as a precious relic.

The President mentioned that the *Conseil d'Administration*, agreeably to the decision taken in the former sitting, on the proposition of Professor Adelon, proposes the following persons as members of the committee: Messrs. Pariset, Adelon, Dupuy, Londe, Prus, Dubois (d'Amiens), Melier, and Poiseuille. The President requested to be joined to those gentlemen, and, finally, on the proposition of several members, Messrs. Royer-Collard and Begin were added. The Committee is thus composed of eleven members.

Dr. Segalas read the second part of his memoir: on the influence of traumatic lesions of the spine on the genito-urinary organs.—Dr. Martin Solon: I do not agree with Dr. Segalas, that incontinence of urine, which follows a lesion of the spinal marrow, is produced by inflammation of the bladder, or that the latter is the cause of the changes observed in the urine. This phlegmasia is consecutive, and results from the urine being but partially evacuated; the aqueous portion of that which is retained in the bladder is absorbed, whilst the other elements are concentrated, rendering the liquid irritating, and creating inflammation.—Dr. Segalas: I do not deny the possibility of the fact, announced by Dr. Martin Solon; I said that the cystitis was the cause of incontinence, but without stating that none others existed. Retention of urine appears first, and gives rise to distention of the bladder, and this has considerable influence on the subsequent phenomena. As to the absorption of the aqueous portion of the urine, several experiments which I performed, prove that it is not very active, since enormous doses of poison are requisite, when injected into the bladder, to destroy an animal.—Dr. Martin-Solon: The urinous odour, emitted in some diseases, shews that the urine may be absorbed.—Dr. Segalas thinks that this is not common, when cleanliness is properly attended to.—Professor Royer-Collard made several remarks on the memoir: 1° The vivisections, performed by Dr. Segalas, cannot explain the physiological phenomena; nor is it possible to take into account all the circumstances which cause changes in the composition of the urine. An animal, for instance, is operated on: evidently, that causes a considerable nervous disturbance, and pain; in fact, it is not in its normal condition. Again, was the nature of the food, which, as M. Chassat has proved, influences the composition of the urine, carefully noted down? 2° The composition and the secretion of urine are so bound together, that they ought not to be separated. 3° Incontinence of urine is not caused by cystitis, or irritation, produced by the concentration of the urine, but by the excessive and long continued distension of the bladder. As to the urinous smell, it is not owing to the absorption of the urine, but because the secretion of that liquid does not take place in the kidneys. 4° Erections, ejaculations, and sexual desires, are very different, and are not, perhaps, sufficiently studied apart. 5° In the case of Dr. Brachet, in which the accouchement was produced by means of the voltaic pile, the phenomenon was quite mechanical, and is similar to what is observed, when the heart is removed and submitted to the action of the pile. 6° Finally, he regrets that Dr. Segalas did not study, separately, the influence of these lesions on mobility and sensibility.—Dr. Segalas, in reply, said: that he placed the animals as much as possible in similar conditions, and, if a conclusion could not be drawn from experiments performed as he had done them, vivisections were useless;—that the secretion and composition of the urine were very different subjects;—that retention was a primitive, incontinence a consecutive, accident. — Dr. Ollivier d'Angers knew of no case, in which luxations of the cervical vertebræ produced erections: this symptom, in these cases, being quite mechanical. As to the possibility of the accouchement taking place, naturally, in women affected with paraplegia, this cannot be doubted; Chaussier has recorded two cases; it may, therefore, be concluded, that the spinal marrow is without any influence on the contraction of the uterus.—After some further remarks from Drs. Castel, Martin-Solon, and Desportes, the discussion was closed.

GARLAND DE BEAUMONT D.M.P.B.L., & S. &c.,
Honorary Physician to the Spanish Embassy.

SELECTIONS FROM GERMAN JOURNALS.

By SIGISMUND SUTRO, M.D.

Combinations of Oxide of Nitrogen with Acids.—Reinsch has shewn that, analogous to the combination of oxide of nitrogen with hydrated sulphuric acid (as described by H. Rose), similar combinations can also be formed with other acids, particularly arsenic and phosphoric acids, by passing the gas through their solution (of the consistence of syrup). With phosphoric acid, beautiful quadrilateral prisms are formed; with arsenic acid, a butter-like mass: deliquescent, by addition of water, the gas escaping under effervescence. Chromic acid is immediately reduced by oxide of nitrogen. A concentrated solution of tartaric acid absorbs the gas; likewise, crystallized hydrate of acetic acid forms a blue compound with it. If oxide of nitrogen be passed into a bottle, filled with hydrochloric acid gas, colourless crystalline needles are formed, besides an oily, yellowish-green liquid. The crystalline needles are decomposed under effervescence, if brought into contact with water. The oily liquid immediately coloured a solution of vitriol, iron black. Both substances are spontaneously decomposed, after some days, under disengagement of chlorine.—*Wöhler's und Liebig's Annalen der Chem. und Pharmacie.*

Ileus, terminating favourably.—An artisan, 48 years of age, of strong constitution, was suddenly seized with a pain in the abdomen, on the right side of the navel. After the bowels had been obstructed for four days, with undiminished appetite, a physician ordered him gentle opening medicines and clysters, but without effect. He was then obliged to seek confinement to bed, where he constantly moved from one side to the other. When the author saw him, his pulse was small but regular; tongue furred; abdomen inflated, particularly in the epigastric region; pain at the above-mentioned spot; eructation, with the smell of fæces. Venesection, cold fomentations to the abdomen, opening medicines, persisted in for twenty-four hours, procured no relief. On the contrary, vomiting of fæces was joined to the former symptoms. Warm baths had no beneficial effect. After another twenty-

four hours, pains and anxiety were inereased. A fatal issue of the disease was already eonsidered unavoidable, when the author ordered the patient to be placed in a warm bath, then to be taken out, after a eertain time, and laid on his back. His legs were plaeed over the shoulders of a strong man, so that his knee-joints rested upon them; his head and trunk were held by two other assistants, and then the lower extremities were so raised, as to direct the head downwards, and the patient was violently shaken several times, while the author seized the abdomen with both hands, and moved the bowels to and fro. When these manipulations had continued for about twenty-five minutes, the patient felt, on a sudden, as if a bladder had burst on the painful spot, and was immediately relieved from all pain. The administration of opening medicines and warm baths was again resorted to, and the patient completely recovered.—*Dr. Schrobitz, of Graudenz, in Casper's "Wochensehrift."*

On Panereatitis, and on its distinction from Hyperæmia Pancreatis.—The *hyperæmia* arises more often from other eauses, than from inflammation. Frequent smoking eauses hyperæmia, and even inflammation. Thus, individuals who indulge in the frequent enjoyment of spirituous liquors, and smoking, often suffer from dyspepsia, heart-burning, eruetation, eardialgy, eolie, abdominal inflammation, diarrhœa, &e. The symptoms of *pancreatitis* are: a eontinued violent pain in the upper part of the abdomen, and in the eorresponding region of the back: often in the right or left shoulder, frequently eombined with violent colic. Only at the beginning of the disease, pain and swelling of the pancreas can be diseovered; later, the severe colic makes the investigation unecrtain. During the colic, eruetation and vomiting ensue; obstruetion generally aecompanies the aeute panereatitis, and not spumous diarrhœa (as is asserted by others). Fever is inconsiderable; pulse often intermittent; no jaundice, nor rapid emaciation. The issues of this inflammation are, either: exudation of plastie lymph, suppuration, ulceration, hypertrophia, atrophia, gangrene, or disorganisation.—*Case* 1: A strong man, 26 years of age, greatly addicted to drinking and smoking, and being in the habit of spitting much, had already suffered, in his 21st year, with frequent dyspepsia, a burning in the upper abdominal region, eructation, eardialgy, eolic, diarrhœa. But these aeeidents were rare, and only subsequent to exeesses. On the 12th of February, he was again seized with pains in the upper abdominal regions: frequent and violent colic. On the 31st of January, the patient complained of a fixed burning sensation; sometimes lancinating pain in the upper abdominal region, remitting, and then exacerbating again, more and more violently; so that the patient was writhing, filled with anguish, and inelined to vomiting. The contents of the stomach were diseharged by vomiting, without relief; bowels obstructed; fever ineonsiderable. When the author was called in, on the 3rd of February, he found the patient very weak, inclined to fainting, giddiness, features prostrate, pale, bedewed with eold perspiration, eyes dim, tongue moist, eovered with a white fur, violent thirst, eruetation, vomiting. The upper abdominal region was distended, hot, very sensible, and burning; sometimes lancinating pains extending to the duodenum, spleen, and to the umbilical, dorsal, and right humeral regions; they were most violent at the great curvature of the stomach. Obstruction had eontinued for several days; a small quantity of very tough saliva was found in the mouth; extremities cold; pulse 75, and eontraeted. In spite of repeated veneseetions, leeches, baths, elysters, purgatives, &c., the patient became weaker and weaker, and expired eight hours after, the pains having previously completely ceased. The autopsy showed all the parts, connected with the pancreas by eellular tissue, of a dark red, inclining to blue, particularly the upper part of the mesentery over the transverse eolon, the serous membrane of the duodenum, and the great eurvature of the stomach. The cellular tissue, and the external membranes of these organs, were very brittle (easily torn), and distended with blood in some places. A part of the mesentery, the eellular tissue of the spleen, and the splenie end of the panereas, were degenerated in the same way. The panereas itself was firm, of more than double the usual size, of a violet colour without; when cut, a great quantity of dark blood ran out of it. The *acini* were inereased in volume, and dark, their vessels distended with blood; the intermediate eellular tissue overloaded with eoagulated blood. At the top of the pancreas, a granulated yellowish exudation was diseovered between the acini. The stomaeh was moderately distended, and covered, at the great curvature and its fundus, with little, dark-red spots: spleen abounding in blood.—In a *second case*, perfeetly similar to the first, repeated venesections, leeehes, luke-warm baths, cataplasms, clysters, and purgatives, brought about recovery, following after a general perspiration and a critieal urine.—*Dr. Läschner, in Christian Sehmuz's Jahrbücher der Medicin.*

*Creasote against Teleangiektasia.**—The author had frequently to treat the above disease in children, and no remedy has exhibited sueh distinguished effeet as creasote. In the past year, he treated three different cases with this remedy, with the most happy sueeess. He ordered the creasote to be more or less diluted, according to eireumstances, and to be applied two or three times a-day to the affected part. After the use of the remedy for some time, excoriation, ulceration, and gradual decrease of the affection ensued, and, ultimately, smooth, soft eieatrices. —*Dr. Thortsen, ibidem.*

Case of Poisoning by Radix Sambuci.—The author was called to a woman, 54 years of age, but of mueh older appearance, having a yellow eomplexion, and greatly emaciated. She had vomited grecnish-eoloured masses the whole day. The husband said, that he thought his wife would recover from her illness, which had lasted for ten days, if she would purge herself freely. He, therefore, dug up a root of the elder-tree, and shaved it into strips. He then squeezed the shavings, and obtained about an ounce of juice, and gave it to the patient. She subsequently complained of violent colie and vomiting. The author ordered infus. senn. eompos., but it was not used, beeause frequent watery stools soon afterwards ensued, spontaneously. The next day, symptoms of enteritis and paralysis pulmonalis appeared, and speedily eaused the patient's death. Dissection of the body was not permitted.

Was not too much aseribed, in this case, to the effeets of the rad. sambuc.? For, the yellow eomplexion, the emaciated appearance, &c., existed before she had taken the juice of the elder-root. Besides, it is to be regretted that the author did not elieit, or describe, the symptoms of the previous illness mentioned by the husband. For aught we know, she might have suffered, before, of some aeute liver eomplaint, with a highly irritable state of the intestines; and, in sueh case, an otherwise harmless, saline, purgative might have had an equally fatal effect. I well remember a ease, where an eminent surgeon laboured for some days under a bowel complaint, which he thought to remove by taking a strong saline purgative; but, in two days, he was a eorpse. The *post-mortem* examination shewed ulcerations and perforations in the intestinal coats. The awful rapidity of his death (he was of very strong constitution, and about 40 years of age) was explained by his unfortunately too frequent indulgence in the use of spirituous liquors. The well-known affinity of alcohol for water, produced in him that rigidity of muscular fibre, which is so apt to run into an inflammatory state, and unfit the parts for resisting the destructive morbid action. The ulceration had probably existed before he took the saline purgative, which, in consequence, occasioned perforation and death. But, should we be justified in saying, that he was destroyed by the purgative? Certainly not; though, perhaps, he might have been saved by more judicious treatment. In the case above reported, the name and reputation of the author warrant us in believing that he was satisfied, on examination, of the death being eaused by rad. sambue.; but it is a pity that he did not attempt to convey the same eonviction to his readers.—[*Note of Dr. Sutro.*]—*Dr. Schollmeyer in Schmidt's Jahrebüeher der Medicin.*

* *Teleangiektasia* (from *telos*, the end, *aggos*, the vessel, and *echteino*, to extend) means the extension of the ends of the absorbent vessels, by obstruction in their circulation.

Cure of Incipient Pulmonary Consumption.—The observations of Simon, Andral, &e., show that in the early stage of tubercular eonsumption, the blood corpuseles gradually diminish in number; this accounts for the early disturbed state of the digestion. Digestion may either be abnormal, as regards its influenee on the blood and its secretions, or as regards the state of the proper organs. In the former ease, the diet must be so regulated as to ameliorate the formation of the blood; in the latter, remedies must be applied to eure the diseased organs. Milk, and food prepared from milk, are the fittest forms of nourishment. Eggs are more difficult of digestion, on aeeount of the albumen they eontain. Asses' milk is preferable to common milk, on aecount of its abounding in sugar and extractive substances, and from the small quantity of easeïne contained in it (which would be most apt to disturb digestion). Should this small quantity of easeïne interfere with digestion, the whey of the milk is to be used, and amylaceous paps, prepared with milk and water, are to be substituted for the easeïne. If the digestion is too sluggish to assimilate the milk, muriate, or sulphate, of soda is to be mixed with it (Seltzer or Roisdorf water may be used for that purpose). The *Kesselbrunnen* of Ems might also be used, if its excess of earbonate of soda be not too irritating to the lungs. Besides milk and amylaceous substances, those vegetables may be taken which eontain little albumen or starch, but much sugar and oleaginous parts. Animal food, abounding in albumen, easily disturbs digestion; very fibrous food is too exciting; that which is fattish, is better borne; gelatine is injurious. These views explain, why milk, pap, animal fat, linseed oil, yolk of eggs, honey, &c., are reeommended as domestic remedies against consumption, and, indeed, are sometimes used with great advantage. Frictions with oil, or lard, with baths, &e. are also useful, unless they check the moderate perspiration, whieh is often of some benefit in the first stage; eod-liver-oil requires a good digestion, but is ocasionally advantageous on aceount of the free acid which it eontains. If we consider the quantity of watery, saline, fatty and glutinous substances, which are excreted through the healthy skin, we shall find it quite natural to suppose that the deranged activity of the eutaneous surface must have a great influence on the formation of tubercles. Flannel ought, therefore, to be worn all over the body (to prevent catching cold), and to be changed every two or three days. Excretion of the skin must be promoted, but not by diaphoretics, which would irritate the lungs. Stokes' liniment, consisting of oil of turpentine and acetie acid, operates both on the skin and on the mueous membrane of the bronchi; daphne mezereum, and issues, are likewise recommended. Regular intermittents eheck the formation of tubercles, whilst their too early suppression promotes tubercular deposition. If tubercles are already formed in the lungs, the eirculation must be prevented from being either too rapid or too slow. In both cases, the deposition of tubercular matter from the blood would be favoured: in the former by a too frequent, and in the latter by a too prolonged, contact between the blood and the lungs. Not only bronchitis, pleuritis, and pneumonia, but some other diseases of the ehest, promote and oecasion tubercles. Great irritability of the heart and lungs sometimes produces tubercular deposition, and ought to be treated with digitalis, prussic aeid, &e., or with the vapours generated from a mixture of belladonna and marsh-mallow leaves, laid on hot iron plates. Cold does not produce tubercular disease, but it favours inflammation of the tubercles when formed. Jeffrey's respirator is very useful in seeuring an uniform warmth of temperature. Great exertion, running, jumping, &c., cause dangerous inflammation of the tubercles. Emetics (sulphate of zinc, and ipecacuanha, aa twelve grains, aecording to Hughes) are very useful in the beginning of the disease, and ought to be re-

peated frequently. If tubercular consumption has been caused by trouble, want, self-indulgence, &c., country air, animal diet, riding, and so forth, are to be recommended. Also, the cortex chinæ, with sulph. aurat. If copious perspirations are combined with great weakness, and but little cough be present, Graves' remedy is very useful.

℞ Infus. cascar. ℥vii.
Quinin. sulph. gr. ss.
Acid. sulph. dilut. gutt. xv.
Tinct. hyoscyam. ʒss.

Two table spoonfuls every three hours.

Frequent exercise, nourishing diet, a little old wine, but no tea. The remedies hitherto used, to remove tubercular disease, do not seem satisfactory. Iodine is more fit for serophulous than tubercular consumption; sal-ammoniac increases the sputa without permanent relief; potash excites too frequent coughing. Hæmoptysis is sometimes a favourable effort of nature to discharge the superfluous blood, and ought not to be stopped too suddenly. In fact, the treatment must always be in conformity with the peculiar constitution, and the cause of the complaint.—*Nasse in Schmid's Jahrbach der Gesammten Medicin.*

On the Efficacy of the Mineral Springs of Kreuznach.—Bush, von d'Outrepont, and Dr. Prieger, direct the attention of practitioners to the great efficacy of some springs at Kreuznach, containing iodine and bromine, for diseases of the uterus and ovaries. Engorgements of the uterus are always removed or alleviated by the above mineral water, unless they are complicated with, or dependant on, a bad habit of body. In menorrhagic affections, the water generally displays very good effects. Enlargement of the ovaries, previous to the effusion of water, is removed, or at least ameliorated by it. Simple fluor albus, with relaxation of the mucous membrane of the vagina, is always cured or alleviated by Kreuznach water. Erethismus of the uterus, combined with painful menstruation, finds a certain cure at Kreuznach.—*Grenser in Schmid's Jahrbuch-der Medicin.*

THE PHYSIOLOGY OF MATERIA MEDICA,

AS ESTABLISHED BY THE LATEST RESEARCHES IN ORGANIC CHEMISTRY, PHYSIOLOGY, PATHOLOGY, &c.

By the celebrated Professor T.F. SOBERNHEIM.

(Continued from page 427.)

From thirty experiments, which Werenscheid made under the eyes of John Müller, with narcotic substances, it was shewn that the symptoms of poisoning appeared about the same time, whether the vagus had been previously cut through on both sides of the stomach, or not. Besides, it is evident from the experiments of Segalas, Emmert, Rapp, Magendie, Delille, Brodie, and Wedemeyer, that the general effect of poisons is manifested, whether the nerve of the part receiving the substance has been destroyed, or the nerve of the central system with which the foregoing is immediately connected, provided the circulation (even though artificial) be continued. When Segalas, after cutting through the pneumo-gastric nerve, injected alcohol, or the vinous extract of nux vomica, into the stomach or the bronchi, the symptoms of intoxication on the one hand, and tetanic phenomena on the other, appeared almost as rapidly as though the above substances had been injected into the blood itself. Wedemeyer divided the spinal marrow of a dog, between the last dorsal and the first lumbar nerves, so that the posterior extremities were perfectly paralysed, and insensible to external lesions. Nervous conduction was here impossible, and still hydrocyanic acid, applied to a wound of the hinder extremities, occasioned symptoms of poisoning in the course of one minute, and the death of the animal in ten minutes. That blood alone is the conducting medium of the narcotic influence, is proved by the following facts: When Barry and Bouland applied cupping-glasses to wounds moistened by hydrocyanic acid, no symptoms of poisoning ensued, so long as the glasses were kept on, and the poison was consequently prevented being absorbed; but, as soon as the cupping-glasses were removed, symptoms of poisoning ensued. Now, what could here have hindered the nerves from rapidly conducting the poison to the central organs of the nervous system? When Emmert tied a ligature round the abdominal aorta, and then applied hydrocyanic acid to a wound of the foot, no poisoning appeared, even during seventy-two hours; whilst, after the removal of the ligature, the animal quickly shewed symptoms of poisoning. Fodéré applied poison to a limb, the nerve being bound by a ligature at both ends, and carefully separated from the surrounding parts, and poisoning appeared, notwithstanding. Both ends of the nerve having been tied, the symptoms could only have been occasioned by the absorption of the poison through the blood, and not through the nerves, for nerves, when tied, do not conduct any impression. Stevens saw, in one case, sixty leeches destroyed, by having been applied to an individual poisoned through hydrocyanic acid. Nay, even the secretions and excretions prove the fact of substances having arrived in the blood. Thus, Barbier observed distinct narcotism, lasting for several hours, in a child which sucked at the breast of a nurse who had, shortly before, taken a strong dose of tincture of opium. Delille saw a child completely cured of syphilis, by taking the milk of a goat which had been rubbed with one drachm of grey mercurial ointment, daily, till salivation appeared. Runge even observed dilatation of the pupil, produced by dropping the urine of rabbits fed on belladonna, stramonium, and hyoscyamus, into the eyes of other animals.

(To be continued.)

NOTICES TO CORRESPONDENTS.

Argus *sends us a very long account of his impressions during the two last meetings called by Mr. Wakley's set. His principal object is to shew that no greater mischief to medical reformers, in their efforts to get a good Bill through the House, can exist than the intermeddlings of a person holding such a position in the Profession, and before the public, as Mr. Wakley. He illustrates his position by reference to the few persons attending, at a moment like this, the two meetings, and by their "low claims to standing in the Profession, not one of them, except poor old Mr. Carpue, having the least claim to anything like note in Medical Science. Even the* Times, *which has such an interest in giving importance to such meetings, could only announce as influential Dr. Lambe, of nobody knows where, a Dr. Thompson, of the Caledonian Truss Asylum, and a Dr. Lynch, of strange notoriety, who got his M.D. nobody on earth knows where, and who got into the Apothecaries' Company as Jordan Roche Lynch, of York, though he is known to be an Irishman, and lived for years in different spots of London, before, and up to, the very moment of getting his Hall examination! Even Mr. Wakley is so conscious of this fact, that he publicly owned that people would not stir because he was putting himself forward, and as publicly avowed his surprise that a respectable gentleman (for whom, as far as I know, nothing better can be said than that he is unexceptionable) could be induced to take the chair! In truth, Wakley is a Marplot: he is, to the Profession, exactly as Feargus O'Connor was to the Liberals, or the Marquess of Londonderry, at Durham, to the Conservatives. People who have a proper regard for moral cleanliness, or an honourable odour, cannot work in the same neighbourhood with him. Besides, who is so purblind, after the experience we have had of him, as not to see that—in the words of a clever hand-bill that was circulated through the meeting—he is trying to work bread out of the Profession through the medium of his poor* Lancet, *trying to trick us into giving him an income, as his rival patriot, Feargus O'Connor did the Chartists, with his* Northern Star. *The honourable and pure soul sickens at such small higglings, such miserable turpitude, such palpable plottings to make Wakleyan merchandize of a scientific community. If Wakley have one grain of modesty—if Nature has not invested him with an instinctive bull-dog impudence, to) which infamy is as fame, and fame as infamy: if he have the remotest wish to serve the Profession: to contribute to that unity of which he talks;—it is as clear as that two and two make four, that he will now do his nature the favour of letting it, for the rest of life, blush unseen; and feel that the post of honour, not to say of comfort, to himself, and the post of service to his brethren—I beg their pardon, to the medical profession—is, for him at least, a private station. But there are some natures to whom public opinion, in its most scathing form, is as but an "idle wind;" and who, like Belaney, outfacing, after legal acquittal, his wife's friends and acquaintances, can outdare sin and shame in the broadest highway of life, and mid the most brilliant glare of noontide opinion. I tell Wakley that he has wholly and utterly mistaken his mission: that,* with the best of characters, *he has neither the education, the breeding, nor the accomplishments which fit him to direct the members of a learned profession: and that,* as it is, *I have my doubts whether the Chartists, in their maddest day of folly, would not have looked on his leadership as a disgrace. He is the bane and pest of the Profession: he cannot hide the fact—wounding as it is—from himself. Let him, then, do us the favour, and himself the comfort, of retiring. It is high time!*

"Vivere si recte nescis, decede peritis.
Ludisti satis, edisti satis atque bibisti:
Tempus abire tibi est!"

J. S.—*Circumstances have interposed which will prevent the continuation of Knox's Physiological contributions to this Journal, for a very short time. We shall resume them as speedily as possible.*

Mr. Armstrong's *case of poisoning by coloured sugar, will appear next week. The sugar, on analysis, exhibits a very notable quantity of acetate of copper.*

Mr. M'Donogh's *letter on Medical Reform has not been overlooked. We shall shortly publish it.*

Several communications on the present Bill are before us. For the most part, they enforce the opinions we have endeavoured to lay before the public: and as we are anxious to give in our volumes *as little space as possible to matter of merely transient interest, we must decline the insertion of our friends' favours in this instance.*

We have received the copy of a petition from Leamington. It is most respectably supported, and it is sufficient to say that it takes precisely the view on the New Bill, which we have been advocating.

A Country Practitioner *is referred to the* Medical Students' Guide, *which contains accurate and complete accounts of all matters relating to medical education, both in this country, and on the Continent. It is of essential service to persons about to educate their sons for the Profession.*

The letter of Junius *is clever, though rather wordy. If he place his real name to it we shall give it insertion.*

Guyensis *will appear next week. The letter is written is a very candid and pleasing spirit.*

Mr. Deshon's *case shall be noticed next week. We shall be glad to receive all the evidence, in order that Guardians may be taught that their medical officers' rights and happiness are not to be trifled with, in perfect impunity.*

"A Wellwisher and Subscriber" *will see that we have not withdrawn our attention from the subject.*

Mr. Smith, of Sheerness, *does not receive his papers from our office.*

Our correspondent, from Bath, has mistaken, we fear, the result of exposure to cold for an independant movement. There may, also, be an idiosyncracy in the case. The observations, however, might be extended with advantage.

A Student.—*We are not yet aware whether the Aldersgate Private School will continue, or not, in operation this Session.*

A General Practitioner.—*There can be no doubt that the Bill will suffer considerable modification before passing. It will be much our own fault if we do not make it a perfect Bill—or nearly so.*

We have received the Brighton Gazette *from our obliging correspondent. The notice of our opinions is indeed flattering,*

M.D.—*The Isle of Man Medical Bill shall not be overlooked.*

We hope to publish Mr. Dermott's *communication next week.*

No. 2, of Dr. Costello's papers on Lithotrity, *&c., will appear in our next Number.*

P. S.—*Our attention has been directed to the Leicester case of mesmerism. Will any of the gentlemen present favour us with a more detailed account—supposing the narrative we elsewhere give, from the* Leicester Mercury, *to be incorrect?*

The letters of a "Fellow," W. X. Y., *are too personal. The matter, besides, of both, is private, and beyond the province of a public journal.*

ERRATA.—In Mr. Braid's paper, in last No., at page 450, 2nd col., 14th line, for "pretension," read "*prehension*,"—5th line, of 3rd paragraph, below, for "my," read "*this*,"—3rd line, of next col., for "emotion," read "*motion*,"—and 23rd line of same col., after the word "the," add "*same*,"—and, at the end of the paragraph, add inverted commas. In 1st col., of 451st page, in 30th line, after the word, "direction," add, "*of motion of the spring*,"—and in the 8th line of next paragraph, before the word "we," add, "*by which.*"

UNIVERSITY COLLEGE, London.—Faculty of Medicine.—Session 1844-45.—The CLASSES will COMMENCE on Tuesday the 1st of October, when Prof. COOPER will deliver an INTRODUCTORY LECTURE on the Study of Surgery, at 2 o'clock precisely.

Classes in the order in which Lectures are delivered during the day.

Medicine, Principles and Practice of—Prof. Williams, M.D.
Anatomy and Physiology—Professor Sharpey, M.D.
Chymistry—Professor Graham.
Anatomy—Professor Quain.
Comparative Anatomy—Professor Grant, M.D.
Materia Medica and Therapeutics—Prof. Thomson, M.D.
Midwifery—Professor Murphy, M.D.
Dental Surgery—Lecturer, Mr. Durance George.
Surgery—Professor Cooper and Mr. Liston, Professor of Clinical Surgery.
Practical Anatomy—The pupils will be directed in their studies during several hours daily by Mr. Ellis and Mr. Potter, under the superintendence of Mr. Quain and Dr. Sharpey.

SUMMER TERM.

The following subjects will be taught during the summer term,—

Botany—Dr. Lindley.
Midwifery—Mr. Murphy.
Pathological Anatomy—Dr. Walshe.
Comparative Anatomy and Zoology (Elementary Course) Dr. Grant.
Forensic Medicine—Dr. Thomson.
Practical Chymistry—Mr. Graham.
Hospital Practice daily throughout the year,—
Physicians—Dr. Williams, Dr. Thomson, Dr. Taylor, Dr. Walshe.
Consulting Surgeon—Mr. Cooper.
Surgeons—Mr. Liston, Mr. Quain.
Assistant Surgeon—Mr. Morton.
Dental Surgeon—Mr. Durance George.
Medical Clinical Lectures. Dr. Williams and Dr. Thomson, and also by Dr. Taylor, Professor of Clinical Medicine, whose special duty it is to train the pupils in the practical study of disease at the bedside during the visits, and also by a series of lessons and examinations on the physical phenomena and diagnosis of disease, to classes consisting of a limited number, and meeting at separate hours.
Surgical Clinical Lectures—Mr. Liston, Mr. Quain.
Prospectuses may be obtained at the office of the College.
Residence of Students—Several of the Professors, and some of the Masters of the Junior School, receive Students to reside with them; and in the office of the College there is kept a Register of parties unconnected with the College, who receive boarders into their families; among these are several medical gentlemen. The register will afford information as to terms and other particulars.
The Report of the Distribution of Prizes in the Faculty of Medicine for the past Session, with the Examination Papers, is ready. Former Students of the College may have it forwarded to them on sending their address.

THOMAS GRAHAM, Dean of the Faculty.
CHAS. C. ATKINSON, Secretary to the Council.

August, 1844.

The Lectures to the Classes of the Faculty of Arts commence on the 15th of October.

The Junior School opens on the 24th of September.

THE MEDICAL TIMES.

SATURDAY. SEPT. 7, 1844.

O! si sic omnia!

ON Aug. 15, the daily *Times* favoured us with an elaborate article professedly to prove two things—first, that Sir James Graham knows nothing of the facts of medical grievances; and, secondly, that his legislation about quackery annihilates our existence as a profession.

The first charge is thus proved. Sir James Graham said, first, that the Scottish Colleges *sell* degrees in medicine, and, secondly, that our Medical Colleges are in confusion from underselling each other. Now, says the *Times*, as the Scottish Colleges have ceased selling diplomas a dozen years, and as certain legal institutions undersell each other—we have two distinct "instances" to shew "how astonishingly ignorant Sir James Graham is of the existing condition of the medical profession!" Here are the *Times* words:—"1. 'That the Scotch Colleges sell degrees in medicine. '2. That our medical colleges are in a state of 'confusion, underselling one another. It may be 'news to him, but it will scarcely be so to a single 'druggist's apprentice in the country, that the last 'of the Scotch Colleges which retained the lucra-'tive practice of selling its degrees after the others 'had abandoned it, followed their example some 'dozen years or more ago; and as for the confusion 'and underselling among our own medical col-'leges, why, Trinity Hall 'undersells' Trinity 'College, the Middle Temple 'undersells' Gray's-'inn, Westminster 'undersells' Eton, and they are 'all in the same consequent 'confusion' as the 'Bristol School and Guy's, the Birmingham School 'and Bartholomew's." It is consolatory to human weakness to reflect that such sentences as these are thought passable reasoning by the editors—if not by the readers—of a leading British journal, as it is afflicting to the lover of his profession, to find that some doctors can conceive such writing, so elegant and logical, to be doing a service to medical reform. The writer *starts* with a convenient falsehood, so that a stout cause pre-supposes anything but a clever mind, for men of talent can secure a good cause success without aiding themselves by dishonesty. What Sir James said was, that a Scotch College (not *sells*, but) *sold* medical degrees.—(See report of speech in *Medical Times*, No. 255.) And if even he had not expressed such a difference of tense, was it astonishingly ignorant of him to argue the propriety of state interference, in order that the *serious* evils that had occurred in this way should not occur again? The power the Scotch Colleges abused, whether this year, or twelve years since, might be clearly abused again under the same law, and with similar temptations, and if, therefore, there be any "astonishing" error of *fact*, or any "astonishing" error of reasoning, both lie, not with Sir James, but with the *Times*' critic, who appears not to have even "that vague general notion of the state of the profession," which he so kindly allows to his criticised minister.

And then comes an attempt to reason away the mischief which is so properly attributed to the underselling tendency of the nineteen examining bodies. The Middle Temple, which, he says, does, we are told does *not*, undersell Gray's Inn. But if it did, barristerships there, and degrees in Trinity Hall and Trinity College, and payments in Eton and Westminster, have no possible relation to the underselling of licensing medical colleges. The first refer to matters of honour, and the honour is more or less as the difficulty is greater of securing it—the second are matters of life and health to the public. Now, if quacks are such perils to life as the *Times* and ourselves agree in thinking, the Medical College underselling another, virtually, and to the extent of the difference, lets in quacks on the public to the people's injury, and the profession's disgrace. Its underselling, therefore, is a very different thing to the underselling of a legal institution. Again, on medical matters, the public are bad appraisers of worth and competency, and they are as apt to form their notions of the value or respectability of our profession, from the blunders of the half-tested member, as from the merits of the most accomplished. Thus then, by underselling, are we *peculiarly* injured—confidence in us destroyed—our true status lowered—our worth unappreciated. The writer's introduction of the Town and Country Medical Schools, just shews that his favourite topic of "confusion" is naturally suggested from within. Medical reformers allow schools to undersell as much as they please; what they seek is, that licensing and examining bodies shall not undersell each other. *Education* is the same whether got cheaply or dearly; *diplomas* as got with a greater or less expenditure of study and labour, differ very materially, both for the public and the profession. On these grounds, therefore, we take the liberty of not deferring to the authority of the *Times*, when it begs to assure us that there is no harm in a competition between licensing bodies which shall let in on us men on the easiest terms.

The second position (thus announced, "IT IS NOW VIRTUALLY PROPOSED TO DESTROY THE MEDICAL PROFESSION!") is supported by the following serious reasons. First: The tendency of our law has been to make us a Profession. Exquisite logic this truly. Secondly: By allowing quacks to practice, quacks will be as much Professors of Medicine as a tap-room fiddler is a Professor of Music, and consequently Medicine will be no more a Profession than Music. Thirdly: An *esprit de corps* is very useful to us, and our being opposed by quacks will destroy it. Fourthly: If quacks practice, diplomas fall in value. Fifthly: The register being unprotected by penalties, it is impossible to keep us a profession, for we shall be but a "voluntary association." Sixthly: The register is useless, for no patient will look through it to find if his medical attendant be competent, or not. And all these reasons prove that the new Bill will destroy us as a profession, supposing that the "test of the profession be that no one can enter it simply of his own accord, but that every one must be admitted to it by competent authority!" Surely such illogical reasonings, such irrelevant assertions—in deference to our contemporary, we will not call them nonsense—was never before laid before the public in the columns of a respectably-conducted journal, and in the fear that our analysis of the arguments will be felt unfair, rather than such absurdity be thought possible, we reproduce this interesting piece of ratiocination.

"There are professors of music who have taken their degrees in the science, but their existence cannot erect music into a profession, so long as every nimble-fingered pianist, who gets his guinea a night for "supplying music to quadrille parties," is permitted by the law to hold himself out and act as a *professor* of music; and, in like manner, if Sir James Graham's bill should pass—a consummation which he will speedily find he need not anticipate—the mere registration of a portion of the medical practitioners, however large it might be, would not, while quacks were placed nearly on the same legal footing with physicians, save the body from its exclusion from the list of the learned professions. It may be suspected by some that this is a point exclusively affecting the medical men; but such is not the case. The *esprit de corps* of a profession, which can only efficiently exist in an actual profession, is of vast importance to the country at large. It is, as it were, the conscience of a corporate body, the moral sense of a corporation aggregate. The feeling of professional honour is that which tends more than any positive law which could be enacted to maintain and continually

raise the standard of professional practice. The disgrace of a single member is felt by the whole body; and every individual of that body partakes, in virtue of his membership, to a greater or less, but inevitably to some, extent, of the sensitiveness of that body; and to that extent is (often unconciously) under a restraint which he would not feel were he dissociated from its fellowship. So long as medicine is really a profession, the highest members in it will feel a sense of shame at the exposure of the misdeeds of the lowest, and there will be a reflex sympathy acting on the very lowest themselves. But destroy the profession, admit every chymist and druggist every farrier, every cowleech, every pill-vender,—and why not again every barber?—to hold himself out and *legally* practise as a "doctor," and the *esprit de corps* will speedily be of the same amount as that which ties together Dr. CROTCH with Professor SNOOKS, who fiddles at a free-and-easy in Wild-street, Drury-lane, and is of that amount which would be characterized in a Parliamentary return by the monosyllable *nil*. However, there is to be a register, and surely, some may say, the registered medical men would stick together as a profession, and the register would afford a test between them and the quacks? The registered practitioners might and doubtless would, endeavour to hold together as a profession; but as they would no longer be *strictly* a profession, and as even the being registered would gradually be felt to be (except for particular purposes) a needless expense as well as involving very considerable trouble, which might be avoided, *there would inevitably be a regular diminution of the number of the registered*, and as regular an increase of the number of the unregistered. As soon as a man's mere *ability* to practise (and not his *right* to practise founded on his ability having been *previously* ascertained) authorizes him to practise, so soon the value of every diploma and register is lessened in the estimation of patients, and consequently of practitioners. The best of our practitioners could no more make their body a profession UNLESS THE REGISTER WERE PROTECTED BY PENALTIES, than Lord Brougham and his friends could make their building at the end of Gower-street, with its "professors" and beadles, a university; they would be but a voluntary association, with no single legal privilege of any very particular value consequent on, or belonging to it; and as for the register, we should like to know what patient ever would, even if it lay in his power, take the trouble to hunt through a list of 30,000 men, in order to ascertain whether the name of "Doctor John Smith," was to be found in it, and to identify the individual of that name on the register with the plausible gentleman, whose brass plate had just been screwed on the bright green door in the next street?

Here we have the old vice of making argument easy by the aid of lying; desirable propositions proved by invented data. "There will inevitably be a regular diminution of the number of the registered!" How pleasing thus to make prophecy the sure basis of argument! The Profession being so very valuable and respectable as he proves it, the men who have paid and studied so much to become its members, will all at once abandon it, just to suit the convenience of *The Times!* The easy test of registration—the guarantee of personal respectability and professional competency—will not be submitted to, though it will alone absolve the medical man from some irksome Municipal and State charges, and entitle him to recover in a Court of Law!

Then "*the register is not protected by penalties*," though in the Bill, staring the writer in the face, is a clause enacting fine and imprisonment to any man pretending falsely to be on the register! Now is this conduct honest? Is it right or decent in a public journalist to falsify such obvious facts, for no other reason than that such falsifications are very convenient to a lame argument?

Adopting *in toto* the *Times'* definition of a Profession (viz., that its "test is that no one can enter it simply of his own accord, but that every one must be admitted to it by a competent authority"), it would be easy to prove that the present Bill, with all its grave and fundamental deficiencies, is much more likely to make and keep us a Profession than the continuance of our present medical mis-government. At present, many are admitted to our ranks by "incompetent authority." Without speaking for a moment of the forged or genuine diplomas from Germany (both got by mere purchase), there are still in the three divisions of this country, licensing bodies that now admit gentleman to practice with a very low degree of competency—and may to-morrow, if they want funds, admit them without any competency at all. Such new members, we contend, are not included among us by an authority, morally as well as legally, "competent." Under the new Bill we have, at least, an effectual remedy for this mischievous anomaly. The Central Governing Board having a complete control over all the examining bodies, can keep up an equal and elevated test of professional competency in each: and the diploma so obtained, acquiring the fresh sanction of the fiat of so elevated a tribunal, will give the new member a title to brotherhood of far higher authority than the present system *invariably* guarantees. It is easy to see that if the quack's assumption of Doctorhood can destroy our existence as a Profession, it would have done so long since, and that if we have outlived the danger up to the present day, our chance of surviving it will not be lessened, when the assumption, instead of being allowed, will be made penal. But it would be useless to expand further on the absurdities, plausibly put, we admit, which the *Times'* scribe has so freely indulged in. It would, indeed, be asking far too much from him to have insisted on his doing his own convictions justice, on his giving this Bill, both for good and evil, fair play. His business was not to write rationally or fairly, or well, but to write down the bill; and through it, write down a personally offensive minister. Pique is proverbially blinding, or the management of a public journal, which owes it power to the favour of public opinion, would have learnt, by this time, that a hatred very ardent, often defeats its own indulgence. Sir James Graham may be written down if he lend a helping hand: so may, also, the character even of the *Times*. We write ourselves down much better than other people.

For our own part, we are actuated but by one motive—which will influence us for activity if it even cost us, from the unhappy position of many of our brethren, a momentary unpopularity. We seek a settlement of Medical Reform in the shortest possible time, and best possible manner—not because such a settlement will make Medical Journals more read, we fear rather the contrary—but because it is absolutely necessary for the interest of science, and for the stable well-being of our brethren. When the *Times* lends us its help to proclaim the mischiefs of quackery, or to ask for a more popular construction of ruling Medical Bodies, we feel, without reference to any motive, that we are the recipients of a favour, and are grateful: but when it desires us to give the whole Bill an indiscriminate opposition, we respectfully decline the invitation, with the polite hint, that though such a course may serve its turn, it will fail to serve ours. We cannot afford, just now, to lose any good, and whatever the interested or sordid may say or do to lead us into interminable turmoils and agitations, we trust that we shall remember that we have interests to serve as well as our tempters, and that *our* best course, in reference to the Government measure is to *secure* whatever it may have that is useful, *change* whatever it may have that is illiberal; and *supply* whatever it may show as deficient.

POOR LAW MEDICAL RELIEF.

BEFORE us lie the two first Reports from the Parliamentary Committee on Medical Poor-Law Relief, and sorry are we to add, that they are not a little unworthy of the celebrity of the body that gave them birth.

In the first Report we have a long enquiry in reference to some charges made by a pauper, named King, against some of the acting officers and servants of the Union. The only point interesting to us out of a series of trumpery allegations made by this person, of a very disreputable character, is a charge made against the medical officer, Mr. Wilkin, who was asserted to have given negligent attention to an old patient, named Garrod, that died of complicated disease, at the age of eighty-four. The evidence is wearisomely frivolous, and completely exonerates Mr. Wilkin, and his assistant, Dr. Smith.

The second Report is more interesting, but is similarly confined to the details of one case of Union neglect. A pauper, named Henry Osman, was admitted to the Kensington Union, on the 4th of July, 1843, labouring under phthisis. It was found that he belonged to the Chelsea Union, and, after a short correspondence between the two Union authorities, it was arranged that he should be thither transferred; the day not being named for the removal, or, if named, not being attended to. The Kensington medical officer, Mr. Guazzaroni, appears to have seen the patient some hours before his removal; and though he gave no written certificate, as is usual, avows to have declared the man in a fit state for transportation. Accordingly, at 10 o'clock, on a hot day in July, the man was moved into an *open* spring-cart, conveyed to the Chelsea Union-House, and, after staying outside, according to some witnesses, ten minutes, according to others, an hour, was admitted, and carried to bed, clearly in a dying condition. He died early on the morning after: and the Chelsea people, attributing the death to the removal, ascribe their own slowness in admitting the invalid, to the extraordinary circumstance of their receiving no notice. Four days after, the corpse was buried: but the Chelsea Board of Guardians seeing, in their medical report, a short statement of the circumstances, sent a notice to the West Middlesex coroner, requiring an inquest. The coroner foreseeing that, from the collision of Unions, and the interest generally excited by the event, that the enquiry would be a severe tax on his time—or feeling that no blame attached to the Kensington Union for the peculiarities of the removal, refused the investigation. The chairman of the Board of Guardians now asked an inquiry from the Commissioners, and these, having received explanations from the authorities of Kensington, seemed to feel there had been some irregularity, but declined a public official investigation.

The Committee of the House, after enquiring very fully into the circumstances, resolved, that Mr. Guazzaroni was to blame for not giving a written certificate, and that they were not prepared to describe as unwise the determination of the Commissioners: but in this latter opinion Lord John Manners and Mr. Owen Stanley did not concur.

THE COLLEGE CHARTER.

In consequence of numerous advertisements widely made, and certain large placards, very plentifully carried on men's backs, calling a meeting on the College Charter, on behalf of a Committee, (not named) by a gentleman subscribing himself as "Henry Dimsdale, Secretary," about one hundred gentlemen were found present at Exeter Hall, at eight o'clock on Tuesday evening, instead of about a thousand, as was expected. Preparations had, indeed, been made, with great expense and industry, to secure the presence of the largest number of medical men ever before assembled in the metropolis; and arrangements, we are assured, had been entered into for their accommodation in the great hall of the building. The first part of the proceedings took place in No. 6, where Mr. I. B. Asbury, previously not known, but represented as a gentleman in respectable private practice at Enfield, was called to the chair. In a short speech he detailed the object of the meeting, enlarging particularly on the refusal of the Council to receive a deputation, an act which he could only explain compatibly with the decorum that became such a body, by supposing that they considered the deputation not respectable enough to be met. He affirmed that it was not the mere proposors of the address, but those signing it, that should have been regarded by the Council.

Dr. Lynch (Jordan Lynch, of Farringdon St.) now rose, and made his stereotyped declamation, about "Helots hugging their chains," "Burgesses' rights," "skill and attainments of the profession and right not to be treated as Chartists." He interlarded a novelty in the shape of a diatribe against the Hunterian orations annually delivered, to which "inflictions" he gave the benefit of his "most profound contempt," and he now relapsed into his customary attack on the character of Lawrence, when the Chairman announced that a larger room was being vacated by a Harmonic Society, to which they could adjourn. [Although about the door there were several persons crowded together from the unwillingness, no doubt, of many to join in the proceedings, yet many of the benches *in* the room, especially at the end and sides, were quite unoccupied. In the room to which the removal took place, we could not count more than 170 persons, many of whom had remained from the preceding harmonic meeting, and these, in truth, seemed to shew the greater portion of the interest that was felt in the proceedings.]—Dr. Lynch now resumed, at the precise sentence where he left off in his phillipic against Mr. Lawrence, whom he again charged with the abandonment of his duty out of vile avarice. He proceeded again to dilate on Brookes and Carpue, and their maltreatment; to prove again that midwifery involved important operations, and concluded by an ill-received eulogium on the *purity* and *consistency* of his new patron, Mr. Wakley—omitting, of course, his old allusion to the "inexplicable" circumstance of Mr. Wakley's protracted silence on the Charter, till the appointment of his brother (who now resides with him) to a berth of £1,200 a-year, had been made certain. He moved the following resolution:

"That the refusal of the Council of the College of Surgeons of England to receive a deputation with an address most respectfully worded, and signed by upwards of 1,000 members of that college, was a deliberate insult offered to those members by the council, which stands without a parallel in the history of medicine in this country!"

Mr. Mott, in a few words, seconded the resolution.—Mr. Greville Jones had some amendment, but was induced not to put it, and the motion was unanimously carried; about ten hands being uplifted for it.

A Mr. Holmes moved the following resolution, seconded by Mr. Hutchinson, of Farringdon-street:—

"That the meeting considered, that inasmuch as the authority of the council was exercised under the provisions of charters which had been granted by the Crown, the commonalty of the college publicly demanded that the names of those members of the council who determined that the deputation should not be received, should be published for the information of the members of the college, and the medical profession generally."

Mr. Ross, in a calm speech, and excited manner, dwelt on the very serious injustices done to the members of the College by the new Charter. They had paid for studies, for examinations, for diplomas, yet they were allowed no privileges. He could not but think that the whole was a system of thimble-rigging. The President (Sir B. Brodie) keeping the thimble—the councillors being "his buttoners" and the candidates the victims. He proposed a resolution, announcing that the meeting would hold the College Council responsible for an illiberal or invidious exercise of their authority.

Mr. Carpue now spoke. He rescued the Council from the wholesale vituperations that had been bestowed on it: declared that some of the members were men truly eminent, and hoped that they would take the wise step of retracing their past course on this subject.

The Chairman in putting the resolution, (which was carried) hoped that the profession could so exert themselves as to relieve that "*bunion*," the corporation in Lincoln's Inn Fields, of its deformity.

Dr. Brady expressed a strong hope that no surgeon would call in for consultation any member of the Council.

Mr. Cooper would venture on one remark or two. He did not think the Charter to blame, but those that misused it. The Council had prayed for the Charter, therefore it was their work, not that of the Home Secretary. The Council had told a deliberate falsehood, but they would not hoodwink him. He earnestly trusted that the profession would set up a College of its own. (Cheers.)

Mr. Wakley was now called for, and when he appeared was greeted by applause, which, though very far from general, was vehement from the few that gave it. He had great pleasure in witnessing the spirit that animated the meeting: it proved that they were in earnest. He wanted them to reflect on their real position—for on knowing that rested their hopes of success. He had been twenty years trying in vain to do something. He had, nearly twenty years ago, attended the largest meeting ever called, in company with a man who now stood high on the Council. Petitions out of number had been presented, and the answer to all their labours was the grant, by the executive, of a Charter. That Charter gave the power of conferring elective rights on the members, and the power would live till Sept. 14, when it would die. Well, now, Parliament, when we ask them for the right of electing the Councillors, say,—"No: we give the power to those that know you best. Let them give it you!" They have refused, and you go before Parliament humbled—you are slighted by your own brethren. To him (Mr. Wakley) it appeared unnatural that 21 medical men—they had now grown to 24—should have acted in that way. The fight must then go on, and if they allow September to pass, I ask you, will you *degrade* yourselves by meeting, in consultations, men who have treated you so basely. The Charter disqualified men from being councillors who were not fellows—and, as it made its own fellows, it was worse than when it chose councillors from the whole body. Mr. Warburton had moved the House for a return of the fellows, with the nature of their qualifications. The principal return was, that they were hospital surgeons; chosen, therefore, by jobbing. When they had a general practitioner to deal with, they used a dash, giving him no qualifications; and they most ridiculously explain that, in appointing to the fellowship Mr. Brown, of Canterbury, a house-surgeon and apothecary to an hospital, they did so because Mr. Major, of that place, had represented him as an assistant-surgeon—as if an assistant-surgeon were one-half so worthy as a house surgeon and apothecary. Could anything be more ridiculous? The College acted as if they were the Council: they had prayed the Queen for the Charter—and, as by the Charter of George the Third, the College was constituted of President, Council, and Commonalty, in petitioning as the College, and without the Commonalty, they had made a fraudulent misrepresentation, which vitiated the Charter, and made it illegal and unsustainable in Parliament. He did not, now, agree with those who asked for a New College, because he did not like to leave the Council the Hunterian Museum. Sir James Graham monopolized two titles of the Ioway Indians: he was a great medicine and great mystery man; and, Heaven knew, he blundered most incomprehensibly. He knows not one atom of medicine. He attributed their failures to division: people said they would not go this way because Wakley went. He was surprised, indeed, how the chairman, respectable as he was, could so get his courage to the sticking place, as to take part in their proceedings. It was not to be borne, that the great medicine man, with all his wisdom, should be allowed to degrade them. He related an anecdote of a foolish fellow, who consulted a quack in Newman Street, who asking his guinea first, told him he could be salivated and cured at a low price—but must pay fifty pounds if he would be cured without leaving his business. The patient paid a part—but, suspecting a trick, returned and got part back. But John Bull was a gullible animal. To-day he was all for well-aired sheets—to-morrow he prefered a wet blanket. He concluded by hoping they would get up a larger meeting next time, and repeating his pledge, given as much in the style of Mr. O'Connell as possible, that IF 18 M.P.'s would support him, he would die of exhaustion on the floor of the House, before *he* would allow the bill to pass. During the whole meeting a studied silence was kept as to the Medical Protection Assembly, though it was by them the meeting was surreptitiously called.

SIR JAMES GRAHAM'S BILL.

At a meeting of the Committee of the East London Medical Association convened Monday, Sept. 2d, for the purpose of considering the provisions of a Bill laid before Parliament, by Sir James Graham, upon the subject of Medical Reform. It was resolved

That this Committee cannot but express their unqualified disapprobation of the said Bill, inasmuch as such a measure must prove highly injurious to the public at large, and most ruinous to the profession. They consider the absence of all restrictions to the practice of medicine beyond the mere disqualification of holding public appointments, deeply to be lamented, as it is evident the mass of the population cannot possibly discriminate between the ignorant pretender and the regularly educated practitioner; the mere fact of registration being utterly insufficient for that purpose.

Resolved,—That whilst this committee do not deny the necessity for Parliamentary interference they cannot but regret the absence of all protective enactments in the proposed measure, feeling convinced that so far from its being desirable to repeal existing restrictions, the welfare of the public requires the adoption of measures far more stringent and summary, to shield them from the infamous and audacious frauds of the pretenders to Medical skill and secure just protection to those who have by diligent study qualified themselves for the practice of their profession.

Resolved,—That the most cordial thanks of the profession, and the community at large are eminently due to the society of Apothecaries, for having enforced a gradual and extended course of study and examination, which has raised the General Practitioner to his present elevated position, and that their exclusion from any board to be hereafter constituted would be subversive of the

interests of the many talented practitioners, who enjoy so large a share of the public confidence, through the instrumentality of the Act of 1815. The Committee therefore cordially concur with the views of the Society of Apothecaries as made known by the resolutions lately promulgated by them.

Resolved,—That the cordial thanks of the committee of this Association be given to the Editor of the *Medical Times*, for the very spirited manner in which he has exposed the inconsistencies of the proposed measure of Sir James Graham for Medical Reform.

[Our humility stands aghast at a compliment so explicit: we have strained our eyes to see that we have not mistaken the words. But so they are; and we must suppose that our *discriminating* opposition of the Bill, has not the approval of our discriminating Medical brethren. Ed.]

TO MEMBERS OF THE COLLEGE OF SURGEONS.*

GENTLEMEN.

Is this Meeting in respectable hands? Who is the "Henry Dimsdale, Secretary," who has called it? I have looked for his name in the COURT GUIDE and POST-OFFICE DIRECTORY—*in vain.* Is he Surgeon, Apothecary, or Physician? If not, what is he? I trust he will satisfy you that he is not a speculator in petty agitations—another feeder on professional calamities. In any case, Gentlemen, I see here no sign of respectability.

What is "the Committee" (without *name*!) by whose "*order*" he acts? Is it a Committee like Mr. Wakley's modesty—a thing *in nubibus*? Or is it that queer set (grown ashamed of their nomenclature) who carried on the notorious concern of the "Medical Protection Company" under the names of Rugg, Cooper, and such like? If so, are the Surgeons of England (*gentlemen* and men of education) to sail in the same boat with such persons whose most prominent Member and late "Hon. Secretary" circulates a card to catch patients like this:—

"By Appointment.
NATIONAL VACCINE ESTABLISHMENT.
Vaccination Gratis,
EVERY TUESDAY AND FRIDAY MORNING AT 9 O'CLOCK.

Mr. Rugg, Surgeon, Accoucheur, &c., 15, Broadley Terrace, Blandford Square, near the Alpha Road, may be consulted GRATIS, *every* morning before 11 o'clock, and *of an* evening after 6, on all diseases; and the medicines required, *had* at a little more than COST PRICE!—Drugs and chemicals, of the *most* pure description, carefully selected from Apothecaries' Hall, on moderate terms.—Prescriptions prepared.—Midwifery, 10s. 6d."

Re-read this, and ask, is it strange that persons of this stamp find it *profitable* to call public meetings, and *convenient* not to mention who they are that call them? No, Gentlemen, they are not respectable: they are not such as gentleman can co-operate with!

Why are you called together by these people? "To adopt such measures as may be necessary relative to the power of enfranchising the Members, which may be exercised by the Council until the fourteenth day of September, and no longer!" But the Council have already decided on all their new Fellows: the list *is* made out—the names are printed—the "*power*" is gone—the fact is accomplished! Is the public meeting then for no purpose? No, no. The room has not been paid for—the *fuss* has not been made for nothing more than it has been made on your account. Bad company seek to waylay you to their advantage; they want to *use* you to get notoriety—to acquire the command of funds—to grasp what they have not! *They want to make of Wakley the Feargus O'Connor of the Profession—of the Lancet its Northern Star.* Will their success raise you in public esteem? Will you let them succeed? Have you no mode of doing justice on an infamously foolish Charter, save by taking part with a foolishly infamous Committee?

No Gentlemen! the plot is not respectable. The conspirators and their objects are alike disrespectable. Beware of them! Remember that when more respectable persons called a meeting at the Crown and Anchor, Wakley nicknamed them "the tail of the profession," and talked of "organised societies" meeting. The organised societies have NOT met—but the dirtiest joints of the tail have sold him their independence! Will you, as gentlemen, be led by so contemptible an excrescence? Will you, occupying a "lower deep than the deepest," be the tools of the tools of Wakley; animals ingeniously taxed for his keep! Or, with me, will you not rather exclaim, we want an independent, a respectable movement, and this is neither independent nor respectable!

Gentlemen, your faithful Servant,
A GENERAL PRACTITIONER.

* This address was widely circulated at the recent Meeting, held in Exeter Hall. We have thought it worth reprinting.—ED.

REPORT OF AN INTERVIEW WITH ALEXIS, THE CLAIRVOYANT, ON FRIDAY, JULY 20, 1844.

(Continued from page 452.)

Returning to the first lady's room: on his second attempt to describe the picture he had been asked about, he told the lady to sit down by him, and took her hand. M. Mareillet desired her to fix her thoughts firmly upon it. "*Pensez-y bien, fixez bien vos idées sur le Portrait.*" Alexis said, "*C'est brun, c'est noir et blanc, ce n'est pas coloré, c'est une Lithographe. La Lithographe n'est pas Anglaise.*" All right. "*Elle est Française.*" *Non.* "*Mais oui, c'est a dire faite pas un Français.*" Right. "*Il y a des lettres en bas, ce n'est pas Français*"—right—"*c'est de l'Anglais, non, non c'est du Latin, c'est son nom.*" All right. He then described exactly hair, beard, and moustache, admired the countenance, repeating several times, "*C'est une belle tête, il est beau, le front est beau*;" said he was not alive, but made some mistakes as to the length of time he had ceased to exist, saying 100 or 200 years, or more. He then suddenly exclaimed, "*Il est ici*;" the lady looked round the room, which was hung with pictures, but said "No." Alexis insisted, "*Mais oui, je vous dis qu'il est ici,*" pointing through the floor, "*Il est dans la Chambre en bas, je le vois.*" The lady proposed going down to see, she alone knowing what picture it was; but he would not let her draw away her hand, and said, "*Non, non, n'allez pas, attendez, je vais vous dire,*" and then with a strong expression of reverence and solemnity, he said, "*C'est le Christ.*" The plate is a lithograph done at Naples, representing the head of our Saviour, from a portrait which was supposed to have been taken from the life, and sent to the King of the Abagari, by order of Tiberius. It has only the head, has neither neck nor hands; has moustache, a beard, and flowing locks, and three rays of glory proceeding from the temples and upper part of the head. The description below it, is in Latin, and is, VERA IMAGO SALVATORIS DNI NRI IESUS XTI AD REGEM ABAGARUM MISSA, and this copy in the lady's possession was given to her several years ago in Naples. After Alexis had finished his *séance*, it was asked if there was one, such as he described, in the house, and it was believed there was not. The lady, however, accompanied by another and the gentleman of the house, left the room to go down to the library in search of it, and in a portfolio which had not been for a long time opened, was found the copy indicated by Alexis, among some lithographs, the existence of which had been quite forgotten. The lady, to whom the print described by Alexis belonged, was not present when this duplicate was found, having turned back, after going half-way down stairs, to ask Alexis not to go away before it had been ascertained whether there was a copy of the lithograph in the room below.

An old sandal-wood fan, closed, and tied with a pocket-handkerchief, was then given him, and he was asked if there was anything particular in it. After some time, he said there was a figure in the centre in black and white; it was in an old costume something like an Abbé, with hair curled up—costume about the time of Louis XV.—robe with a collar open at the neck. There were stars above it in the wood of the fan. It was then spread out; in the centre, in an oval, was an engraved figure of Mirabeau, and the sandal-wood was pierced with stars. He said it belonged to a lady present, and he would, if required, point her out and give her the fan; this was not done. He was asked to describe the drawing-room of this lady, and said there was a small clock; but here is her own account: "I imagined that the ladies, whose crucifix and whose picture he had *seen* and described, had assisted him unintentionally by answering him, and thus giving him hints. I gave him none. We have on our drawing-room chimney-piece a remarkably small clock, placed upon a wooden pedestal covered with velvet; I asked Alexis concerning it, he said: it was an object that could be divided into two parts, the lower part of wood, and the upper part of steel, iron, or metal. He then said, "*Qu'il y avait une tête.*" I told him that there certainly was NOT, fancying he meant to describe a bronze bust. He said, "*Oui, oui—il y a une tête, il se peut que ce ne soit pas une tête d'homme, ni de femme, mais il y a une figure.*" I was as positive against the head as he was for it, so I said I would not teaze him with any further questions, as I feared I might fatigue him. In talking matters over at home, we settled that his having placed "*une tête*" on our mantlepiece was an instance of failure. Imagine our *amazement!* in discovering engraven on the back of the clock—a Grinagog of a face!! which, though *ni une tête d'homme—ni une tête de femme*, is to all intents and purposes—*une Figure!* Alexis fulfilled his promise of discovering the owner of the fan; when this lady allowed him to hold her hand, in order to make inquiries concerning the clock, he observed, unasked, that it was the lady to whom the fan belonged. She asked him if he recognised her by her voice; he told her "No," and she then remembered that she had not spoken to him previously.

A lady put her watch into his hands, asking him the name of the maker, which was engraved on the works in the usual manner; he made one or two attempts, but it was a total failure.

After this he begged to be unmesmerized or awakened, as he was very much fatigued; this was quite evident for he seemed faint and exhausted. The persons present were quite satisfied with what he had done, and joined their requests to M. Marcillet to awaken him from a sleep, which, to all appearance, was not different from the waking state of all present, for he saw and conversed freely with every one. M. Marcillet, by some passes, jerking his arms, and making the joints of his fingers crack, awakened him, when he yawned and gave every indication of being awakened from a disturbed sleep.

The picture of Christ was shown to him afterwards, but he did not seem to know anything about it, and on several questions being put with regard to things he had done in his state of somnambulism, he showed complete ignorance, not seeming to know what he had done, and this without betraying any appearance of attempting to conceal a previous knowledge, but asking with natural curiosity and open manner, what he had done that was curious or astonishing. And truly much that he did was most curious and astonishing. How to be explained?

No one present at this interview could doubt the facts presented, though some among the party might say, we cannot understand—we are still incredulous! And they might ask, what is the cause?—what the power?—how can these things be? A French writer has it, "*On sait que dans l'esprit de la plupart des hommes, des choses, les plus reeles, passent pour de chimeres, des qu'elles mortifient leur amour propre, ou qu'ils n'en connoissent pas les principes ni les causes.*" How many of the phenomena which are ever occurring around us, we cannot satisfactorily explain, and yet we dare

not say we disbelieve in them. And in the case of clairvoyance, how many ask, is this a power of good or of evil? It exists, probably, to a certain degree in all persons, being more developed in some, as in Alexis, than in others. It is by the accumulation of facts, that much may be learnt, and it may be said with Virgil, "*Felix qui potuit rerum cognoscere causas.*"

A CASE OF TETANUS CAUSED BY CARIOUS TEETH.

By H. RAYNES, Esq., Gringely on the Hill.

To the Editor of the "Medical Times."

William Spencer, ætat. 21, a farming servant, of robust constitution, was seized, on Sunday evening, the 4th of August, with the symptoms of tetanus, in a most marked and violent degree: in fact, with that form of the disease designated—opisthotonos; during the paroxysm, the body was bent backwards, with the utmost rigidity; the extensors of the spine and extremities, both upper and lower, were put upon the stretch, so as to admit of the patient being raised, during a paroxysm, from the recumbent to the erect position, by the power of one or more assistants applied to the occiput, without bending the trunk or even the neck; the lower jaw was fixed; the eye-brows corrugated; and the greatest suffering depicted on the countenance; the patient groaned with agony; deglutition was difficult. The treatment was commenced by a copious bleeding from the arm, and the free exhibition of tartar emetic, until vomiting was induced; the spasms seemed to make their attack every two or three minutes. There were ejected, from the stomach, fragments of apples, pears, and the husks of roasted potatoes; the spasms shortly subsided, when a few grains of extract of opium were given, and several hours of sound sleep followed; the patient, however, was awoke by a paroxysm, which was succeeded by others, increasing in force and frequency. It now became evident, that the heterogeneous contents of the stomach were not the exciting cause, and that death must take place, in a few hours, unless means were adopted to remove this cause, whatever it might be. For this purpose, I directed my attention to the wise teeth, as we know that tetanus has been caused by them when cutting through the gums, but there was no source of irritation in that situation. Pursuing my inquiries, I ascertained that he had had severe toothache during the whole of Saturday, and I succeeded in removing the stumps of two of the lower molar teeth, grown over with gum; the first touch of the instrument threw the man into a violent paroxysm, but, from the moment of removal of the teeth, on Monday morning, until Thursday evening, there was a perfect freedom from relapse, and a manifest improvement in the symptoms generally; calomel and colocynth, with saline purgatives, were, in the meantime, freely employed to evacuate the bowels. On Thursday evening, there was a recurrence of a few convulsive twitchings of a mitigated nature, and with some hours' interval between them; this was accounted for, upon discovering that an error of diet had been committed: the stomach, the centre of sympathy, having been offended by some indigestible substance; a dose of castor oil put all to rights again, and there has been no return of symptoms since. The principal inconvenience complained of, during the after-treatment, was pain about the anterior lobes of the brain, which was quite removed by leeching, blistering, and a few doses of calomel. The state of the patient, however, was far from satisfactory, during the first week; he remained in a condition of half consciousness, the eyes being wide open, without being fixed upon any particular object, and without winking; pupils dilated; the expression idiotic; there was aphonia; incapability of opening the mouth, or moving the jaw; he could just protrude the tip of the tongue, and raise one hand to the head by the assistance of the other; coma had prevailed from the commencement. From that period, to the expiration of the second week, he gradually regained his strength; he could use his vocal and locomotive organs, though feebly; tongue was clean; appetite good; pupils contracted to their natural size, and the feaures resumed their wonted expression; in fact, the man is now convalescent; he has taken no medicine during the last week.

There is no doubt in my mind, that the tetanus was caused, in this instance, by the irritation of the stumps of the teeth in the alveolar process, and that the case would have terminated fatally, had not the stumps been opportunely removed.

HOSPITAL REPORTS.

KING'S COLLEGE HOSPITAL.

Medullary Disease of the Testicle, complicated with Hydrocele.—Castration.

Isaac Stains, æt. 42, wood-cutter, was admitted into King's College Hospital on the 14th day of May, under the care of Mr. Partridge. He is a native of Berkshire, where he has always lived, in very good health, till about twelve months ago, when he perceived (without any cause) the left side of the scrotum to be enlarged, but free from pain. Since, it has gradually increased in size; he, however, continued his occupation till three weeks ago, when he was obliged to discontinue it, and, on account of the uneasiness and pain which its weight produced, he found it necessary to support the scrotum in a bag truss.

At the time of his admission, he was in pretty good condition; complexion ruddy; has no cough, nor pain in the chest; the left tunica vaginalis is distended with fluid, behind which the testicle was found to be much enlarged—the enlargement was not, however, confined to the epididymis; the testicle feels heavy when poised on the hand; the swelling is not transparent, when a lighted taper is placed behind it in a dark room; fluctuation is very distinct; complains of a good deal of pain in the loins; appetite has failed during the last week; the urine is high coloured, of specific gravity 1·032—becomes turbid as it cools, and again clear on the application of heat; there is a deposit of albumen on the addition of heat and nitric acid; has never had hernia. He is to remain quiet in bed; to have a dose of castor oil at bed time; middle diet; hot fomentations to be applied to the loins and scrotum.

May 17th.—The hydrocele was tapped to day with a fine trocar, and about half a pint of serous fluid evacuated; upon examination, it was found that the fluid at the upper part of the swelling was not removed, apparently in consequence of some adhesion of the tunica vaginalis, dividing its cavity. The testicle was now found to be about the size of the patient's fist (independent of the hydrocele), and very firm. Scrotum to be fomented and well supported.

20th.—Feels better; there is not so much pain in the loins; the puncture, made to evacuate the fluid, has closed up. Continue the fomentations.

27th.—The fluid is accumulating again; about two ounces were removed to-day with a small trocar.

31st.—There has been a good deal of irritation and consequent œdema of the scrotum, since the last puncture was made; the pain in the loins is better. The scrotum to be carefully supported and constantly fomented.

June 2nd.—The fluid has re-accumulated in the tunica vaginalis. The scrotum is to be gently painted with strong tincture of iodine.

6th.—The iodine produced no good effect, consequently it was discontinued. To have lotio liq. plumbi diac. continually applied to the scrotum.

22nd.—The hydrocele was again tapped to-day, and about fifteen ounces of serous fluid evacuated. It was found to be neutral, of specific gravity 1·022, coagulated by heat. The serum, withdrawn at different times from the tunica vaginalis, was, shortly after it had been removed, examined under the microscope, but no spermatozoa could be found.

23rd.—It has become evident, from the observation of this case since its admission into the hospital, that the testicle is increasing in size, and, as the epididymis was also affected, it is to be apprehended that the disease may extend up the cord, which is at present perfectly soft and healthy, without any disease that can be detected in the lumbar glands. Mr. Partridge has, therefore, resolved to extirpate the testicle.

24th.—The patient being placed upon the table, Mr. Partridge performed the operation in the following manner (the hair on the pubes and scrotum having been previously shaved off):—

The left testicle being firmly grasped in the left hand, so as to render the integuments tense, a longitudinal incision was made with a long straight bistoury, from a little below the external abdominal ring to the very bottom of the scrotum. The loose cellular tissue was next partly divided with the knife, and partly lacerated from the cord. The cremaster muscle was now dissected back, an assistant firmly grasping the cord a little below the external abdominal ring, to prevent its retraction; the cord was divided with one stroke of the knife; the tumour was seized by the lower portion of the cord—and removed from the scrotum principally by laceration of the cellular tissue; the cord slipped from the fingers of the assistant;—it had, however, been left sufficiently long to be readily grasped again. The spermatic, deferential, and cremasteric arteries were first secured with ligatures; the surface of the wound was then sponged with warm water, and every bleeding vessel, about ten in number, was tied in the same way. The edges of the wound were next brought together by six sutures, the ligatures on the vessels of the cord having been turned over the upper angle of the wound; strips of wet lint were next laid over the wound; the patient was placed in bed, and agreeable support given to the scrotum, which is to be kept wet with water dressing; he is to be put upon low diet for a few days.

25th.—Feels pretty comfortable to-day. Slept well last night; pulse 100, full; tongue moist and furred; has no pain in the course of the inguinal canal or tenderness of the abdomen; is thirsty; bowels not open since yesterday.

℞ Ol. ricini ℥j. hac nocte.

28th.—Feels pretty well; has had no pain or tenderness along the inguinal region, or lower part of the abdomen; bowels open; the upper part of the wound has united by the first intention, and all the sutures were removed. Continue the water dressing.

July 3rd.—All the ligatures, except two, came away yesterday (eight days after the operation); is a little thirsty; has a little pain in the loins, otherwise feels pretty well in health. Continue the water dressing. Ordered:

℞ Ol. ricini ℥ss. hac nocte.

10th.—The wound is looking healthy, with florid granulations; he is quite free from pain; there is no tenderness along the inguinal region, or lower part of the abdomen. One of the ligatures still remains.

15th.—Had a very severe gnawing pain in the epigastrium yesterday, which he has experienced repeatedly before, for which he took the following draught, which gave him relief:—

℞ Tinct. opii. m. xx.
Conf. aromat. gr. x.
Aquæ menthæ pip. ℥j.
M. Haustus statim sumendus.

24th.—The last ligature came away on the 12th. The wound is healing and the scrotum contracting; feels pretty well in health; still occasionally complains of pain in the loins and colicky pains in the bowels, which are relieved by hot fomentations.

29th.—The wound is all but well; there is no hardness of the scrotum or of the cord, nor induration along the inguinal canal or elsewhere; the inguinal glands are quite healthy; abdomen not tumid; complains still of pain in the left lumbar region; bowels regular; urine healthy; appetite good; complexion as ruddy as on his admission into the hospital. Went into the country.

August 10th.—The surgeon, who had seen him in the country, reports that the wound has healed

Remarks.—Upon examining the tumour, it was found, as had been surmised, that adhesions existed between the tunica vaginalis testis et scroti, which divided the cavity very nearly into two separate cysts. The testicle itself, as well as the upper and middle part of the epididymis, was much enlarged, and both presented well marked specimens of medullary deposit, of varying consistence, with (in the testicle) intervals of simple chronic induration. The tunica albuginea was thickened; the lower part of the epididymis was nearly healthy; the vas deferens and spermatic cord were quite so. The testicle was injected, and put in the King's College Museum. The principal points in the operation were: carrying the extension of the incision to the very bottom of the scrotum, to prevent the lodgement of matter during the healing of the wound; the separation of the fasciæ, and more especially of the cremasteric covering of the cord, previous to its division, to prevent its retraction; the subsequent separation of the tumour, by gentle laceration, rather than incision of the connecting cellular tissue of the scrotum, to diminish the hæmorrhage; and, finally, the application of ligatures to every discoverable bleeding vessel, however minute.

ST. BARTHOLOMEW'S HOSPITAL.

Rheumatism, with Endocarditis, followed by Inflammation of the Pericardium.—Mary Anne Wallace, ætat 22, a housemaid, of fair complexion, and rather delicate appearance, was admitted into Mary's ward, St. Bartholomew's Hospital, under Dr. Roupell, May 10th, 1844. The wrist and knee-joints were much swollen, hot, and extremely painful; she likewise complained of pain in the limbs generally; incessant thirst, and great restlessness; the skin was hot, and bedewed with perspiration; tongue covered with a yellow fur; pulse 100, full and hard; bowels open; catamenia regular. The action of the heart was much accelerated, and a bruit was heard with the first sound, but she complained of no pain or uneasiness in the chest. She stated that she had always enjoyed good health, never having suffered from rheumatism before: ten days ago she caught cold, which was followed by pain in the joints and feverishness; she was confined to her bed for a week, when she became much worse, and, two days after, applied for admission into the hospital:—v. s. ad ℥xij.

℞. Hydrarg. chlorid. gr. ij.
Pulveris opii gr. ¼.—Misce.
Fiat pil. 4tâ quâquâ horâ sumend.

May 11th.—Expresses herself as better, the joints being less painful; but complains this morning of palpitation of the heart: the countenance is slightly anxious; pulse hard and sharp. On auscultation, a most distinct frictional sound was heard over the entire track of the pericardium.—To have hirudines xij. to the region of the heart; continue the pill.

12th.—Countenance extremely anxious; in other respects, appears much the same.—To have a blister to the region of the heart; continue the pill.

13th.—Appears rather better; countenance not quite so anxious; heart's sounds the same.—Continue.

14th.—Much the same as yesterday; countenance still anxious; action of heart accelerated; frictional sound the same: pulse 124, and rather incompressible; gums slightly affected by the mercury.—To have acet. cantharid. applied to the chest, so as to raise a blister.—Continue the pill.

15th.—Appears much better this morning; the countenance is less anxious, and there is much less pain in the joints; the pulse is 96, and rather sharp; the frictional sound is still heard distinctly, but much diminished.

16th.—Feels herself better than she was yesterday; frictional sound less distinct.—Continue.

18th.—Not so well this morning; the breathing is greatly hurried; countenance very anxious; she has incessant cough, with frothy expectoration; skin hot and dry; pulse quickened.—To have the following draught:—

℞. Haust. ammon. ac. ℥iss.
Tr. hyoscyam., et
Vin. antim. potass.-tart. āā ℥ss.
Fiat haustus ter die sumendus.

18th.—Cough less troublesome; breathing easier; countenance not so anxious.—Continue.

20th.—Slept well last night, and appeared much better this morning; countenance improved; respiration natural; cough much less troublesome; skin cool; tongue cleaner; has some little appetite; pulse 106, and rather sharp. On auscultation, the rasping bruit, heard with the first sound of the heart, on admission, is entirely gone; the frictional sound is more distinct than it was a few days ago, and there is slight dulness on percussion over the præcordial region.—Continue the draught and pill.

22nd.—Not so well again this morning; had a return of her cough, which was very troublesome during the night; the breathing appears short and hurried: the skin is cool; pulse 100, and rather smaller. The action of the heart is still accelerated, but the frictional sound is almost gone; no bruit with either sound of the heart; gums sore.—Continue the draught.

℞. Hydrarg. chlorid. gr. ss.
Extracti conii gr. iv.
Acaciæ —— q. s. ut ft. pil. ter die sumend.

23rd.—Feels herself better, and is anxious to be allowed to get up: cough less; frictional sound entirely gone.

25th.—Going on favourably in all repects; allowed to get up to-day.—Continue the pill.

28th.—Still improving; mouth very sore, from the mercury.—To have lb. i. of beef, for tea, daily; discontinue the pill, and to have haust. quinæ disulph. ter die.

31st.—Sits up every day, and appears improving rapidly.

June 4th.—To have half-meat diet.

18th.—Discharged to-day, quite well.

Erysipelas.—Hannah Cook, ætat 20, a servaut, of good conformation, fair complexion, was admitted into Mary's ward, under Dr. Roupell, May 27th, 1844.—The countenance was extremely anxious; face much swollen, the skin being greatly inflamed, and presenting a dry vesicular appearance; eyelids tumid, and almost closed. She complained of great pain in the head, intense across the forehead; a sensation of fulness; heat and tingling of the face; thirst; great restlessness, and much debility; the skin was hot and dry; tongue clean and red; pulse, 120, and rather sharp; bowels relaxed; catamenia regular. She stated that, a week previously, she caught cold from getting wet through one evening; on the morning after, she was attacked with severe rigors, headache, thirst, and loss of appetite: on the following day, her face became red, and much swollen, and the other symptoms were increased in severity. She was ordered to be bled from the arm to ℥x., and to take hst. ammon. ac. ter die.

28th.—Continues still the same; no amelioration of the pain in the head, or swelling of the face; skin cool; pulse 112, soft and compressible: she complains much of debility.—Ordered the following draught:—

℞. Ammon. sesquicarb. gr. v.
Tr. opii. m. iv.
Liq. ammon. acet., et
Mist. camphor. āā ʒvi. Misce.
Ft. haustus ter in die sumendus.

29th.—Certainly better; face less swollen, and she has less pain in the head; skin not so hot; pulse soft and compressible.—To have a pound of beef, for tea, daily.—Continue the draught.

30th.—Much better in all respects; face returning to its natural appearance. — Continue the draught.

31st.—Not so well this morning; feels herself exceedingly low and weak, and complains of great soreness of the head; tongue clean; pulse small and feeble.—To continue the draught, and to have ℥iv. of wine daily.

June 1st.—Feels herself better to-day.—Continue.

3rd.—Going on favourably; skin cool; cuticle desquamating; tongue clean; pulse 80, soft and compressible.—Continue wine and medicine.

10th.—Improving daily.—To have half meat diet.

18th.—She left the hospital to-day, perfectly well.

Fever.—Margaret O'Dounell, ætat 14, a delicate looking girl, of fair complexion, was admitted into Mary's ward, under Dr. Roupell, July 1st, 1844. The countenance was anxious, and highly flushed; eyes suffused; teeth and lips covered with sordes; respiration short and hurried: she complained of great pain in the head, and in the left side; pain in the back and limbs generally, with thirst, heat of skin, cough, and weakness; the skin was hot and dry; tongue furred, but moist; pulse 120, and with little power in it; bowels open; urine scanty and high-coloured. She stated that, two days previously, she was attacked with headache and sickness, followed by pain in the side, frequent shivering, thirst, loss of appetite, and great restlessness: no abnormal sounds, except some bronchial breathing, were heard upon auscultation. She was ordered, hirudines vi. to the side; a cold lotion for the head; hydrarg. c. cret. gr. iiss. every night, and the haust. ammon. ac. cum magnes. sulph. ʒss. ter in die.

July 2nd.—Pain in side relieved by leeches; in other respects continues the same.

3rd.—Not so well: complains of the pain in the side being increased; the skin is hot and dry; pulse 120, rather sharp, with but little power in it; tongue dry and furred; bowels relaxed.—To omit the mag. sulph. from draught, and to have hydrarg. c. cret. et pulv. ipecac. co. āā gr. iiss. ter die, and six more leeches to the side.

4th.—Was better yesterday, but, this morning, does not appear so well; respiration is still hurried, and there is dulness on percussion over the left infra-clavicular region.—To have eight leeches to the above space.—Continue draught and pill.

6th.—Much better; breathing much relieved; countenance improved; pulse small; skin harsh and dry.—Continue the pill.

Rep. haust. ammon. ac., et adde
Vin. antim. potass.-tart. M. x.

9th.—Going on favourably; is sitting up to-day, and has some little appetite.—To have broth diet.

20th.—She continued in the hospital till to-day, when she was discharged, cured.

THE CASE OF OVARIAN EXTIRPATION, BY W. L. ATLEE, Esq., OF LANCASTER, PENSYLVANIA, FROM THE JOURNAL OF MEDICAL SCIENCE FOR JULY 1844.

This case had not very favourable prospects about it, when undertaken. The age of the patient was too great, viz.: 61. In one of Dr. Clay's cases, the patient was 57, who recovered without a bad symptom, but this is no argument that aged females are well calculated to bear the operation; indeed, if we turn to the latter gentleman's opinion, he states, "the best age for selection would be from 35 to 45, and he should be reluctant to go to a higher figure, unless the case was extremely favourable in every other feature."

Contrary to the practice of Dr. Clay, in this case of Mr. W. L. Atlee, strong purgatives were given, previous to the operation, by which irritation was certainly raised, and if we follow the statement of the case throughout, we find *that irritation* never subsided, but really terminated *in inflammation.* The irritation was perceptible on the intestines when the incision was made, and was also manifest by the tenderness to the touch of the peritoneal surface, when exposed. The pulse fell immediately after the operation, but soon got up again, and seldom averaged less than 100 (always a suspicious pulse), afterwards. Mr. Atlee is a decided advocate for the larger incision, as every person must be that purchases his knowledge *by his experience.* In the case before us,

Mr. Atlee *had to enlarge the opening as much again;* it is evident that a large incision is infinitely better than being compelled to resort to it secondarily. Mr. Atlee kept in the hare-lip sutures up to the time of death, nearly five days. Dr. Clay advises their removal as early as possible, *to avoid irritation,* which they certainly have a tendency to excite; and he (Dr. Clay) has seldom had any sutures to contend with beyond the third day. *Autopsy, one hour after death,* proved the fatal issue to be from inflammation. The tumour was but small, when compared to many others that have been extirpated. At the close of Mr. Atlee's communication, are some very just remarks on the rash opinions that have been expressed by parties, prejudiced against the operation; when the details of such evidence, however, have been fairly examined, it is found that the *strongest expressions of opinion* have been indulged in by those, whose position proved them to be the least calculated to give an *opinion at all:* men of theory only, writers of surgical articles, having *never practiced surgery,* and having little experience in any other department of the profession, except that of sitting in an arm-chair, cavilling at others' faults, *at so much per line.*

PERISCOPE OF THE WEEK.

Muscular enteritis.—Dr. Kollock, of Savannah, Georgia, describes, in the *American Journal of Medical Sciences,* an epidemic of enteritis, principally affecting the muscular coat of the small intestines, and marked by excessive pain in the abdomen and obstinate constipation, in treating which he has found it necessary to abstract blood very largely, and give sedatives and demulcents. Catharties are injurious. One of his prescriptions is a hot whiskey bath, consisting of a gallon of the spirit, added to a sufficient quantity of water to form the bath. His communication is illustrated by the detail of several cases; in the first of which, that of a strong, athletic man, he says he abstracted nearly a gallon of blood in the course of three or four hours, and yet the patient continued in great agony. In spite of this enormous loss of blood, the bleeding was repeated the next day, in addition to the use of the tobacco-enema, and the exhibition of large doses of calomel. It is not to be wondered at, that, after such treatment, the patients should have a slow convalescence, and be subject to anasarca. A full dose of opium, repeated if required, would probably have been more efficient.

Inversion of the uterus.—Dr. Gazzam narrates, in the *American Journal of Medical Sciences,* the case of a lady in whom procidentia uteri was produced after labour, by the attempt at withdrawing the placenta, which was attached to the uterine parietes. The attending physician peeled off the after-birth, and endeavoured to replace the womb, in which attempt he only partially succeeded, the uterus remaining inverted within the vagina, close to the os externum. By the fourth day the patient became decidedly maniacal. Dr. Gazzam sought to restore the prolapsed uterus, but not succeeding, he exhibited nauseating doses of tartarized antimony for twenty-four hours, after which, placing the patient in the position for turning, and grasping the uterus in the right hand, he made at first gentle, and after a while more forcible, compression, increasing the force gradually. Having persevered thus for more than half-an-hour, and materially diminished the bulk of the organ, (which was felt contracting in the hand) he applied the tips of the fingers, placed together conically, to the fundus uteri, and made gradual and steady pressure in the direction of the os tincæ, and the upper axis of the pelvis. At first the whole uterus was carried up, but after the vagina was put fully on the stretch, the fundus uteri began to dimple, and in a few minutes after it started up suddenly, and the fundus, with nearly the whole of the Doctor's hand, passed through the os tincæ. When satisfied the reposition was complete, the hand was gradually withdrawn, a sponge-tent introduced into the vagina, a compress placed over the vulva, and all secured with a T bandage. The patient, after this, gradually recovered, both mentally and bodily. Dr. Gazzam attributes much benefit to the nauseating and depressing action of the tartarized antimony.

Ligature of the external iliac artery.—Dr. Boling describes, in the *American Journal of Medical Sciences,* a case of aneurism of the femoral artery high up, in which he ligatured the external iliac. As far as regarded the operation, the case terminated successfully; but there existed another aneurism of the femoral artery of the opposite side, and there were some indications of the aneurismal diathesis. It is, therefore, fair to presume that the case will ultimately terminate fatally.

Polypus uteri.—Dr. Garden, of Wylliesburg, Va, narrates, in the *American Journal of Medical Sciences,* the case of a coloured woman, 30 years of age, affected with leucorrhea, and also with what appeared to be menorrhagia, there being, at intervals of two or three weeks, a pretty copious and long-continued discharge of blood, both fluid and coagulated, from the uterus, attended with pains like those of labour, but not so violent. This state had existed for about eight or ten months, and was increasing in severity. After prescribing medicines to improve the general health, ergot of rye was given in five grain doses, four or five times a-day, to check the discharge. Its use was continued while the discharge lasted, and resumed when it recurred. The woman's sufferings were greatly aggravated by this treatment, but she was directed to persevere, the existence of a polypus not having been ascertained. Dr. Garden, after a time, was sent for, on account of a tumour of uncommon magnitude having presented itself in the vagina. This, on examination, proved to be a dense, fibrous tumour, nearly as large as a child's head at birth. Part had already separated in a semi-putrid state, and the remainder came away a few days afterwards. The woman soon regained her health.

On the extraction of retained placenta in cases of abortion.—In a paper on this subject by Dr. Henry Bond, published in the *American Journal of Medical Sciences,* after citing the opinions of the principal writers on midwifery as to the inefficacy of remedial measures in the treatment of uterine hæmorrhage, caused by retention of the placenta in cases of abortion, and after criticising the different instruments that have been invented for its removal, the author recommends for that purpose an instrument which he calls the placental forceps, and which he considers to be free from the objections to which the others are liable. It is about ten inches long, curved laterally on a radius of about twelve inches, and the blades about one inch and a half longer than the handles. The blades terminate in an oval expansion, nearly half an inch wide. The handles and blades, including the edges of the oval expansion, are rounded, or bevelled off, so as to preclude all probability of wounding or pinching any of the surrounding soft parts. The inner part of the oval expansion is made concave and rough, so as to maintain a secure grip upon the body embraced. These precise dimensions, as to the length and curvature of the instrument, are not considered essential; but it is probable that they will be found most convenient to the operator, and most easy to the patient. The curvature is intended to be such, that when introduced with the finger as a director, in cases where the perinæum is rigid, there shall not be any unnecessary or inconvenient pressure on this part, or on the urethra. The outside of the oval parts of the blades is made slightly convex, and smooth, without a fenestra, so that in passing them through the os uteri, and expanding them, so as to embrace the placenta, there shall not be the least danger of abrading or lacerating that part. The curvature, however, is such that, after the finger has been withdrawn, it will not prevent a rotation of the instrument, if it should be thought necessary, in order to detach the placenta. This instrument has been used by Dr. Bond in the only case that has come under his notice, since it has been constructed, and the result, he says, was most satisfactory. The cases for the relief of which it is adapted, are comparatively rare.

Ovarian disease.—Dr. Emery Russell, of Norwalk, Connecticut, details in the *American Journal of Medical Sciences,* three cases of ovarian disease, of considerable duration, which terminated fatally. The cases are published with the intention of shewing the practicability of the operation for the extirpation of the diseased ovary, in favour of which proceeding Dr. Russell speaks in exaggerated terms. His cases, he conceives, shew by the appearances after death, the facility with which the disease could have been removed, as, notwithstanding the large size of the dropsical ovary, no adhesions had taken place. In all the cases both ovaries were affected, but the left principally so. In the first case it weighed nineteen pounds, and contained a great number of cysts and distinct tumours, exhibiting the marks of disease in many different stages and varieties, and presented every variety of appearance, from simple scirrhus or induration, to entire disorganization. In the third case, not seen by Dr. Russell until after the patient's death, the disease had continued for eleven years. The circumference of the body around the abdomen was nearly nine feet: on laying it open, an enormous diseased mass was found occupying its whole cavity, the intestines being pressed closely upwards towards the spine. This tumour was constituted by the left ovary, the weight of the solid and membranous part being thirty-seven pounds; of the quantity of fluid evacuated after death, and received into vessels, besides about ten pounds of loss, thirty-five pounds; and to this may be added eleven pounds of fluid, drawn off by tapping on the day of her death. Thus about ninety-three pounds avoirdupois may be taken as the true weight of this unexampled morbid production. The right ovary weighed about half a pound; all the abdominal viscera were healthy.

The bilateral operation of lithotomy.—Dr. Eve, Professor of Surgery in the Medical College of Georgia, has published a paper in the *American Journal of Medical Sciences,* on the bilateral operation of lithotomy, which he prefers to the ordinary lateral operation, as there is less risk of infiltration of urine, hæmorrhage, or peritonitis. He uses Dupuytren's lithotome caché, and thus describes the operation: the patient is prepared as for the ordinary operation. The instruments necessary are, a sound, with a larger groove than the common one, a convex cutting edge scalpel, the double lithotome, and calculus forceps. The existence of the stone having been clearly ascertained by the sound, the surgeon makes a crescentic or semilunar incision in the perinæum, midway between the anus and the bulb of the urethra, with its convexity towards the scrotum. He commences on the right, between the anus and tuberosity of the ischium, and terminates at the same point on the left side. This section is continued down to the sound, on the membranous portion of the canal, when the beak of the lithotome is adapted to it, and fairly introduced along it into the bladder. The slight curvature of the instrument corresponds to that of the urethra in its introduction. The sound is then removed, and the lithotome may be made to touch the stone; it is then to be half turned upon itself, so that its concavity looks towards the rectum, its blades expanded, and the instrument steadily, and gradually withdrawn, in the direction of the incision in the skin. This is to be done by lowering the handle. The finger may next be passed into the bladder, the stone felt, its long diameter ascertained, and the forceps employed to remove it. As regards the after treatment, Dr. Eve does not use any dressing, nor pass a catheter into the bladder: the patient is left entirely in the hands of nature; he has the advantage of lying on his back or on either side, and is only required to be carefully watched. It is surprising, Dr. Eve says, to what extent the wound in the perinæum contracts after the operation. Recovery is often remarkably rapid. The paper is illustrated by the detail of cases.

Use of vegetable acids in acidity of the stomach.—Dr. Tancy narrates in the *American Journal of Medical Sciences,* several cases to shew that the use of vegetable acids will afford relief in

acidity of the stomach, when soda has altogether failed. He has prescribed them in a great many cases, and, in nearly all, with very decided benefit. In cases of acidity arising from pregnancy, he has found the subacid fruits of great service, while those that were tart could not be borne, and where mineral acids were decidedly injurious, and where alcalies and absorbents were of little or no avail.

Ovarian disease.—An interesting case of ovarian disease is recorded by Dr. Judkins in the *Western Lancet*. The upper and posterior wall of the vagina became protruded, forming a sac filled with a fluid, which was several times punctured, and the contents evacuated. After death, which took place about sixteen months after the first appearance of the disease, a large encysted tumour was found in the abdomen, supposed to weigh twenty pounds or more, surrounded by and floating in two, or two and a half gallons of semi-purulent fluid. This tumour firmly adhered to the walls of the abdomen by strong attachments everywhere; it appeared to have its origin in the right ovary, which was a mass of morbid growth.

Vaccination during the existence of small-pox.—Mr. Daniell narrates, in the *Provincial Medical Journal*, the case of a young woman labouring under a formidable attack of small-pox, in whom vaccination was practised successfully, with the effect of rendering the variolous malady comparatively mild, and he is consequently of opinion that vaccination might be employed as a remedial agent in cases of small-pox, when that disease has positively entered the system.

Lithotomy.—Sir John Fife, according to a report in the *Provincial Medical Journal*, operated for stone in the bladder, on a boy, five years of age, in the following manner:—After passing the grooved staff, he made his first incision after the method of Dupuytren, from ischium to ischium, arching over the anus, the convex side of the incision passing close under the back of the urethra; he soon reached the staff, and then passed his knife into the bladder, according to Liston's plan, dividing only a small portion of the prostate. Uncommon difficulty was experienced in grasping the calculi, the larger one being of an oblong form, and pendulous from the fundns of the bladder, to the lining membrane of which it was firmly attached. The smaller calculus rolled towards the neck of the bladder, and often eluded the forceps, but was eventually caught and extracted. The patient recovered. Sir John Fife's reasons for departing from the ordinary mode of operating are: first, to avoid the cutting of the bulb; secondly, to protect the rectum by the more satisfactory interposition of the left fore-finger; and, thirdly, to open the urethra further back, and close to the anterior edge of the prostate. He prefers Liston's mode of opening the bladder, to that of Dupuytren's, alleging that it is more satisfactory to a surgeon to dissect his way by recognizing the fibres he divides, than to assist himself by any mechanical contrivance like the bistoire cachée, besides the objection to a double incision into the prostate, when a single one, half through, may suffice. Sir John Fife considers his mode of operating to be more suitable for adults than children.

Manufacturing human beings.—Dr. Caldwell states, in the *New York Journal of Medicine*, that, nearly forty years ago, a distinguished and well-known professor of chemistry declared, in his presence, and in his house, that, by a chemical process, *he could make a human being*. About the same time, a book was published in Philadelphia, by a gentleman with whom he was intimate, in which it was openly asserted that the time would soon arrive when, by the arrangement of a given kind of matter in a given way, and the passing through it of a stream of electricity, *a man might be crystallized!* This out-Liebig's Liebig.

Poisoning by acetate of lead unattended by fatal symptoms.—Dr. Hviding, of Weile, (Denmark,) has published a case which is remarkable on account of the large quantity of metallic salt taken into the stomach, without causing death, and so far supports the practice of those physicians who prescribe acetate of lead in considerable doses as a remedy in phthisis pulmonalis and abdominal typhus. A young girl, who was subject to constipation, was in the habit of taking, from time to time, thirty grammes of sulphate of magnesia, a dose of which she kept by her. One day wishing to make use of it, she went to the drawer where she had deposited it, and took from it a white powder wrapped in paper, not knowing that another person had deposited, in the same bureau, some acetate of lead for the purpose of preparing Goulard water. She took this powder, the quantity of which was nearly half an ounce, in a cup of broth, and two hours afterwards experienced violent pain in the stomach, followed by vomiting, the latter symptom persising without interruption till the evening, when the disorder assumed a bilious character. She however, had not any suspicion that she was in the slightest danger. It was only at the expiration of three days, when the abdomen became very tense, that, seeing the constipation had resisted the use she had made of her usual remedy, and her attention being called to the metallic taste with which her mouth was impregnated, she mentioned these symptoms to the person who had deposited the poison in the drawer, who, alarmed at the error that had been committed, sent immediately for Dr. Hviding. This gentleman, considering the long period which had elapsed since the ingestion of the poison, thought it useless to have recourse to emetics, but prescribed a dose of castor oil and a diet of oatmeal gruel for sixteen days. Under the influence of this treatment the abdominal pain ceased, the alvine evacuations took place daily, and the patient's health was entirely re-established. Dr. Hviding mentions, on this subject, the case of another patient, who, instead of using topically some Goulard water prescribed for an inflammation of the eye produced by a wound, took three table spoonsful of it internally, and that without feeling any other inconvenience from it than slight pain in the stomach.

Disease of the maxillary antrum. Dr. J. Greenwood narrates in the *American Journal of Dental Science* the case of a young man, twenty-two years of age, who applied to him to have a middle molar tooth of the upper jaw filled. Dr. Greenwood cleaned out the cavity, and performed the operation without occasioning any pain or inconvenience, the pulp and branches of the medullary canal having apparently been destroyed for some time. In the course of a week after the operation the patient returned, complaining of a heavy pain in the head, and then stated that the tooth had previously annoyed him before it was stopped. On removing the stopping a very strong and fœtid smell was emitted from the aperture, followed by a discharge of thin discoloured fluid. Creasote and cotton wool steeped in laudanum were inserted into the cavity, but he returned the next day complaining of a sensation as if molten lead was in the cheek-bone, and that he could not use his right arm (he was by trade a carpenter) on account of weakness, and the constant pain and heaviness in the head and the muscles of the cheek. He also experienced a drowsiness, yet could not get rest on account of the continued torpid feeling accompanied by twitchings in the region of the eye, and the muscles of the face. The tooth was extracted, after which considerable pus followed, accompanied by a sanguineous discharge from the socket. This being arrested, Dr. Greenwood made an aperture into the antrum with a straight three-sided perforator, which was introduced gently by a spiral rotatory motion, following one of the facial alveolar fossæ about an inch or more into the sinus. Immediate relief was obtained, and a considerable flux of fœtid dark coagulated blood and pus followed. The orifice made by the perforator was the size of a tobacco-pipe stem; it was enlarged, and when the discharge had somewhat ceased, some raw cotton was wrapped round the end of a piece of straight iron wire, which having been moistened previously with a mixture composed of muriatic acid, creasote, and rose water, was forced into the antrum. This was repeated three times; a dry piece of lint being introduced for the purpose of absorbing the impurities after each; finally cotton, saturated with the solution was introduced, and remained in the cavity until the next day, when the operation of cleaning out the cavity with a weaker lotion was repeated. In three days Dr. Greenwood saw the patient again, and injected a solution of acetate of lead and ordered gentle aperients. The discharge from the sinus continued, but he was enabled partially to use his arm. From this time, by the use of aperients, and syringing the cavity with *suds* made from tepid soft water and old Castile soap, and by the external application of equal parts of tepid water, vinegar, and laudanum, the cure was completed.

Glanders in the human subject.—M. Landouzy narrates the following case of glanders, occurring to a labourer from an accidental bite by a glandered horse. Two days after the injury, all the symptoms of acute glanders manifested themselves; pustular eruption, dyspnœa, dull sound of the lungs, diminution of the respiratory murmur, abscess, &c., and in the midst of all these symptoms, a phenomenon not described hitherto, namely, opacity of the cornea in both eyes. The patient died at the end of a fortnight. At the autopsy, an abundant eruption was observed on the thorax and abdomen, the bronchi were covered with a miliary eruption, the lungs perforated by abscesses in all directions, the liver and spleen manifestly increased in size, a miliary eruption in the intestines, both above and below the cœcum, which itself was ulcerated in seven places. This case is remarkable for the following circumstances; first, inoculation of glanders by a bite; secondly, among the symptoms, opacity of the cornea, and in the alterations of anatomical structure, ulcerations in the cœcum. M. Landouzy observes that the wound was cauterised with the butter of antimony, but as three days elapsed before surgical aid was called in, it was entirely without effect. The animal, it appeared, had been ill for six months, a fact proving that the disease may be communicated in the acute form from a horse affected chronically.

Diabetes mellitus cured by alkalies and sudorifics.—Messrs. Mialhe and Contour have detailed a case of diabetes which they treated successfully by alkalies and sudorifics. The patient was a man forty-three years of age, in whom the disease first appeared after an abundant hæmorrhage from piles. The presence of saccharine matter in the urine had been ascertained for a long period, the quantity being about an ounce and a half to a pint; the weakness of the patient was extreme; there was no transpiration, and no inclination to defæcation. The patient was put upon animal diet, and the use of vapour baths and flannel was prescribed. The following mixture was ordered for him to be taken during eight days:—℞ Sodæ bicarb. ℈iv., magnes. calcinat, ℈j. At the end of eight days the dose of bicarbonate of soda was gradually increased, and carried successfully to six, eight, ten, and twelve scruples, the quantity of magnesia remaining always the same. Under the influence of this treatment the amount of sugar in the urine continually decreased. At present there are not any traces of it, although the patient takes milk, bread, fruit, &c., and his strength, as well as his functions, are perfectly restored. Messrs. Mialhe and Contour explain the cure in this case by the fact, that under the influence of alkalies the assimilation of sugar became possible, the diabetic affection consisting not in an ultra-stomachal saccharification, but, in reality, in a defect of assimilation of the sugar derived from the aliments. This defective assimilation itself, according to them, is owing to the blood of diabetic patients not containing the proportion of free or carbonated alkali necessary to effect the decomposition of the sugar.

Extirpation of the Spleen.—M. Berthet has published the details of a curious case of extirpation of the spleen in the human subject. An individual in a quarrel was stabbed with a knife in the left side. The author called in eight days after, recognised a considerable tumour formed by the spleen, which exhaled a strong odour of putrefaction. He cut it out, and after a few methodical dressings the patient got well, and lived thirteen

years and a half. His digestion was generally well performed, a circumstance which induces the belief that the spleen is an organ not more essential to life in man than in the animals from which it has been removed by experimental physiologists. At the end of this time, he died of pneumonia. At a *post mortem* examination, a very small portion of the spleen was found, no bigger than a filbert, adhering to the external parietes of the stomach.

Use of blisters.—Dr. Henry Bennet avers, in the *Lancet*, that large blisters applied to the skin, and allowed to remain twenty-four hours, without the interposition of oiled paper, or the use of camphor, or any other preparation, are very seldom followed by symptoms of urinary irritation; when it does exist, it is nearly always very slight, and easily subdued by mild antiphlogistic remedies, such as diluents, poultices to the hypogastrium, &c.; and he thinks that the formation of false membranes at the inner surface of the bladder, described by M. Morel Lavellée, as occurring in cases of irritative inflammation of that surface, from the application of blisters, must be exceedingly rare, unless under the influence of epidemic causes. He is strongly in favour of the use of blisters, as counter-irritants in the treatment of acute inflammatory diseases; and observes that they act as derivatives, by the local inflammation which they create, and as depletives, by the abstraction of serum from the economy. He has seen Velpeau employ blisters as large as eight, ten, and sixteen square inches in size. They were invariably sprinkled with camphor.

Hydrostatic bed.—An anonymous writer recommends Dr. Arnott's water-bed, as a means, in many cases, of procuring undisturbed sleep. He also points out an error in its construction, by there not being an opening left for the escape of the air that collects on the top of the water, so that when the patient first lies down upon it, the air contained within (under) the mackintosh cloth, causes this to bulge, on either side of the body, and the bed is thus really more of an air-bed, supporting the incumbent weight by the tension of the cloth, as a hammock does, than a water-bed. A hole made by a gimlet near the top of the case would rectify this.

The ergot of rye.—Mr. Liston details a case of profuse hæmorrhage from the face, consecutive on a gun-shot wound, in which the source of the bleeding could not be detected. Mr. Wright, in whose practice the case occurred, directed the application of a very strong decoction of the ergot of rye, which had the effect of instantly stopping the bleeding; a clot was produced; there was not any recurrence, and the patient did well. Mr. Liston adds, that the oil of ergot is reputed to be very effectual as a styptic, and says he shall certainly use it, the first favourable opportunity.

GOSSIP AND NEWS OF THE WEEK.

Royal College of Surgeons.—Gentlemen admitted Members, August 28th, 1844:—C. P. Slaytor, G. Fitzgerald, J. S. Maskew, G. Love, W. Rankin, R. Le Marchant, T. M. Morton, F. Barnett, J. M'Gowan, G. M'Culloch, G. Flint, R. White.—Admitted August 30th, 1844:—W. Finer, D. Hamilton, J. Pearson, G. Manning.

Apothecaries' Hall.—Gentlemen admitted Members, 29th August, 1844:—John Taylor Sharp, John Woods, James Clifton, John Heynes, Walter Clegg.

The Mesmeric Influence.—The wonders of mesmerism are not altogether unknown to the people of Leicester, but a case has occurred this week which has eclipsed all previous facts, either here or at a distance. We allude to that of the amputation of a limb on Thursday last. The patient is a young woman of the name of Mary Ann Lakin, 16, Fleet-street, in this town, who had been afflicted with a disease of the knee-joint for four years. The precise nature of the disease we do not know, but it was attended with enormous swelling of the limb, and with such excruciating pain as to prevent anything like consecutive rest for a long period. By these pains and want of sleep she had become reduced to a skeleton, and there was every probability that her life must be sacrificed or the limb amputated. In this critical state of the case, about a month ago, it was suggested that mesmerism should be tried on the patient, and it was found that its influence was of the most beneficial and soothing nature. Under its influence pain would cease, and the patient would sink into perfect and refreshing repose. As amputation of the diseased joint was deemed essential by her medical attendant, it was decided that the operation should be performed while in the mesmeric state. Accordingly, 12 o'clock on Thursday morning was fixed upon for the operation to take place. Mr. Hollings was the mesmeriser, and Mr. Tosswill the operator, besides whom there were present Dr. Shaw, and Messrs. Paget, Seddon, jun., Downing, &c. Mr. Hollings having mesmerised the patient, which was accomplished in about nine minutes, Mr. Tosswill proceeded to perform the operation. The limb was taken off within about five inches of the hip joint, the spot measuring 33 inches in circumference where the amputation took place, and which was effected in two minutes and a half. During the operation an all but inaudible moaning was heard, and a slight movement of the body was perceptible; but as far as could be judged there was an entire absence of pain. This was evinced by the countenance preserving throughout the greatest placidity, not a single motion of a muscle indicating such sensation. On being demesmerised, the patient was not aware of what had taken place till informed by those in attendance. In the afternoon great pains were felt in the loins, attended with considerable writhing of the body from the contraction of the muscles, but on resorting to the mesmeric influence these gradually ceased, the patient falling into a calm sleep, which lasted an hour and forty minutes, and when aroused all pain had entirely left her, and has not been felt since. When facts like these have occurred at a distance, some degree of discredit has been attached to them from a suspicion that they were not well authenticated. In this case, we do not pretend to decide anything about the nature of mesmerism, but the proceedings are altogether so astonishing, and at the same time so well attested, by the presence of several distinguished members of the medical profession, that no reasonable mind can reject them. One thing seems established by this case, that whatever the mesmeric state may arise from, it is capable of being made available for important medical and surgical purposes.—*Leicester Mercury.*

Clerkenwell.—Yesterday, William Wright, dressed as a groom, was charged with numerous frauds on medical gentlemen.—Mr. Allsop, a surgeon, residing in Sloane-square, Chelsea, (being a Quaker) affirmed that on the evening of the 8th ult. a person resembling the prisoner came into his shop and directed witness to send two pills and a black draught, together with change for half a sovereign, to 40, Cadogan-place. The articles were accordingly forwarded thither, but in half an hour the messenger returned with a bad five shilling piece.—Joseph Philips, in the employment of Mr. Allsop, swore that on the evening in question the prisoner met him near his master's residence, and having obtained the medicine gave witness a bad five shilling piece, which he handed to his master.—Mr. Henry Jenkinson, surgeon, 8, Barnsbury-place, deposed that between 8 and 9 o'clock the prisoner came into his shop, and ordered a black draught and two pills to be sent to Mr. Lane, of 40, Canonbury-square. Witness again asked him for whom the pills were, and he said for Mr. Lane.—Mr. Combe: Why did you suspect his story?—Witness: I knew Mr. Lane could not be in want of pills, for the gentleman has been dead for some time. (A laugh.) Witness, however, told him he would send the medicine. The prisoner said, "Take care and send the change for a sovereign as well, that you may be paid." The prisoner went away, but witness followed, and, seeing him in company with another suspicious-looking character, with whom he was evidently leagued, gave him into custody.—John W. S. Coward, a surgeon, living at 11, Minerva-terrace, Barnsbury-park, deposed that on the 24th ult. the prisoner ordered two pills, a black draught, and change for a sovereign, to be sent to Mr. Jones's residence, No. 28, Barnsbury-park. The medicine and change were sent accordingly. The prisoner and his confederate met the messenger, took the medicine and change from him, and gave in return a counterfeit sovereign. The messenger did not, however, discover the coin to be base until he returned home.—The prisoner cross-examined each with the adroitness of an old hand, and denied ever having seen any of the parties before.—Sergeant North prayed the prisoner's remand, in order that numerous other cases which had come to his knowledge might be brought against him.—Mr. Combe ordered depositions for trial to be taken in the cases which were complete, but remanded him eventually.

Prairie Surgery.—I have heard of a surgical operation, performed at this point, in the summer of 1826, which, though not done exactly *secundem artem*, might suggest some novel reflections to the man of science. A few days before the caravan had reached this place, a Mr. Broadus, in attempting to draw his rifle from a wagon, muzzle foremost, discharged its contents into his arm. The bone being dreadfully shattered, the unfortunate man was advised to submit to an amputation at once, otherwise, it being in the month of August, and exceedingly warm, mortification would soon ensue. But Broadus obstinately refused to consent to this course, till death began to stare him in the face. By this time, however, the whole arm had become gangrened, some spots having already appeared above the place where the operation should have been performed. The invalid's case was, therefore, considered perfectly hopeless, and he was given up by all his comrades, who thought of little else than to consign him to the grave. But, being unwilling to resign himself to the fate which appeared frowning over him without a last effort, he obtained the consent of two or three of the party, who undertook to amputate his arm, merely to gratify the wishes of the dying man; for in such a light they viewed him. Their only "case of instruments" consisted of a handsaw, a butcher's knife, and a large iron bolt. The teeth of the saw being considered too coarse, they went to work, and soon had a set of fine teeth filed on the back. The knife having been whetted keen, and the iron bolt laid upon the fire, they commenced the operation, and, in less time than it takes to tell it, the arm was opened round to the bone, which was almost in an instant sawed off, and, with the whizzing hot iron, the whole stump was so effectually seared as to close the arteries completely. Bandages were now applied, and the company proceeded on their journey as though nothing had occurred. The arm commenced healing rapidly, and in a few weeks the patient was sound and well, and is, perhaps, still living to bear witness to the superiority of the "hot iron" over ligatures in "taking up" arteries.—*Journal of a Santa Anna Trader.*

The mean term of life diminishes northward in Great Britain. The highest in the south-western counties is in the following order:—Sussex, 55; Hants 53; Devon 56. The county of Lancaster has a mean of 36, the lowest county; in which Liverpool rates at 26. Human life in Devon is on the average, twenty years longer than in Lancaster, and thirty longer than in Liverpool.

At the late graduation in the University of Edinburgh, William Keeper, Esq., M.D. Clogher, Tyrone, was awarded a gold medal for his inaugural dissertation "On the Pathology of Nutrition."

Obituary.—On the 27th ult., Thomas Hassall, Esq., of Addison Road, Kensington, retired army surgeon, aged 73.

Caution for Medical Practitioners Residing amongst the Dankalli.— I was prevented from bleeding a patient by recollecting the case of an unfortunate Armenian doctor, who, in Suikin, two years before, had been sacrificed by the populace on account of the death of a patient whom he had thus treated. The Turkish governor of the town, before whom the complaint was made of this treatment, in vain interceded in behalf of the doctor: his expostulations had no effect, and he was obliged to permit that which he was unable to prevent, and the accused was taken from his presence to the outside of the walls of the town, where he was barbarously executed, in the usual manner, by the weapons of the friends and relations of his deceased patient. I heard of this in Aden, the

fact having been reported by the European consuls in the neighbouring ports to their respective Governments, and, in consequence, a representation was made to the Porte upon the subject. In such countries, if a traveller be requested to afford assistance to sick persons, for whom no hope of recovery exists, his best practice will be, to recommend the friends of the patient to pray a certain number of times to Allah, or, if he must do something himself, let him give them some written charm or other, but never by any means administer medicine, or perform the least operation. In cases when active measures are adopted, and the patient, to the surprise of himself and others, does get well, the cure is always ascribed to Allah alone; but, should he die, the doctor is considered responsible for his death, which is certain to be attributed to him or his medicines. To show how careful a person ought to be, I shall relate a little incident that occurred to me whilst we were staying at our last halting-place. A woman came for some medicine for her husband, who was said to be very ill indeed. I could not go to see him, as he lived ten or twelve miles from the Kafilah. As the woman was very importunate for medicine, which, having no knowledge of the case, I at first refused, to get rid of her I opened a package of tea, and gave her a small spoonful, wrapt it up in a bit of old newspaper, and sent her away with directions how to use it. The next morning, however, I found her making a terrible noise at the entrance of my hut, saying that her husband was a great deal worse, and all owing to the medicine he had taken. No one could understand the simple character of the remedy I had sent him, so all my explanations went for nothing, until I happened to see, sticking between her skin petticoat and her black hide, the identical paper I had put the medicine in; and snatching it from her waist, I found the tea still in it, actually untouched. This evidence of the woman's imposture was conclusive, and she was taken away by those of her friends who, just before, were making loud demands of compensation for the injury they asserted I had done.—*Johnston's Travels in Abyssinia.*

A SELECT PRACTICAL FORMULARY.

TRANSLATED FROM THE FRENCH OF M. FOY, PRINCIPAL PHARMACIEN OF THE HOSPITAL ST. LOUIS, AT PARIS.

(Continued from page 418.)

POMMADE AGAINST THE ITCH (Lison): one ounce of litharge, dissolved in four ounces of olive oil, at a gentle heat. Mode of exhibition—half an ounce to be used evening and morning, in frictions on the hands and feet, and under the arm-pits.

POMMADE AGAINST THE ITCH (Alibert): four drachms of sublimed sulphur, two ounces of lard, two drachms of sulphuric acid, mixed together.

POMMADE AGAINST THE ITCH (Hospital): three ounces of sublimed and washed sulphur, four ounces of well-triturated chloruret of lime, twelve ounces of lard, mixed together. Mode of exhibition—this quantity is sufficient for ten or twelve days, to be used in frictions evening and morning, on the parts occupied by vesicles. A bath, or general lotions must be used every second day, to cleanse the surface of the body, and facilitate the action of the frictions.

POMMADE AGAINST HERPES CIRCINNATUS: one ounce of lard, seventy-two grains of the sulphuret of lime, fifteen grains of camphor, mixed together. Mode of exhibition—a piece as large as a small nut used in each friction.

POMMADE AGAINST HÆMORRHOIDS (Cullen): one drachm of powdered nut-galls, eight drachms of lard, mixed together. Mode of exhibition—a drachm evening and morning, in gentle frictions. *** In the pommade of Dr. Wade, there is rather more nut-gall, and also a drachm of camphor, and two drachms of tincture of opium.

POMMADE AGAINST IMPETIGO SPARSA: one ounce of cerate, thirty-six grains of red sulphuret of mercury, ten grains of camphor, mixed together. Mode of exhibition—used in frictions every evening, on the diseased parts. The quantity used is subordinate to the diseased surfaces.

POMMADE AGAINST LICHEN (Biett): twenty-four grains of the proto-nitrate of mercury, twenty-four grains of camphor, four drachms of lard, and four drachms of oil of sweet almonds, mixed together. Mode of exhibition—inunction practised every evening on the diseased parts, with a sufficient quantity of the pommade.

POMMADE AGAINST LICHEN: eighteen grains of alum, fifteen grains of camphor, one ounce of lard, mixed together as above.

POMMADE AGAINST MENTAGRA (Hopital St. Louis): one to two drachms of the proto-sulphate of mercury, sixteen drachms of lard, mixed together, and used topically on the diseased surface.

POMMADE AGAINST PRURIGO (Hopital St. Louis): two drachms of extinct lime, half a drachm of subcarbonate of soda, half a drachm of liquid laudanum, one ounce of lard, mixed together. Used in inunction on the diseased parts.

POMMADE AGAINST PRURIGO: one ounce of lard, one ounce of juice of the house-leek, one ounce of oil of St. John's wort, one ounce of lime-water, mixed together as above.

POMMADE AGAINST SCROPHULOUS SYPHILIDES (Biett): twenty-four grains of the ammoniacal proto-chloruret of mercury, twelve grains of camphor, one ounce of lard, mixed together. Mode of exhibition—a sufficient quantity used topically on the diseased parts.

POMMADE AGAINST TINEA: equal parts of finely powdered soot and lard, mixed together. Mode of exhibition—two frictions daily, with a piece as large as a nut.

POMMADE AGAINST TINEA: two ounces of powdered charcoal, two ounces of flowers of sulphur, one ounce of soot, mixed together, and incorporated with seven ounces and a half of lard. *** The head having been washed with soap and water, the diseased parts are to be rubbed every third day with three or four drachms of this ointment.

POMMADE AGAINST TINEA (Hopital St. Louis): three drachms of powdered sulphuret of potash, three drachms of subcarbonate of soda, three ounces of lard, mixed together. Mode of exhibition—after the hair has been cut off, and the crusts which cover the patient's head removed by the aid of poultices, the affected parts are rubbed with this pommade, and the head is afterwards covered with blotting-paper.

POMMADE OF CYRILLO: one drachm of the deuto-chloruret of mercury, one ounce of lard, carefully mixed together. Mode of exhibition—in frictions, in the dose of half a drachm to a drachm at a time. Antisyphilitic.

POMMADE, EPISPASTIC: eight parts of white wax, fifty-two parts of narcotic ointment, (unguentum populeum), melted at a gentle heat in a porcelain or Fayence vessel, and two parts of powdered cantharides gradually incorporated, the mixture being continually stirred, until it is cold.

POMMADE, EPISPASTIC—a milder ointment—(Henry and Guibourt): two parts of powdered cantharides, digested in a water-bath, in forty-two parts of lard, strained with expression, then filtered, and six parts of white wax, with one of nerval balsam, added.

POMMADE OF MEZEREON (Coldefy): an ointment prepared by digesting sliced mezereon bark in melted lard, and white wax, for twelve hours. Used for dressing blisters. It has not any action on the bladder.

POMMADE OF HELMERICH (Hopital St. Louis): two ounces of sublimed sulphur, one ounce of sub-carbonate of potash, four ounces of lard, mixed together. Mode of exhibition—the body of the patient is to be brushed, while in a saponaceous bath, so as to rupture the vesicles of the itch, then an ounce of this ointment is to be used at once in frictions, three times a-day before the fire (Dr. Burdin): the medium duration of treatment is from ten to thirteen days.

POMMADE, HYDRIODATED (Form. Hosp. Paris): one drachm of the ioduret of potassium, one ounce of lard; the ioduret is to be triturated, first by itself, then a small quantity of the lard added, and lastly, the whole incorporated together. Mode of exhibition—half a drachm for eight days, afterwards a drachm, to be used in frictions, evening and morning, in goitres, scrophulous tumors, enlargement of the testicles, &c. *** In the formulæ of Messrs. Magendie and Coindet, an ounce and a half of lard is ordered by the first, and two ounces by the second.

POMMADE, HYDRIODATED (Pierquin): two drachms of hydriodate of iron, two ounces of lard, very carefully mixed together. Mode of exhibition—a piece as large as a nut, used in frictions, evening and morning, on the inner and upper part of the thighs, in cases of amenorrhœa and fluor albus.

POMMADE, IODURETTED (Form. Hosp, Paris): one drachm of iodine, three drachms of the ioduret of potassium, three ounces of lard, mixed together, as is done with the hydriodated ointment.

POMMADE, IODURETTED (Hopital St. Louis) No. 1: ninety-six grains of ioduret of potassium, twelve grains of iodine, two ounces of lard.

POMMADE, IODURETTED (Hopital St. Louis) No. 2: two drachms of the ioduret of potassium, eighteen grains of iodine, two ounces of lard.

POMMADE, IODURETTED (Hopital St. Louis) No. 3: two drachms and a half of the ioduret of potassium, twenty-one grains of iodine, two ounces of lard.

POMMADE, IODURETTED (Hopital St. Louis) No 4: two drachms and a half of the ioduret of potassium, twenty-four grains of iodine, two ounces of lard.

POMMADE, IODURETTED (Baudelocque): twelve grains of pure iodine, seventy-two grains of ioduret of potassium or lead, or thirty-six grains of the ioduret of mercury, one ounce of lard, mixed together. Used to dress scrophulous ulcers, and in frictions on swellings of the same kind. The dose varies from half a drachm to a drachm, and more, according to the extent of the diseased surface.

POMMADE, IODURETTED WITH OPIUM (Lemasson): fifteen grains of iodine, seventy-two grains of the ioduret of potassium, two ounces of lard, two drachms of Rousseau's laudanum, mixed together in a porcelain mortar. Mode of exhibition—a very thin layer of this ointment spread upon lint, is used to dress scrophulous ulcers with. If there is much irritation, an emollient poultice is applied over it.

POMMADE, CAMPHORATED IODO-NARCOTIC (Hop. du Midi): twenty-four grains of the hydriodate of potash, eighteen grains of extract of hyoscyamus, eighteen grains of extract of conium, four grains of camphor, one grain of iodine, two drachms and a half of lard. A topical sedative for syphilitic, cancerous, and scrophulous ulcerations.

POMMADE, STRONG MERCURIAL—*unguentum Neapolitanum, unguentum mercuriale forte*: the codex directs this ointment to be prepared with equal parts of quicksilver and hog's lard. Frictions with the strong mercurial ointment are proper, not only in the treatment of syphilis, but also in puerperal peritonitis, metro-peritonitis, cutaneous inflammations, phlegmonous erysipelas, phlebitis, meningitis, paronychia, small-pox, conjunctivitis, serous enlargement of the joints, white swelling, inflammation of the skin, albuminuria, certain forms of ophthalmia, venereal buboes, anthrax, swelling of the eyelids in small pox patients, &c. Prof. Velpeau increases the discutient properties of mercurial frictions by previously denuding the skin by large blisters. He has thus advantageously treated white swellings, periostosis, the osteitis which precedes necrosis, and the swellings with a tendency to degeneration of the fibro-synovial, tendinous, and other sheaths. Mode of exhibition—the strong mercurial ointment is employed, sometimes in friction frequently repeated during the day, in quantities varying from twenty and thirty to seventy-two grains, and sometimes as a topical application on the denuded skin, in cases of osteitis, for example. It is employed alone, or combined with some other bodies, such as cerate, the wines of opium, extract of belladonna, cacao butter, &c., in very variable proportions.

POMMADE, MODIFIED MERCURIAL (Levicaire): with the view of preventing the salivation caused by mercurial frictions, Dr. Levicaire, a naval physician at Toulon, adds to the ounce of strong mercurial ointment, two drachms of the hydrate of lime, half a drachm of sal ammoniac, and one drachm of sublimed and washed sulphur.

POMMADE, MERCURIAL, WITH HONEY: it has been recommended to replace the strong mercurial ointment by the following compounds:—

No. 1—one ounce of quicksilver, two ounces of white honey.

No. 2—two ounces of quicksilver, two ounces of white honey.

No. 3—two ounces of quicksilver, an ounce and half of white honey.

No. 4—four ounces of quicksilver, one ounce and a half of white honey.

All these preparations have been tried at the Hopital du Midi, but have not presented any great advantages.

POMMADE, MERCURIAL, WITH OPIUM: one ounce of strong mercurial ointment, one ounce of opiated cerate, mixed together. Used as a topical application to indolent syphilitic ulcers, and on the abdomen in puerperal peritonitis.

POMMADE, SIMPLE MERCURIAL: see grey ointment.

POMMADE, SIMPLE MERCURIAL (Jadelot): one ounce of scraped white soap, softened in a water bath in one-eighth its weight of water, after which, two ounces of olive oil, and one ounce of calomel, prepared by steam, are to be added. The preparation is to be shaken each time it is used.

POMMADE, NERVINE: see nerval balsam.

POMMADE, OPHTHALMIC (Sanson, Velpeau, Sichel): one to three grains of white precipitate, one ounce of lard or cerate without water, mixed together on a porphyry slab.

POMMADE, OPHTHALMIC: one ounce of the preceding preparation, five to six grsmmes of liquid laudanum, mixed together. Mode of exhibition—a piece as big as a pin's head, to be inserted several times a day, between the eyelids, in cases of specks on the cornea.

POMMADE, OPHTHALMIC (Velpeau): one grain of melted nitrate of silver, one drachm of lard, mixed together in a porphyry slab. Used in different kinds of blepharitis. Mode of exhibition—a piece as large as a pea applied two or three times a day on the diseased parts, with the end of the finger, or of a probe. Before it is applied, all the crusts which cover the free edge of the eye-lids, should be removed by inunctions made with olive or almond oil, or with butter, or else by emollient poultices only.

THE HAND-BOOK OF BATHING. By a Physician. —*Sherwood and Bowyer.*—A useful little book, on an important subject. The writer has evidently acquired experience, and proves, here, that he can use it sensibly.

Metropolitan Mortality for the Week ending Saturday, August 17.

Causes of Death.	Total.	Average of 5 Springs.	Average of 5 Years.
ALL CAUSES	798	900	946
Zymotic, or Epidemic, Endemic, and Contagious Diseases	225	191	178
SPORADIC DISEASES—			
Dropsy, Cancer, and other Diseases of uncertain or variable Seat	103	106	111
Diseases of the Brain, Spinal Marrow, Nerves, and Senses.	119	159	157
Diseases of the Lungs, and of the other Organs of Respiration	196	233	286
Diseases of the Heart, and Blood-vessels	23	19	21
Diseases of the Stomach, Liver, and other Organs of Digestion	65	88	69
Diseases of the Kidneys, &c.	6	5	5
Childbirth, Diseases of the Uterus, &c.	8	9	10
Rheumatism, Diseases of the Bones, Joints, &c.	6	5	6
Diseases of the Skin, Cellular Tissues, &c.	...	1	1
Old Age	39	56	71
Violence, Privation, Cold, and Intemperance	26	25	26

No. 260.

SUMMARY.

SEPT. 14.

LECTURES ON THE THEORY AND PRACTICE OF MEDICINE, BY DR. C. J. B. WILLIAMS, M.D., F.R.S.:—
Dyspepsia and its varieties: the Inflammatory, the Atonic, and the Irritable—Their Form and Treatment—Pyrosis or Water-Brash—Symptoms and Treatment—The Irritable Form of Dyspepsia—Treatment—Analogous Affections 479

LITHOTRITY, LITHOTOMY, AND THE DISEASES OF THE URINARY ORGANS, BY W. B. COSTELLO, M.D. 481

EPITOME OF RECENT OPINIONS ON THE BLOOD, INFLAMMATION, AND ITS SEQUELÆ, BY G. D. DERMOTT, ESQ. 482

ON THE INFLUENCE EXERCISED BY TRAUMATIC LESIONS OF THE SPINAL MARROW ON THE FUNCTIONS OF THE GENITO-URINARY ORGANS WITH THE ANALYSES OF THE DIFFERENT SECRETIONS, BY — SEGALAS, M.D. 484

AN EXPERIMENT ON THE INFLUENCE OF ELECTRICITY ON THE TISSUE OF THE KIDNEY, AND ON THE EXCRETION OF URINE, BY E. H. DESPORTES, M.D., M.A.M., &c. 486

THE PHYSIOLOGY OF MATERIA MEDICA, as Established by the Latest Researches in Organic Chemistry, Physiology, Pathology, &c., by PROF. T. F. SOBERNHEIM .. 486

SELECTIONS FROM GERMAN JOURNALS, BY SIGISMUND SUTRO, M.D.:—
Experiments on Amylum or Starch 488
Camphine produced by the Action of Nitric Acid on Amber 488
Dr. Wohler on Butyric Æther 488
Odour of Castor 488
Caoutchouc as a Remedy for Tooth-Acho 488

TO CORRESPONDENTS 488

LEADERS:—
Sir James Graham and the Registration of the Profession.. 488
Silly Resolutions by a Medical Association 489

SIR JAMES GRAHAM'S NEW BILL.. 490

STATE OF MEDICAL FEELING.. 491

REVIEW:—
Popular Cyclopœdia of Natural Science, Zoology; Part I; by Dr. W. B. Carpenter 491

THE LEICESTER CASE OF MESMERIC AMPUTATION 491

THE LANCET'S ABANDONED INJUNCTION 491

PARISIAN INTELLIGENCE:—
On Diseases of the Eye, by Professor Velpeau, (continued) —Inflammations of the Cornea; their frequency, danger, and difficulty of establishing their treatment—Classification—Keratitis Diffusa—Ditto Ulcerosa 492
Dr. Vidal (de Cassis) on Orchitis and Lithotomy 493
Cyst of the Mamma containing Milk.. 493
Remedy against Pertussis 493
Secondary Symptoms of Syphilis 493
Academy of Sciences; Sitting of the 2nd Sept. 493
M. S. Fremy on Osmium and its Compounds.. 493
On the Fabrication of Sulphuric Acid.. 494
Academy of Medicine; Sitting of the 3rd Sept. 494
Discussion on some Points of Dr. Segalas' Memoir 494
M. Hoffman on the Administration of Pistacia Terebinth, in Asthma 494

POISONING BY ORNAMENTAL SUGAR 495

HOSPITAL REPORTS:—
King's College Hospital 495

PERISCOPE OF THE WEEK:—
Diseased Teeth 496
Prolapsus Uteri 496
Styrol 496
Cystiform Tumour in the Anterior Chamber 497
Neuralgia.. 497
Fluoride of Ammonium.. 497
Ammonia and Bisulphuret of Carbon 497
Amputation 497
Procidentia Vesicæ.. 497
Procidenta Vaginæ.. 498
Nitrate of Urea as a Diuretic 498
Preservation of Secale Cornutum 498
Carcinomatous Tumour of the Neck, mistaken for Aneurism 498
Melanotic Tumour of the Left Labium Pudendi 498
Fractures of the Clavicle 498

GOSSIP OF THE WEEK 498

METROPOLITAN MORTALITY TABLE 498

COURSE OF LECTURES ON THE THEORY AND PRACTICE OF MEDICINE.

Delivered by C. J B. Williams, M.D., F.R.S., Professor of the Practice of Medicine, and of Clinical Medicine, at University College.

WE have now to consider the subject of *dyspepsia*, or, as it is commonly termed, *indigestion*. You will find this state described under different forms, and arising from two opposite conditions: in one, from the stomach being too empty, and in the other, from its being too full. The three chief varieties of dyspepsia, according to practical men, are: first, disorder of the function of the stomach, chiefly of an inflammatory kind: secondly, the atonic species, which is connected with a great degree of weakness in the organ, and in the function connected with it; and, thirdly, the irritable kind, that in which the nervous system is greatly excited, and the various symptoms which take place are of the nervous character. These three varieties, the inflammatory, the atonic, and the irritable, sometimes occur in a manner so distinct, as to justify the division which has been made of them; but, in many instances, you find these different varieties run into each other, or become perfectly combined. Thus, for instance, the atonic variety usually arises from the food taken being either too hard to be digested, or the stomach being too weak to act upon it. But, if this continues long, the food acts as an irritating mass, and excites, not merely irritation or disturbance, but even inflammation, and thus the inflammatory form of dyspepsia becomes superadded. This is not at all an uncommon combination. Again, the inflammatory form of dyspepsia in nervous subjects sometimes passes into the irritable; that which is at first inflammation, often becomes, in nervous subjects, a sort of neurosis. Severe gastrodynia commonly occurs in the commencing stage of inflammatory dyspepsia. Still, however, making all these allowances, it is better in a practical point of view to group the different causes of indigestion into three classes: chiefly because the different forms require different treatment.

Firstly, the *inflammatory form*: this is a low degree of the subacute form of gastritis, in which there are symptoms of a low inflammation of the stomach; and this is particularly excited during the digestive process. The sensations complained of are: more or less heat, pain, and tenderness, chiefly at the epigastrium, or referred to the sternum; this is mostly felt after taking food. There is thirst, and the tongue commonly exhibits a red aspect, especially at the margin and the tip, and the papillæ are elongated; it often happens that the tongue is white and furred, and sometimes it is smooth and red, with a tendency to be dry; again, it may be glazed, as if it had been stript of the epithelium which covers it; sometimes, it is smooth and dry in the middle, and furred on the outside. I have seen ulceration of the tongue in this variety of dyspepsia. The fauces, too, in this disease, are very frequently red, and the uvula is somewhat elongated. There is sometimes slight inflammation about the whole mouth, and the lips are parched and dry. The bowels are commonly confined, and, in most cases, there is, with this irritation of the stomach, a tendency to vomiting. The urine is high-coloured and scanty, sometimes depositing a considerable quantity of lithic acid. Thirst, and a slight amount of feverishness, come on during the periods of digestion; the skin is dry and hot; acid perspirations may take place at night, and the pulse is quickened; the circulation, though accelerated, is weak; the feet are cold, and headache is often complained of. These different symptoms are increased on taking food, more especially stimulating aliments, or hot drinks. Under these circumstances, there may be an unnatural pulsation at the epigastrium, and pain, not only at this point, but likewise extending to the right or the left hypochondrium, and the region of the heart, as well as the back, and the left shoulder blade. The temper is commonly observed to be remarkably irritable, more particularly after meals, this being the period of the greatest discomfort. This variety is not so commonly accompanied by sour eructations and accumulation of wind, as the atonic form. It is apt to be attended by a disordered condition of the skin, and erythematous eruptions sometimes show themselves. Now, when these symptoms, which I have been considering, have continued long, and the strength has become greatly impaired, they are apt to pass gradually into those of chronic gastritis; in fact, organic disease appears to be a frequent result of the long continuance of inflammatory dyspepsia.

The chronic form constitutes one of the varieties of hypochondriasis. The causes of this form are sometimes merely temporary, such as: excesses of diet, especially stimulating food and liquors. It is not uncommonly produced by excessive indulgence in stimulating liquors, especially by those who are not accustomed to them; and it is produced, likewise, by some of the common causes of inflammation. Hot drinks, in excess, have been known to produce it; and, sometimes, the sea air will bring on an attack of gastritic dyspepsia. Irritating medicines, too, have a similar effect in some cases. It is apt to occur in persons of plethoric habits, and not uncommonly in hysterical females, or in connexion with amenorrhœa. This disease appears to be a kind of sub-acute inflammation. During the period of digestion, there is a greater flow of blood towards the stomach, than at other times, and this species of congestion, day after day, during the digestive process, keeps up the mischief.

The *treatment* is the same as for the slighter forms of inflammation; and, in a plethoric subject, it may be necessary to draw blood; but, as it commonly happens that the chief pain and discomfort are referred to the epigastrium, leeches, poultices, and sinapisms, may be all that is necessary, where the patient is too weak to bear a greater loss of blood; and these may be applied to the pit of the stomach, during the process of digestion. Internal medicines are of considerable efficacy in relieving this tendency to excessive inflammatory congestion. Small doses of mild mercurials, once or twice a day: hydrarg. cum cretâ, or blue pill, combined with narcotics, such as henbane or hemlock, followed by small doses of castor oil, are of considerable avail in unloading the vessels of the stomach and the intestines; besides drawing off the excess of blood in these parts, they fulfil another indication,—that of keeping the bowels in a moderately loose state. It is likewise necessary to moderate the action of the stomach, with cold drinks and alkaline solutions, and, if there be nausea or a tendency to severe pain, hydrocyanic acid may be added, with benefit, to the saline solutions. Mucilaginous drinks are useful in the same way; and iced or cold water, sipped frequently, is likewise of great utility. Sometimes, it is necessary to employ these during the digestive process, and sometimes before meals; or even the first thing in the morning. It is of the greatest consequence, in the treatment of this variety, to regulate the diet strictly, and to avoid stimulating food and drinks. Mild farinaceous food, gruel, arrow-root, sago, tapioca, &c., varied from time to time, sometimes in a more solid, and sometimes in the gelatinous state, and occasionally light puddings, may be given. For drink: barley-water, soda-water, toast-water, or whey, answer very well. It is always necessary, in these cases, to attend to the general health; there is generally a weak circulation, and the great object is to improve it. The patient should use constant exercise, avoiding cold winds, and taking care to clothe the body well. In chronic and old-standing cases, where the patient gets tired of medicines, considerable advantage is derived from sulphurous and saline waters: those of Harrowgate, and some other places. When the patient begins to be convalescent, he should gradually return to the use of animal food, taking care never to over-proportion its quantity or quality to the powers of the stomach: the return should be very gradual, indeed, to the use of stimulants.

The next variety is the *atonic dyspepsia*, called also *asthenic*, and which is attended by a loss of power in the stomach. This loss of power comprehends several kinds; there is not only a loss of muscular power, but a loss of functional power, from deficiency in the secretion of the gastric juice; and there is, also, disorder in the mucous secretion of the stomach. The symptoms of these cases are: frequently, loss of appetite; loathing and even nausea, or vomiting; the appetite is sometimes capricious, there being great craving, and still, at the same time, when the food is taken, there is a sense of great discomfort, with nausea and perhaps vomiting. There is also a feeling of weight in the stomach, and this organ cannot digest what is taken; there is, moreover, a feeling of distension after eating, obviously arising from flatulence. There are eructations, not only of gas, but also of solid matter and liquids, generally sour, though sometimes tasteless, and even saline. Muriatic and acetic acids mostly abound in these secretions from the stomach. The eructations, that take place after eating, very commonly contain acetic acid, and, in that case, a kind of fermentation takes place. Sometimes, the eructa-

tions consist principally of water, or a watery saliva, and diluted mucus. The *waterbrash* is of this kind. Often, there is a bad taste, and a disagreeable smell in the mouth; and sometimes the mouth is lined with a fur, which is very fœtid and offensive. These varieties of bad tastes may occur chiefly after eating, but in some cases they are perceived when the stomach is empty. Sometimes, eating removes a great deal of it. The tongue, in this variety of dyspepsia, is considerably altered, though not exhibiting the dark redness of the last kind; it is furred more or less, and covered with a thin whitish coat; frequently, it is much swollen; the breath is often fœtid, and the bowels are commonly costive; the urine is high-coloured and disordered: it is scanty and turbid, and sometimes loaded with urea, while, at other times, it is very clear; sometimes, there are phosphatic and other deposits found in it. The pulse is weak and usually accelerated; the extremities are cold, and the skin very moist, perspiration being easily produced. There is, commonly, more or less head-ache, vertigo, and an indisposition to exertion; in fact, general languor of the body and mind.

Now, this form of dyspepsia is usually connected with great debility of the stomach, and of the system generally. It occurs in cases of general weakness, where there is a state of anæmia. Sometimes, however, this affection is entirely local. Thus, for instance, a person who has had a surfeit, in whom the stomach is habitually weak or irritable, after taking too great a quantity of food, may have an attack of this species of dyspepsia, with many of the symptoms I have been describing. Very poor living, long continued, is apt to produce a similar effect. Hence, we find this kind of dyspepsia commonly occurring among the lower orders. Sometimes, too, frequent irregularities of diet, more particularly in persons of weak constitution, engender this form of disorder. It occurs most commonly in persons of weak and relaxed habits, as well from the causes I have mentioned, as from indigestible food, or food ill-adapted to the capacity of the stomach of the individual; and very slight causes will excite it again and again. Persons of very sedentary habits, who are closely confined in bad air, or are accustomed to intense mental application and great mental anxiety, thus exhausting the vital energies, are found to be very subject to this kind of dyspepsia. Circumstances which weaken the circulation, and long-continued neglect of the function of the lower part of the intestinal canal, are apt to promote the occurrence of these attacks.

You will, therefore, understand that this disease is essentially a weakness of the stomach as a muscular organ, but, more particularly, as an organ of secretion and digestion. The secretions of the stomach are, sometimes, imperfectly mixed up with the products of the disordered digestion. A variety of this kind has long been known under the name of pyrosis, or water-brash: it is one of the varieties of diseased secretion, and is characterised by eructation of liquid. I need not consider it as a separate variety, because it is but one of the symptoms occurring in atonic dyspepsia. Sometimes, this secretion takes place in such quantities as to merit the term of flux. Water-brash occurs very frequently among the poor Scotch and Irish, who live on potatoes and porridge, and in others who are of a lax habit, and get their stomachs disordered from a variety of causes. Now, with regard to the *symptoms* of this affection: it may present itself under an acute form, and these acute attacks depend less on the permanent weakness of the organ, than upon the effect resulting from some recent agent; as, for instance, on some surfeit of food, or food of an improper character. Under these circumstances, when the stomach is very much disordered, and the tongue is greatly furred, much benefit is often derived from the exhibition of an emetic, which gives a stimulus to the stomach, clearing away the diseased secretions, and altering them in character. By this means, the stomach is enabled to recover its healthy tone. Purgatives are often useful, more particularly the bitter kinds, which are tonic to the stomach, and, at the same time, act as aperients to the canal below it. For instance, rhubarb and aloes, combined with magnesia and alkalies, are very useful. In anæmic cases, iron is the great remedy. There are, however, particular symptoms to be treated in indigestion, that are met with, perhaps, from time to time only. For instance, flatulence and heart-burn, when they occur, are commonly subdued by aromatics: as peppermint, sal-volatile, or æther, in combination with liquor potassæ, carbonate of soda, or magnesia. All these antacids and carminatives tend to counteract the flatulence. Nausea and bad taste are greatly relieved by mild salines: citrates of potash and soda, or tartarised soda; or some of these salines may, in certain instances, be combined with aromatic waters. I have occasionally found advantage from combining them with creasote. Seltzer water is, also, serviceable in these cases. In water-brash, the nitrate of bismuth, given in doses of five to ten grains, with gum mastic and sugar, is a good remedy; and, if there is acidity, calcined magnesia may be combined with it. In case of nausea being present to a great degree, hydrocyanic acid may be given with much advantage. But, the most important point in the treatment is, to give tone to the stomach, to allay its excitability, and to get into proper action its secretory function. Now, this is done, perhaps, more effectually by diet and regimen, than by medicines; nevertheless, I have found tonic remedies often render very great aid. Dieting the patient is of great importance, and the stomach should have a proper degree of rest. Weak organs are not benefitted by total rest, though, of course, they are diseased by too much exertion; the exertion should be moderate. It is, therefore, of the greatest consequence in the treatment of atonic dyspepsia, to give the meals at stated periods and fixed hours, keeping carefully to those hours, and taking care that the individual gives sufficient rest to the stomach and the whole system, to enable the digestive process to go on as favourably as possible. The stomach is to be, in a measure, coaxed to do its proper work. In atonic dyspepsia, instead of gruels and slops, you find some solid food agrees better, and you may commence with animal diet, in small quantities, with a sufficient mixture of farinaceous food: bread, not too stale, nor yet too new; and a little rice, exceedingly well boiled. Rice should not be boiled in a cloth; that is a complete perversion of a very useful vegetable. A little cauliflower, and macearoni, may be taken. The lean of a mutton chop, or a slice from a joint, when hot, often agrees very well, and may be readily digested, where more would cause a severe fit of indigestion, and where slops, or broths, &c., would but increase the malady. If this is not sufficient to sustain the patient, a meal of this kind may be made twice a day. Sometimes, meat at breakfast, either with tea or coffee, in moderate quantity, or even with cold water, is a good plan of diet. A stimulant is often very useful, and a little weak brandy and water may be given, but the quantity of liquid should not be considerable. Dyspeptics should dine at very regular hours; taking breakfast at eight or nine, dining at one or two, and introducing, between dinner and the next solid repast, a liquid meal, consisting principally of weak tea, and eating very little with it. A biscuit and a glass of wine answer very well between meals. It is a great mistake to suppose that the patient must be absolutely starved. You must draw out the powers of the stomach, by means of diet and remedies, taking care to avoid fresh causes of indigestion. It is highly beneficial to promote the general strength and health, by exercise of a moderate kind in the open air, but not immediately after meals. An hour or two after breakfast, and after dinner, exercise should be taken, but not to so great an extent as to produce fatigue. Lastly, the medicines should be of the tonic class: columba, cascarilla, and gentian, combined with alkalies, or mineral acids, whichever are found to suit best; for, a constant rule cannot be laid down. It is of the greatest consequence to ensure regular evacuations; and if the tone of the stomach is not restored, by the plan of diet before alluded to, it is much better to take some gentle saline aperients. In many instances it is necessary, where the patient will not submit to diet and regimen, to resort to mineral or saline waters. The chalybeate waters of Cheltenham and Tunbridge Wells, are very often useful.

The irritable form of dyspepsia is known by various names: such as, cardialgia, gastrodynia, gastralgia; it is a morbid sensibility of the stomach, with nervous dyspepsia, and presents chiefly the following symptoms: pain, uneasiness, and unpleasant sensations, referred to the stomach, the sternum, the left side, and the back, sometimes radiating to the arm, and occurring mostly after food; but, in some few instances, without taking any food at all. In these cases, although there is a great amount of pain and constant tenderness at the pit of the stomach, there is no increased heat of the skin, nor is the pulse quickened to any considerable extent. The pain is frequently relieved by pressure, and by hot liquids, or various circumstances which would exaggerate the symptoms of the other forms of dyspepsia. The pain is sometimes very severe, coming on in paroxysms affecting the back and the chest, constituting gastrodynia and gastralgia, in its highest degree, and sometimes, also, occasioning difficult breathing. At times, there are nervous symptoms, and pain in individual parts—sympathetic irritations: as palpitation, asthma, cough, pains in distant organs, cramps, twitchings of the face and lips, and so forth. Here, we have the nervous sensibilities called into action by the imperfect function of the stomach. There is, sometimes, connected with this form of dyspepsia, great mental depression and even despondency; and the more intense form of this disease constitutes hypochondriasis, or melancholia: in the one case, the patient describes his symptoms with tedious minuteness; while, in the other, the spirits are greatly depressed, and the individual is unable to refer his complaints to any particular organ. The appetite, in this variety of disease, varies: sometimes it is most enormous, and, occasionally, the patients fancy they can eat all sorts of unwholesome things. The pulse varies very much. The tongue is clean, or else there is a thin fur upon it. The patient is often very tremulous, and there is but little thirst. The bowels commonly are costive, but the evacuations are not disordered in appearance. The urine is generally copious, as in many other nervous affections; sometimes, however, it is rendered turbid by a deposition of the phosphates. The causes are those of indigestion, affecting nervous subjects, especially in such as labour under nervous symptoms in other parts. There are often found, in connexion with this state, symptoms of spinal irritation, and tenderness in the situation of the middle or lower dorsal vertebræ. This variety may run into the other forms.

Now, the *treatment of this affection* is much the same as for atonic dyspepsia. Nitrate of bismuth and hydrocyanic acid, are useful where gastralgia is present; when the nervous sympathies of the stomach (as palpitation, &c.) are exalted in a high degree, narcotics, such as: stramonium, belladonna, and opium, are very serviceable. In a less degree, alkalies are useful: particularly, liquor potassæ, and lime water. Mustard poultices give great relief. As more permanent remedies, to deaden the nervous sensibility, nitrate of silver or sulphates of copper and iron, in various proportions, are found to be of very great efficacy. It is of great importance, in these local nervous diseases, to improve the general health and the tone of the vascular system, by taking exercise in the open air.

Now, there are some analogous affections to these, occurring in the duodenum, and which require a little consideration. When they are combined with the affection of the stomach, the symptoms presented by the latter are somewhat modified. There is, sometimes, disorder of the liver, and of the hepatic system, and there exists pain to the right of the epigastrium, and uneasiness sometimes felt after food. The fæces are apt to be discoloured, and the secretion of bile is more or less wanting. The appetite is, in some cases, good, and there may be no uncomfortable sensation, immediately after eating, but it is felt two or three hours subsequently. There is seldom much

fever present in this variety of duodenal dyspepsia. There is headache and vertigo, and sometimes giddiness and faintness are felt. If this disorder continue long, it is apt to produce cough, palpitation, jaundice, and disorder of the secretions generally. The urine then becomes thick and high coloured, and tinged with bile; the tongue is furred, and of a yellowish tinge, and often presents a patchy appearance; sometimes, there is vomiting, and the skin exhibits a morbid aspect. This disease occasionally leads to tuberculous cachexia, from the imperfect action of the liver, and subsequent disorder of the general system. The causes of this, and other similar affections, are bad and indigestible food, passing into the duodenum in an undigested state, and there causing irritation; hurried eating; and acute attacks of duodenitis. These attacks are not uncommon in persons of sedentary habits.

LITHOTRITY, LITHOTOMY, AND THE DISEASES OF THE URINARY ORGANS.

[By W. B. COSTELLO, M.D.,
Surgeon-Lithotritist to the Royal Free Hospital.

(Continued from page 442.)

Before proceeding farther, I deem it right, as a matter of justice to myself, to revert for a moment to the period when my double-slide lithotrite was first made known. Up to that time, out of the hundred apparatuses, proposed from time to time, but one—I mean the apparatus of Civiale—possessed, in reality, any practical value. Up to this time, amid the increasing clamours of rival inventors, each new comer proclaiming the superiority of his own invention, in power and perfection, over those of his predecessors, no progress was made. The introduction of the double-slide instrument had a magical effect in silencing these pretensions; and, in less than a year from this time, those vaunted inventions had passed into profound oblivion. Civiale's instrument, to which the vast majority of the successes obtained up to this time, were due, continued to be employed for some time longer — always an efficient instrument in his own able hands. It was from this time only, that the possibility of lithotrity becoming an apanage of the accomplished operating surgeon generally, could be foreseen. Being personally interested in this point of the history of the operation of lithotrity—a point, the importance of which, in regard to a wider diffusion of its application, cannot for one moment be called in question—I have, I own, felt some surprise at the care taken by modern writers, especially in this country, to avoid any allusion to it, or even the slightest hint that the author of so important a change in the apparatus, rejoiced in a name.

By the great simplicity of construction of this instrument, its perfect solidity, and its power of grasping almost any size of calculus, the circle of the application of lithotrity was immensely enlarged. The confidence felt in the qualities of this instrument soon became almost universal, and in one of my earliest operations with it, I recollect an able surgeon, of Windsor, Sir J. Chapman, observing to me:—"You have so simplified the instrument and the operation, that I fear your reward will be, that you have taken the bread out of your own mouth." It was, in fact, from this period only, that practitioners, wholly unprepared by any previous study, or opportunities of making themselves familiar with the lithotritic process, assumed daring enough to make trials in this line. I cannot be held to blame for the errors of rashness and inexperience. In enriching the art with a useful instrument, I did not say that it reduced the operation to a mere mechanical process, capable of being executed without tact, dexterity, or mental resources in the person who undertook it. The possibility that lithotrity should no longer remain a special attribute in the hands of only a few, but might become a part of the general qualifications of the surgeon, was realized by this instrument, and this was no unimportant advance. M. Labbat, a distinguished French surgeon, and a judge quite competent in this matter, who visited London in the following year, did not hesitate to assert, that, "without my instrument, lithotrity must have remained in a few peculiarly privileged hands; and with it, its general, or at least wide diffusion, became not only possible, but certain."

But the best things are subject to abuse, and even men of the very highest position, when not qualified by a full possession of all the facts of a case on which they hazard an opinion, may be led away into misrepresentation when they venture to judge of a thing without seeing it, *as it should be seen in reality*. Of this, the case I am about to narrate will serve as an example.

At the period already referred to, a lithotritist, well known for his invention of a great variety of instruments—pretty, but useless—undertook to apply a new instrument, in which the mechanical power for crushing the stone was sought to be realized, without adequate security for strength of construction to render that result certain. The patient, a man of rank, submitted to the attempt at operation in the presence of some of our most eminent surgeons. The stone was seized, and subjected to a percussive force. It was the instrument, however, and not the stone, that yielded under the repeated blows; and when the operator, thinking his work performed, attempted to withdraw the instrument, he found it impossible. The branches, between which the stone had been held, were forced wide asunder—the front one being bent like a hook against the pubis, whilst the other remained erect in the middle of the bladder. An event so untoward, but which might have been foreseen, occasioned a most painful and agonizing embarrassment. The necessity of having recourse to cutting was inevitable, and could not even be delayed. Accordingly, the patient was bound and the bent instrument was removed, together with the stone—a distinguished surgeon, who was present, performing the operation. The terror, the anguish, and depressing effect of the whole scene, and the great loss of blood from the second operation, but too fatally foreshadows the sequel;—the patient died! The cutting operation might have been successful, had it been performed with its ordinary advantages of due preparation, and the guidance of a grooved staff for the knife. Instead of which, the necessity of resorting to it arose suddenly, and the bulky instrument that blocked up the urethra, formed an impediment, and not a guide to the surgeon. By the one, or the other mode of operating, and under ordinary advantages, the patient's life might have been saved; it was sacrificed in the unfortunate occurrence which united and accumulated some of the worst dangers of both.

The construction of the instrument employed on this occasion was, to the last degree, defective. A moment's examination would have sufficed to convince any surgeon that it could not have been employed with any chance of safety. That the most dexterous operator in the world could not have averted the consequences that followed, is proved by the renewal of this unhappy occurrence on the Continent. The details of another similar case were read before the French Academy, by another operator, who was unable to extract the bent portion of the instrument after cutting into the bladder above the pubis.

In both these instances, I have been always at a loss to account for the blindness that must have prevailed as to the defect of the instrument; for it was blindness, and not a culpable levity, or disregard of life, that placed men who had otherwise given proof of high operative talent in such a painful position. Ignorance as to the qualities of an instrument here had the same fatal consequence as rashness and want of dexterity has had in others. What, then, are we to expect of men, who, without good instruments, or the skill to use them safely, assume the airs of finished lithotritists, before they had taken the trouble of acquiring the dexterity necessary to perform the operation, or even the first notions in regard to its manœuvre?

Such was the effect of this operation on the mind of the late Sir Charles Bell, that he declared himself soon afterwards in one of his lectures a decided opponent of the new operation. But the error of generalizing from a single instance, was not one that could lay permanent hold on the mind of our great physiologist. Before another such misfortune occurred—and another did occur unfortunately—chance furnished me with an opportunity of exhibiting lithotrity to him in its true light. Among his own patients, there was one afflicted with stone in the bladder, whom in spite of his aversion to lithotrity, he wished me to see. Under these circumstances, I had an interview with Sir Charles in which I had but little difficulty in convincing him that the misfortune he had witnessed was not justly attributable to this method of operating, and even that it could not be a possible result of it when proper precautions were taken, or when the operation was conducted methodically. Lithotrity is not an operation to be performed hap-hazard, and *ex quovis ligno*. It has its modes, and methods—its instruments and processes, the neglect, or defect of which entails failure, and something worse. This reasoning had its effect, and Sir Charles saw at once that he had confounded in the severity of his judgment two things essentially dissimilar. The patient, Mr. Barker of Davies Street, Grosvenor Square, aged 78, was feeble, and emaciated, having laboured under symptoms of calculus in the bladder, for upwards of two years. His pains were not very severe, but the general health and strength were failing. He was much disturbed by calls to make water, which was voided in but small quantities at a time. His appetite, usually very hearty, had given away, and his sleep was broken. His little walks for exercise, so grateful to the old man, were entirely discontinued, owing, not only to the want of strength, but to the increase of pain with which they were followed. The urine collected during the night had a whitish appearance from a substance suspended in it, which, on cooling, was precipitated and appeared through the clear fluid, like a mass of gruel adhering to the bottom of the vase. The smell of the urine was also now and then very offensive.

This assemblage of symptoms, conjoined with the patient's debility and great age, had induced Sir Charles Bell to hesitate in recommending lithotomy, while, on the other hand, upon examination, some circumstances were discovered, which I thought were encouraging for a trial of lithotrity. The bladder being, in some degree, sluggish, retained the injection well; it was spacious; the examination was not productive of much pain, and the calculi, though numerous, were not very large. The prostate, however, was voluminous. Some of these circumstances were favourable as far as the manœuvre of the operation was concerned; but others inspired doubts as regarded a successful termination. It was, however, considered, both by Sir Charles Bell and myself, as the only resource that presented any prospect of success. The irritation produced by the presence of this foreign body was making progress, and the symptoms might at any moment become more aggravated.

The operation was performed in the presence of Sir Charles Bell and Mr. Shaw, Surgeon of the Middlesex Hospital. The urine was withdrawn, and an injection of tepid water, thrown into the bladder. My double slide instrument was then introduced, and a stone of the size of a pigeon's egg was at once seized; being friable, it was instantly reduced, and the sitting terminated—the whole of the manœuvre not occupying more than twenty seconds. The old gentleman thought so little of the pain he was put to, by the operation, that he was desirous the instrument should be re-introduced to do more. No other effect was observable after this sitting, than the voidance of a quantity of fragments. There was not the slightest appearance of fever, or re-action of any kind. At intervals of three or four days, the applications were renewed with the same successful result. In the space of three weeks, a quantity of fragments, filling a wine glass, was obtained, and the distressing symptoms, previously enumerated, gradually ameliorating, disappeared. What might have happened in such a case, had the instrument been roughly, and at chance work, and for a long time, applied, I will not say; but the applications were conducted with method and great gentleness, and, indeed, Sir Charles was so

satisfied at the management and termination of the case, that he frankly acknowledged that he had judged too severely an of operation which saw was capable of being employed most happily, beneficially, and without risk. This gentleman died six years after of congestion in the head. On examination after death, the bladder was found healthy and free from stone.

It would have been desirable to have had more favorable occasion for exhibiting the advantages of lithotrity over lithotomy to so accomplished a surgeon, especially when his mind had been biassed by the remembrance of a disaster. The want of success, in the case which he had himself furnished me for the operation, would have been calculated to alienate him still more in regard to a just appreciation of it—his prejudices might have been confirmed instead of being corrected, or removed. But, happily, it was not so, and I possess from him, almost to the eve of his death, the most encouraging incentives to exertion, in diffusing sounder ideas, in regard to the new method.

I may here relate another case, somewhat similar. The patient, a gentleman residing at Hartlebury, near Worcester, was under the care of an eminent practitioner in Worcester, Dr. Turley. The symptoms had existed some time before Dr. T. had been called to see him. This gentleman—Mr. Bourne, brother of Dr. Bourne, formerly well known as a highly respectable physician in Oxford—was a fine man, of tall stature, and had maintained, notwithstanding his 77 winters, a remarkably erect bearing, until he experienced his first attack of the symptoms denoting the presence of a stone in the bladder. At first, the pains were moderate, with intermissions of such duration, as to give him hope that his sufferings were but temporary. In the course of a year they had acquired such a character of intensity, that his nights and days were rendered miserable by the frequency of the calls to make water, and the difficulties of satisfying them; he suffered from thirst, with paroxysms of fever at night; the appetite became capricious, with prostration, skin of a yellow hue, and wasting. The urine was scalding, never quite clear, purulent, or muco-purulent, and now and then streaked with blood. Dr. T. fully detailed these particularities; adding, that his belief was, that there was a stone, the material cause of the irritation, which it was urgent to remove; and as Mr. B. was unable to come to London, I visited him in Worcestershire, in the winter of 1837. On sounding, I discovered a stone, of a rough surface, and about the size of a small walnut; and that the prostate was large and tender. Had I not had ample experience of the success attending the speedy removal of the mechanical cause of the irritation of the urinary organs, I might have hesitated as to immediately operating in a case presenting so many unfavorable circumstances. I was convinced that a short sitting, affecting the parts no farther than the contact of the instrument for a few brief moments, could not add to the erethism maintained by the foreign body, and that a disruption of its bulk effected rapidly would afford to the fatigued and irritated organs a chance of repose—the first condition of a return to the healthy state. The patient would not listen to any proposal of relief by cutting, which however offered but little chance of success. He was fixed in the idea, that if the stone could not be crushed, his life could not be prolonged for any time. From the alterations in the urinary organs, the danger of converting a chronic inflammation of the mucous membrane of the bladder, into an acute one—the giving way of the general health, and the wasting, failure was possible; but I relied much on the celerity of the manipulation, and the certainty of the almost instantaneous destruction of the mechanical cause of all these disorders. My hope was not disappointed. Two sittings of but a few moments—neither more than forty seconds duration, sufficed for the destruction of the calculus. The fragments were voided almost immediately after the sittings, the sleep became prolonged, the appetite and mental cheerfulness returned day by day, and from a state of misery, and advancing marasm, his complete continues to ad not occupy more than a week. valescence d the metropolis about two years ago. Mr. B. visited his great age, was perfect, and so His health, fo present time.

EPITOME OF RECENT OPINIONS ON THE BLOOD, INFLAMMATION AND ITS SEQUELÆ.

By G. D. DERMOTT, Esq., Lecturer on Anatomy and Surgery, at the Charlotte-Street School of Medicine.

The circulating blood of all *vertebrata* (mammalia, birds, reptiles, and fishes), if viewed in the field of a microscope, is seen to be constituted of two principal parts,—the *liquor sanguinis*, and *red blood discs*; the latter suspended in the former, as in a menstruum, and so abundant in carnivora and birds, that they seem almost to exceed the mass of fluid in which they swim. Blood is somewhat tenacious; appears homogeneous to the eye; has a peculiar faint odour, differing in different animals, and a saltish taste, shewing weak alkaline reaction: ʒi. of blood will saturate rather more than a drop of vinegar.

In nearly all *invertebrata*, blood is nearly *colourless*; bearing apparent resemblance to chyle or lymph: has a reddish tinge in certain marine worms; but this is not owing to the presence of blood discs.

Specific gravity of human blood, from 1.045° to to 1.061° — *Temperature*, 96° to 99° Fah., or 31° to 32° Reaum.

Blood is indispensable to vital manifestations; it appears with the earliest traces of life in the embryo, and increases in quantity with its evolution and growth.—*Sources:* vitellary matter of ovum, maternal blood, chyle and lymph.—*Quantity:* according to calculations of *Valentin*, on an average, between 1-3rd and 1-4th, or about 3-7ths of the wholeanimal.

Principal compounds—*chemical constituents:*—Albumen, fibrin, hematosine, extractive matter, salts, and water; and, after incineration, a little of the peroxide of iron is found, especially in the hematosine, or red colouring matter.

Blood has the same ultimate composition as flesh.

Comparative Analysis of Dried Ox-Blood and Dried Beef, by Playfair and Bœckmann:—

	Flesh.	Blood.
Carbon	51.86	51.96
Hydrogen	7.58	7.25
Nitrogen	15.03	15.07
Oxygen	21.30	21.30
Ashes	4.23	4.42

Organic Elements of Blood.—Red blood discs, "separated nuclei"* of latter, colourless discs, albuminous granules.

Blood discs, blood corpuscles, blood globules, and blood particles, are synonymous terms;—their discovery, by Malpighi, was one of the first fruits of the microscope

The blood discs are minute, transparent cells; *flat in all vertebrata, or nearly so:* how preferable, therefore, is the term, blood disc, to blood globule.

In all *mammalia*, except the camel, the circumference of the blood disc is *circular;* compared to thick coins, microscopical muffins or cheeses, with surfaces, in the ordinary state, somewhat concave:—surfaces, however, as to degree of concavity or convexity, subject to variations, both in the body and out of it, owing to the quantities of their fluid contents varying by exosmose and endosmose.

Organic constitution and size of Blood Discs.—Each consists of an external cell or capsule, a centrally-situated nucleus (at least, during one period of its existence), and, between these, the colouring matter, watery fluids, and the gases.

In *vertebrata, not mammalia* (birds, reptiles, and fishes), the blood discs are larger than in mammalia; their circumference, as well as that of the nucleus, is *oval* (except in certain cyclostemes, in which it is round). The nucleus, or kernel, is also larger, so as to bulge out considerably from the centre of the blood disc.

Blood discs are of different sizes in different classes of animals; slightly varying in size in the same individuals, possibly because they are in different stages of growth. This variation is, however, very slight.

In *Man* and *Mammalia*, the average diameter is from 1-2800th to 1-4000th of an inch.* But, in the small musk-deer, it is less than 1-12000th.

Birds—long diameter, from 1-1700 to 1-2400th; short diameter, from 1-3000th to 1-4800th: their width nearly corresponding to the average diameter of man's.

Reptiles—largest in amphibia, especially those retaining their gills.

Frogs—long diameter, about 1-1000th; transverse diameter, about 1-1800th.

Siren—long diameter, about 1-435th.

Proteus—long diameter, sometimes 1-337th.

The blood discs of the two latter are seen by the naked eye.

Fishes—commonly somewhat larger than the frog.

In *mammalia*, the size of the blood corpuscles, in each great division of this class, bears some relation to the size of the animals, and to the nature of their food. The size, in general, ranks thus:—Omnivora, carnivora, herbivora; ruminants having the smallest; largest, those of elephant; next, capybara and rhinoceros; next, man (average diameter 1-3500th): the smallest, yet known, are those of the little chevrotain, and napu musk deer.

In *birds*, there is a greater uniformity of size, and nearer relation to the size of animals, than in the mammalia: they have the smallest elliptical blood discs, except the camel.

Reptiles have the largest and thinnest blood discs, and the more persistent their branchial apparatus, the larger they are; thickness not more than 1-8th of their length.

The blood discs of reptiles, especially batrachian, owing to their large size, will not pass through the pores of filtering paper; therefore, are retained on its surface, whilst the liquor sanguinis flows through. In the frog, the nucleus projects considerably from either side of the blood disc, when out of the circulation.

In the *spider*, the blood disc is, in form, a meniscus.

When blood discs are examined with lenses of low magnifying power, they only look like small dark points; when with glasses, a little more powerful, they appear like a white circle, with a black point in the centre, which gave rise to the erroneous opinion of Della Torre and Styles, that blood globules were rings, perforated in the centre. This appearance is merely the effect of light, for, by using a magnifying power of 300 or 400, the central point assumes the appearance of a luminous spot, and, by varying the position of the globule, and the direction of the rays of light, it will be at once evident that they are not perforated.

The blood corpuscles are regarded as primary organic cells, "floating gland cells."

The *external husk, capsule, or cell*, is transparent, composed of an extremely soft, delicate, and elastic membrane, includes the hematosine, or colouring principle of the blood, and is presumed to be the bearer of oxygen from, and of carbonic acid to, the lungs. Venous blood, brought in contact with oxygen, out of the body, becomes of a bright red colour, just as it does within the body; and arterial blood, introduced into a jar of carbonic acid gas—but particularly of carburetted hydrogen gas—acquires the deep tint of venous blood.

Blood discs, in a single layer, appear not exactly red, but yellowish; but, if accumulated in greater number, they appear red.

The *nucleus* is generally of the same form as the blood disc; i.e.: if the latter is elliptical, the nucleus is elliptical—if circular, circular. It is generally colourless, and firmer than its investing cell; and varies in size in different animals, both absolutely and relatively to its shell. The nucleus of adult mammalia is said, by many physiologists (though contradicted by others), to resist acetic acid, whilst the envelope is rendered invisible. Iodine often occasions its reappearance.

* Gerber.

* Carpenter's *Physiology*.

No one doubts the presence of a nucleus in birds and all the lower vertebrata, and that, in some of the amphibia, it contains a number of distinct granules; but, as to the actual existence of a nucleus in mammalia, there is considerable difference of opinion among microscopists; some maintaining that it can be brought into view by treating the blood disc with acetic acid, whilst others deny that any definite appearance is thus produced.

Magendie, Hodgkin, Lister, and Busk, deny its presence: it is questioned by Valentin and Gulliver.

Gerber, on the other hand, and several others, strenuously maintain its existence.

Those who deny its existence in man, state that the transparency of the centre is owing to the blood disc being thinner at this point,—the centres of its two concavities approximating, or, perhaps, meeting.

Henle and Schultz state, that in a few blood discs, there are nuclei; but, in the majority (those fully developed), there are none; and think that the blood nucleus, as in some other cases (adipose tissue, for instance) is gradually and wholly absorbed after the cell is perfected.

Simon says, that the nuclei of red corpuscles, in the early stage of development, are large and distinct; but as development advances, they become smaller, and at last disappear. Burdach, Wagner, and Valentin believe that the red corpuscles, whilst circulating, have no nuclei, and that they only form when corpuscles are removed from the circulation. Wagner says, that mere contact with the atmosphere determines their formation (this, I believe, is applicable to some human blood discs; those which chance to be charged with fibrin): if this be true, the fibrinous nature of nucleus is sufficiently proved; no other constituent than fibrin possessing the property of being held in solution in living blood, and deposited as insoluble in dead blood.

Simon, Burdach, Wagner, and Valentin say, that the corpuscles of frogs' blood, whilst circulating, present no nuclei, and that the appearance of nuclei out of their body, is owing to the fibrin coagulating. Wharton Jones, on the other hand, asserts, that a nucleus exists in the corpuscle of the frog, whilst circulating, though not so distinctly seen as when out of circulation: the disc, in the latter case, becoming more collapsed.

The compiler of the present paper maintains, that, by viewing blood discs with a good quarter or eighth of an inch achromatic, small, round, or tubercular nuclei can be seen, projecting at the concave surfaces of many discs, generally at their centres, though not always: sometimes, there are two, three, or even more, scattered, as it were, through the disc.

It has been observed by some, that, when an animal is under a state of excitement, the circumference of the blood discs assumes a ragged condition. This, the author of the present paper thinks, is not exactly the case; for, if we look attentively with a quarter of an inch achromatic, we find this appearance is produced by the circumference having resolved itself into a circle of nuclei, appearing like a miniatured Petitian canal, inflated.

The latter appearance has been erroneously, the author thinks, attributed by Dr. Quain to the action of the salt; it appears in some, though not by any means in the majority, of the corpuscles. It has been stated that no nucleus can be demonstrated in the unprepared state of the corpuscle; but the author has observed repeatedly the above appearances, both with and without the admixture of any saline solution or other re-agent, as the result, he conceives, of the spontaneous coagulation of the fibrine which they may contain, and which possibly may be rendered more apparent by the action of the salt, owing to the collapse of the blood disc which it occasions.

It is said that the blood discs, when undergoing spontaneous decomposition, become granulated, and sometimes (as long since noticed by Hewson) even mulberry shaped; such globules can be found in the blood at all times. The possibility of detecting nucleus in the circulation of the frog, is owing, probably, to something being superadded to the fibrine as a component of nucleus in the latter animal.

Re-agents.—Weak acetic acid extracts the colouring matter: the nucleus becomes distinct, whilst the envelope is rendered faint, and scarcely visible; its presence may be rendered again obvious by a solution of iodine, which gives it colour and opacity. Strong acid entirely dissolves the envelope. Pure water extracts the colour, distends the corpuscle, renders it round by endosmose or imbibition, and the nucleus more conspicuous: sometimes (like acid), causes the envelope to burst, when nucleus escapes. If the corpuscles are in fluid sufficiently concentrated, as solution of salt, or sugar, or inspissated plasma, the vesicles shrink and become thinner, owing to the dominant current passing through the vesicle from within outwards (exosmose).

In examining the blood discs, weak solutions of salt or sugar are often used; but these, as well as even the serum of another kind of animal (such as the filtered serum of frogs' blood, as Warner recommends), act injuriously upon the discs; to examine the blood discs critically, all additions should be avoided, unless it be the serum of the same animal.

Hewson's plan of bringing the nuclei into view was, to place a drop of blood and a drop of water close together on a piece of glass, forming an inclined plane, and, as you view the specimen, allow them to coalesce in the field of the microscope; when, it is said, that the nuclei within the blood globules will be observable as the globules roll down the glass, and become round and transparent; and the nuclei, it is said, will be found to collect towards the lower edge of the specimen.

Drs. Reese and Lane state that the nucleus of the human corpuscle is not globular, but consists of a thin layer, of colourless substance; that its surfaces are granular, and its edges uneven; that it is rather more than half the diameter of the corpuscle; that its thickness is not easily ascertained, perhaps about one-eighth or one-tenth of its diameter. (This does not correspond with the nucleus usually described, nor with what the author of this paper conceives to exist. Drs. Reese and Lane have, probably, mistaken the blood disc deprived of colouring matter for nucleus). They also state that the envelope does not differ in any essential particular from that of the frog: and that its interior adheres firmly to the central parts of both surfaces of the nucleus, but not elsewhere.

The author believes that the human nucleus, as seen in abstracted blood, is the result of coagulation of the fibrin, or a compound of it, contained in the disc.

The blood discs of the mammal fœtus are somewhat larger than those of the adult.

Blood discs are highly flexible and elastic, whereby they can pass through capillaries much narrower than their diameter, becoming elongated, twisted, or bent, and as suddenly regaining their form. Thus they pass through apertures or pores very minute indeed, in proportion to their diameter; and blood globules, Gulliver and others say, are often found on mucous surfaces, when no solution of continuity can be detected. Others deny, however, that effusion of blood discs can take place without a breach of surface.

Blood discs are said to undergo changes of form, in consequence of their possessing an inherent power of contractility, and this apparently in a ratio as their vitality is heightened by local action. Dr. Barry says he has observed it in blood effused on the inner membrane of the fallopian tube of the rabbit during the transit of the ovum; and Mr. Gulliver has also observed it in extravasated blood.

Chemical Composition of Blood Discs.—It is difficult to speak definitely about this, as the capsule, nucleus, and contained matter cannot be separated without chemical re-agents, which must alter, in a degree, their respective properties.

Some conceive the *nucleus* to be fibrin; others liken it to "coagulated albumen," from the manner in which it withstands acetic acid. The *envelope* approaches most to fibrin.

Two proximate principles have been obtained from the included red matter. 1st. *Globulin*, colourless, and nearly allied to albumen. 2nd. *Hematosine*, or *hæmatin*, the colouring principle which gives redness to the globuline.

Mode in which they are separated:—1st. Deprive the blood of its fibrin, by stirring it; then mix it with four times its bulk of saturated solution of sulphate of soda, and filter, when the greater part of the corpuscles will remain on the filter in the form of a moist, red mass, termed the cruor. 2nd. Boil the latter in alcohol, slightly acidulated with sulphuric acid, which dissolves the hæmatin, whilst the colourless globulin is kept in combination with part of the sulphuric acid. 3rd. Add carbonate of ammonia to the hæmatin while hot; then clear the fluid by filtration from the sulphate of ammonia, and a little globulin, which is precipitated. Lastly: Evaporate the liquor to a twelfth part of its bulk, when it deposits the hæmatin in the form of a very dark brown powder, from which a small quantity of fat can be extracted by ether.

Hæmatin or Hæmatosine.—To it, the red colour of blood disc is due, although it constitutes not more than the twentieth or twenty-fifth part of dried globules; is tasteless, insoluble in water, alcohol, and ether, but soluble in any of them if mixed with alkalies (forming deep red solutions), or with acids; supposed to unite with these, like albumen, as an acid to a base. In composition it differs considerably, however, both from albumen and protein: composed, according to Mülder, of carbon 65·84, hydrogen 5·37, nitrogen 10·40, oxygen 11·75, and iron 6·64. Although by incineration it yields a notable quantity of the per-oxide of iron, the red colour is not due, as formerly supposed, to the latter, for Scherer found that the metal may be entirely dissolved away by the agency of acids, and that the animal matter, afterwards boiled in alcohol, colours the spirit intensely red.

Chemists differ as to the state in which iron exists in hæmatin. Some suppose that the metal enters into the formation of the organic compound, as do the carbon, hydrogen, and other elementary constituents; this seems disproved by the last-named experiment of Scherer; others conceive that it is mixed with organic matter as an oxide or salt, just as oxides or salts may be combined with albumen; the latter is the most probable.

Hæmatin is supposed to promote and maintain the metamorphosis of the red corpuscles by its great affinity for oxygen, and Simon believes that it is itself metamorphosed into hæmaphœin, or brown colouring matter of the plasma of the blood, which is continually removed along with the urine, it being the colouring matter of that also.

Globulin is the principal constituent of the corpuscles. After hæmatin has been extracted by the process already mentioned, the globulin, it is said, remains in combination with the sulphuric acid. It is a protein* compound, agrees with albumen in composition and properties, except that it is soluble in serum, or in a saline solution, which holds albumen dissolved, and that by heat it coagulates into a granular mass, different in aspect from coagulated albumen. Henle thinks both

* If albumen, fibrine, or caseine be dissolved in a strong solution of caustic potash, and exposed for some time to a high temperature, they becomes decomposed; and if acetic acid is then added, a gelatinous transparent matter is precipitated, termed by its discoverer (Mülder) protein, from the Greek verb signifying *I am first.* It is regarded as the radicle of the proximate principles, albumen, fibrin, and caseine; and Liebig says it is, "the starting point of all tissues." Protein is glutinous and translucent; when dried, it forms a hard, brownish yellow substance—tasteless, insoluble in water and alcohol; attracts moisture from the air, swelling out again into a gelatinous mass; soluble in diluted acids, alkalies, and alkaline earths.

Ultimate analysis, according to Mülder:—

N	16·01
C	55·29
H	7·60
O	21·00
	100·00

these peculiarities are owing to the albuminous matter being enclosed, and in a degree protected, by the envelopes of the corpuscles, which remain after the extraction of the hæmatin. He thinks that the globulin is nothing but albumen with the membranous envelopes (and the nuclei when present) of the blood particles. Lacanu and Liebig consider globulin to be albumen.

The cruor or matter of red corpuscles (globulin and hæmatin together) is soluble in water, and its solution, containing the envelopes in suspension, coagulates at 181° Fahr., forming an insoluble precipitate. Its behaviour with re-agents, both soluble and coagulated, resembles that of albumen in like states. Relative proportions of the two principles, according to Berzelius, are: globulin 94·5, hæmatin 5·5. Corpuscles are supposed also to contain a small quantity of solid phosphuretted fat. One hundred parts of dry cruor, by calcination, yield of brown alkaline ashes about 1·3, which consist of carbonate of soda, with traces of phosphate, 0·3, phosphate of lime, 0·1, lime, 0·2, and sub-phosphate of iron, 0·1, peroxide of iron, 0·5, carbonic acid and loss, 0·1.

After the blood discs have been separated from the other blood constituents, and immersed in water, so as to become globular, and to have their contents diffused, and in a great measure dissolved in the water (perhaps by rupture of their capsules), the solution, thus obtained, exhibits the same changes of colour under the influence of oxygen, acids and salines, as the blood itself in similar circumstances.

Generation of Blood Discs.—When first formed in the embryo of a bird, they have an origin in that portion of the germinal membrane, which afterwards becomes the area vasculosa. This consists of delicate cells very uniformly arranged, and the capillary vessels are formed by the union, or fusion, of these cells one with another, whilst the blood discs are developed from the granules of cell-germs contained in the said cells. "The blood is thus formed by the cells of the germinal membrane, at the expense of the albuminous alimentary materials which they absorb from the yolk." These changes take place about the second or third day of incubation, and it is not until some days afterwards that the blood discs assume their characteristic form.

As there is no special organ for their formation in the embryo, we may infer that none is needed for that purpose in the adult; away, then, with the *gratuitous* assumption that the spleen, or the thymus gland, are manufactories of blood corpuscles. The exciting cause which produces them in living matter under favourable circumstances is, I believe, the agency of air.

It is still an open question, whether blood discs are produced from chyle-globules.

Anatomists believe that blood discs have the power of producing themselves. Dr. Barry's observations seem to confirm this, and even Leeuwhenhoek conjectured it. It has been already stated, that, when undergoing spontaneous decomposition, they become granular, or even mulberry shaped, and that such are always to be found in the blood. Dr. Barry states,—fresh cells are generated within the parent cell at the expense of the granules of the margin of its nucleus, precisely as rings of cells arise from the germinal spot. The author has not witnessed this regularity of development, nor the regular radiating lines extending from the nucleus to the periphery of the disc and "dividing the said disc into six segments," nor does he believe it. He must refer the reader to what he has already said under the head of Nucleus, as to the multiplicity of nuclei which exists in some of the discs.

Mr. Wharton Jones believes that the blood discs are formed from the colourless blood corpuscles.

Uses of Blood Corpuscles.—Of these much remains to be learnt. It is supposed by many anatomists that some of the tissues, especially the muscular, (in which alone fibrin was supposed to exist) were formed by the aggregation of the blood discs in various ways. According to Dr. Barry, a generation of his spiral elementary organic fibre takes place within the blood disc. The nucleus resolves itself into a number of minute discs, which form a flat filament either in the form of a ring or coil, and he says these filaments, thus formed, resemble the elementary filaments both of animal and vegetable tissues, (his double spiral filament,) of which, according to him, the primitive fibrils of muscles and other tissues are composed. He says, every tissue which he has examined, "he has found to arise out of corpuscles having the same appearance as the corpuscles of the blood,"—including epithelium cells, pigment cells, capillary vessels, the elements of cellular tissue, or cartilage, of muscular tissue, of the crystalline lens, of the chorion, of the ovulum, of the spermatozoon, and pus globule.

He supposes that the exudation corpuscle (from which the various forms of simple structure are produced in the reparation of parts) originates from the nuclei of the red corpuscle; whilst others conceive (without foundation) that the exudation corpuscle is an altered form of the chyle globule: and others that it is identical with the white blood globule.

The red blood globules have a vast deal to do with the temperature of the frame; they are most numerous in animals of the highest temperature, and whose respiration and muscular action is the most vigorous,—more numerous in birds than in mammalia—and in mammalia than in reptiles and fishes. One of their principal offices is conceived to be, to convey oxygen from the lungs to the tissues, and to bring back the carbonic acid which is set free in the capillaries. As the influence of the air is necessary for exciting into vital activity all tissues, they are in this, and probably in other ways, of essential service in keeping up all organic action by the presence of their stimulus, and of promoting the vital movement of the very fluid in which they are circulating.

There cannot be a finer proof that the red blood corpuscles are stimuli to the heart's action, and that they have the power of arousing and keeping up vital motion in the animal economy, at large, than by the transfusion of the blood from one animal into another; for, when the animal is in a perfect state of syncope, and *serum* only is injected, no more effect is produced than by the injection of so much water; but if perfect blood is injected, vigour and activity is at once restored to the frame.

If blood, obtained from another species of animal, having discs of a different shape or size, be injected, the most horrible symptoms of nervous excitement are produced (especially if the discs are of a different shape) and comparable only, in the rapidity of their effects, to those which follow the introduction of the most energetic poisons. I mention this, not that the experiment should be repeated; the fact being established, it would be quite unnecessary, therefore, criminally and unphilosophically cruel.

The blood corpuscles take an important part in nutrition, if not in providing the materials of the tissues, yet in giving them a capacity for development and growth. It is conceived by some, that in some cases of reparation (as Hunter supposed), such as fractured bones, the effused blood becomes the bond of union, by changes which the blood corpuscles undergo;—if so, this by no means proves that they are effused in ordinary nutrition.

Wagner and Henle plausibly suppose that, during their circulation, the blood corpuscles are occupied in the capillaries, by the vital energy which they, like other primary organic cells, possess, in giving to the blood the constitution or condition necessary for nutrition and secretion: they are considered as floating, stimulating, organic gland cells; similar, in general character, to the isolated cells which constitute the substance of the simplest plants and animals, each cell having an independent life of its own.

Simon, Wagner, and Henle believe that the more especial use of the red corpuscles is to act as glandular secreting cells in furnishing fibrin to the system, and that they become resolved into it. Mr. Wharton Jones believes that the red corpuscles have the especial office of converting the albumen into fibrin—one protein compound being thereby converted into another. The augmentation of fibrin is always at the expense of the red globules; under increased action, they are resolved more quickly, and in greater quantity, into fibrin, than in health.

White, or Colourless Corpuscles.—Their real nature is not thoroughly determined. They are comparatively few in number, rounded and slightly flattened in figure; somewhat larger in men and mammalia than red discs; nearly the same size in all vertebrata; about 1-3000th of an inch in diameter; destitute of colour, if anything, rather white; surface very finely granulated; specific gravity less than of the red; but slightly affected by water; acetic acid displays a nucleus, consisting of 1, 2, 3, or even 4 large clear granules, also a delicate envelope, which, becoming distended, augments the size of the globules, and is eventually dissolved, the nucleus remaining. When blood is coagulated, the colourless corpuscles, being lighter than the red, are left mixed with the plasma, consequently crowd the buffy coat of inflamed blood.

With a good glass, several differences, or, as it were, transition stages, can be seen amongst them in men. In the lower vertebrata, the difference between the two kinds of corpuscles, or discs, is more striking, as well as the resemblance of the colourless discs to the globules of chyle and lymph. There are globules, similar in appearance, in the nutritive circulating fluid of invertebrata, which latter bears, it is said, a close apparent resemblance to the chyle and lymph of vertebrata.

Are those of frogs identical (as they are conceived to be by many) with their lymph or chyle globules?—or, are the colourless corpuscles of mammalia, as Barry conjectures, a transformation of the ordinary red corpuscles, as they are about to resolve themselves into solid tissues, or pus globules?

The observations of Gulliver and others show, that in inflammatory states, especially suppurative diseases, the colourless globules are much more abundant in the blood than in health.

According to Gulliver, Remak, and Wharton Jones, the red blood corpuscles are formed from the colourless; the two former say, that, after a loss of red corpuscles, they are reproduced by being formed within the colourless, and become free by the solution of the latter; whilst the red corpuscles are, in their turn, resolved into fibrin, and hæmatin into hæmaphœin, or the brown colouring matter of the plasma.

These white corpuscles must not be confounded with the white matter of tubercular disease, sometimes in the blood, having the appearance of spherules or granules, a large portion of the granular matter of caseous tubercles consisting of similar matter; nor with the white serum which, under high microscopic power, is found to present the granular base of chyle, or is sometimes produced by the diffusion of oily matter in serum, less finely divided than usual.

(To be continued.)

ON THE INFLUENCE EXERCISED BY TRAUMATIC LESIONS OF THE SPINAL MARROW ON THE FUNCTIONS OT THE GENITO-URINARY ORGANS, WITH THE ANALYSES OF THE DIFFERENT SECRETIONS.

By —— SEGALAS, M D., Member of the Academy of Medicine.

(Continued from page 463.)

The comparison which I made between these two cases,* led me to examine, in a series of questions, the influence exercised by traumatic lesions of the spinal marrow on the functions of the genito-urinary organs.

Question the first:—What is the influence exercised, by the traumatic lesion of the spinal marrow, on the secretion of urine?

In a work on the diseases of the spinal marrow, (already at its third edition, and to the author of which a prize was accorded by the Academy of Sciences,) it is affirmed that—*the secretion of urine is considerably modified, and even does not take place, in certain cases of destruction or disorganisation of*

* See the paper of last week.

*the rachidian nervous centres.** The author, our learned and distinguished colleague, Dr. Ollivier d'Angers, founds his opinion on the vivisections performed by Dr. Krimer. But, in the first place, I beg leave to state that, the fact of the urine being suppressed, owing to the destruction or disorganisation of the spinal marrow, even admitting that such were proved by experiments on animals, is not confirmed by facts observed in man; since, in none of the cases of traumatic lesions of the spinal marrow, which I have seen or read of, did ischuria renalis exist; in almost all, on the contrary, an accumulation of urine took place, more or less promptly, in the bladder. Secondly, the result announced by Krimer, on this subject, is relative only to the medulla-oblongata, and the cervical portion of the spinal marrow. This physician observed, in fact, that whilst the extirpation of the cerebrum and cerebellum did not put a stop to the secretion of the urine (as Sir B. Brodie supposed, contrary to the opinion of M. Gamage), —whilst the division of the par vagum did not prevent its continuing, and whilst the division of the nerves of the kidneys themselves did not immediately cause its cessation: the destruction of the medulla oblongata, and of the cervical portion of the spinal marrow, produced instantaneously ischuria renalis, though artificial respiration was had recourse to, in order to prolong the life of the animal.† As to the remainder of the spinal marrow, an experiment of Krimer's shows, that it may be wounded, and even destroyed, without producing ischuria renalis. My own experiments permit my asserting, that the secretion of urine takes place, notwithstanding the destruction of the dorsal and lumbar portions of the cerebro-spinal apparatus. To prove this, I divided the spinal marrow, of four dogs, in the lumbar region, opposite the first lumbar vertebra: of seven others, in the cervical region, near the dorsal vertebræ; and, in the eleven, the urinary secretion continued, at least apparently, just as if I had performed no operation whatever. But, to convince those sceptics, who consider that, in such experiments, there is a difference between the simple division and the destruction of a portion, more or less considerable, of the spinal marrow, I destroyed it in one animal as high up as the first lumbar, and in another on a level with the first cervical, vertebra, *and the secretion of the urine continued.* These experiments, repeated several times, invariably gave the same results. I, therefore, consider myself authorised positively to affirm, that the urinary secretion continues, not only after the division of the spinal marrow, but likewise after the destruction of all that part situated below the spot in which the experiment was performed.

As to the conclusions which may be drawn from the existence of ischuria renalis, in the few experiments in which Krimer was obliged to have recourse to artificial respiration, after the destruction of the medulla oblongata and cervical portion of the spinal marrow, in order to prolong life, they will have little weight with physiologists who have practiced this method; because they are well aware how soon death supervenes, and especially how incomplete is the circulation of the blood, in these cases. What would be the result, if these experiments were analysed?

In reference to this question, they may be comprised under the following heads:—1° Krimer opened the abdomen of a rabbit; removed from the bladder half a tea-cupful of turbid urine; closed the wound; injected into the stomach, by the œsophagus, three ounces of water; and then divided the spinal marrow between the first and second vertebræ. As soon as respiration ceased, an assistant insufflated air by means of the apparatus invented by Legallois; the heat of the animal soon descended from $97\frac{1}{4}^{0}$ F., to $65\frac{3}{4}^{0}$ F.; and an hour only had elapsed, ere the throbbing of the heart became weak and irregular. Two hours after, the abdomen was opened again; the bladder and ureters, when examined, were found to be empty; the kidneys pale; though the heart still continued to contract very feebly. It would then appear that the bladder was opened, previous to the division of the spinal marrow; and, on examining that organ, two hours after this section, it was found quite empty, although artificial respiration had constantly been performed. But, in the hypothesis, rather problematic I must confess, of the bladder having been opened, was the wound hermetically closed? This appears somewhat doubtful, when we reflect on the difficulty of the operation, and on the silence of the author as to the mode by which he performed it. But, setting aside this circumstance, when we consider how the temperature of the animal decreased: how weak and irregular were the contractions of the heart; we must admit, that it is hardly possible to conclude, from such an experiment, that the secretion of urine was totally suppressed.

2° Krimer laid bare the brain of a good sized rabbit; removed the superior portion of the two hemispheres; emptied the bladder, with the catheter it would appear, for he says nothing about an incision into the abdominal parietes; introduced two ounces of tepid water into the stomach; and, fifteen minutes after, the bladder, when examined anew, yielded two drachms of urine. The remaining portions of the cerebrum and cerebellum were next removed; a quarter of an hour after, 15 drops of urine were withdrawn; but the knife had scarcely penetrated a few lines into the substance of the medulla oblongata, ere respiration ceased with a deep sigh; an artificial respiratory apparatus was immediately made use of, and, after acting twenty-eight minutes, the bladder was examined and found empty. On reflecting, first, on the small quantity of urine secreted just before the cessation of the normal respiration, and, secondly, on the insufficiency of artificial respiration, probably badly performed, to keep up the activity of the circulation: the vacuity of the bladder, observed towards the close of this experiment, will easily be explained, without its being necessary to have recourse to the direct influence of the medulla oblongata, or the cervical portion of the spinal marrow, on the renal secretion.

3° Krimer divided the spinal marrow of a dog, on a level with the last cervical vertebra. After this operation, the urine, emitted by the animal, was as limpid as water, and was found, on analysis, to contain acids and salts in considerable quantity, but not much animal matter. The bladder was emptied, by means of the catheter, of the small quantity which remained, and the following injections were made:—five ounces of broth were introduced into the stomach. Three hours after, the bladder was found considerably distended, and about three ounces of urine obtained, in every respect similar to the former:—three ounces of an infusion of rhubarb were next injected, and, half-an-hour after, Krimer drew from the bladder several drachms of urine, and, by means of caustic potass, discovered the presence of the rhubarb. The spinal marrow was then divided between the fifth and sixth dorsal vertebræ, and, an hour after, seven drachms of a turbid, acid, and citron-yellow urine, were removed. The medulla was next divided, opposite the third lumbar vertebræ; and, first, several ounces of an infusion of rhubarb, combined with broth, injected: and, five hours after, seven ounces of broth alone. Eight hours after the second injection, nine ounces of a pale, yellow-coloured, turbid urine, were obtained, which, though containing a considerable quantity of rhubarb, did not materially differ from the preceding. The spinal marrow was next, by means of a metallic wire, destroyed, from the upper opening as far down as the sacrum. An hour after this operation, half-an-ounce of urine was drawn off, as limpid, and of the same composition, as previously. Krimer then opened the abdomen, squeezed out of the bladder the last drop of urine, tied the orifice of this reservoir, and proceeded to destroy the cervical portion of the medulla, from below upwards, as high as the first cervical vertebra. The metallic wire had hardly reached the fifth, when the respiration ceased, preceded by violent, convulsive, movements of the head and anterior limbs: an assistant applied immediately an apparatus for artificial respiration, and Krimer was thus enabled to continue the destruction as high as the spot designed. The convulsions lasted half a minute, then ceased, and the animal lay as if dead; the heart alone continued to throb, and the eyes remained bright. In about six minutes, the beatings of the heart became weaker, 100 per minute; in thirteen minutes, they were hardly perceptible, and the animal was quite cold. Artificial respiration was then discontinued, and the bladder, when examined, was found to be empty: its parietes flabby and soft, and its neck easily dilated.

It is evident that, in this experiment, the artificial respiration, after the destruction of the medulla, retarded but a few minutes only, if at all, the death of the animal, which was greatly weakened by the operations successively performed upon it, viz.: the division of the spinal marrow, in different parts, and the opening of the abdominal cavity: consequently, the vacuity of the bladder, when examined the last time, is no proof of the influence exercised by the cervical portion of the medulla on the secretion of urine. In order to clear up the doubts which existed, I performed the following experiments:—1°. I destroyed the cervical portion of the spinal marrow of several rabbits, from above downwards; in all, artificial respiration having been employed to prolong life, for fifteen to thirty minutes, the urinary secretion continued: in none, did it undergo a notable interruption. I verified the exactitude of this assertion, by removing, previous to the operation, by means of a gum-elastic catheter, all the urine contained in the bladder, and leaving the instrument in that organ, so as to be able to calculate precisely the quantity resulting from the normal secretion, and that which was formed during artificial respiration. A remark may here be made: that the urine of the rabbit is naturally thick and turbid, often secreted in very small quantities; and, therefore, that the experiments performed on this liquid require great care and attention.—2°. This fact induced me to repeat the experiment on a dog—as follows: six ounces of water were injected into the stomach, through an opening in the œsophagus, and its return prevented by a ligature having been applied: this I had previously tried on rabbits, but without any satisfactory results.—The bladder was emptied with a gum-elastic catheter, which was left in the organ;—the trachea opened, and an apparatus for artificial respiration being placed there, the medulla spinalis was destroyed by means of an instrument, introduced between the first and second vertebræ; immediately, natural respiration ceased, and was substituted by artificial. For an hour, during which time the latter was continued, the urine did not cease flowing through the catheter, and in sufficient quantity to fill a small phial, capable of containing about three ounces and a half. It did not differ much from that previously obtained, being only a little more aqueous —a circumstance easily explained, if we reflect on the water which had been injected into the stomach.—3°. On another dog, the same experiment was performed, and a similar result was obtained.

Are not these facts sufficient to bear out the assertion (contrary to the opinions of Krimer, and of those who draw their conclusions from his experiments).—that the destruction of the cervical portion of the spinal marrow has no influence whatever on the urinary secretion? Doubtless they are; and, indeed, I think I have proved, that it may be gradually destroyed, not only without producing a suppression of the secretion, but, likewise, without causing any notable diminution in the quantity, provided care be taken to perform artificial respiration, when the cervical portion of the marrow is destroyed. I will add, in support of this opinion, the experiments performed by one of the ablest and most distinguished observers we have—Dr. Brachet: who gave to a terrier dog two cupfuls of milk and water, and, having divided the spinal

---

* *Traité des maladies de la moelle epinière, contenant l'histoire anatomique, physiologique, et pathologique, de ce centre nerveux chez l'homme.* By C. P. Ollivier d'Angers, M.D., third edit., vol. 1, p. 142, 1837.

† *Coup d'œil sur les résultats physiologiques des vivisections faites dans les temps modernes*, per Pierre Guillaume Lund. (*Journal Complementaire des Sciences Medicales*, vol. 25, 1826.)

marrow in the cervical region, emptied the bladder. After performing artificial respiration, for fifty minutes, he found, in that reservoir, an ounce of urine. On another dog, the *par vagum* on both sides, and the spinal marrow, were divided, and the result was, in every respect, similar to the foregoing.*

(To be continued.)

AN EXPERIMENT ON THE INFLUENCE OF ELECTRICITY ON THE TISSUE OF THE KIDNEY, AND ON THE EXCRETION OF URINE.

By E. H. DESPORTES, M.D., Member of the Academy of Medicine, &c. &c.

(For the "Medical Times.")

In a late Sitting of the Academy, I made use of an unusual expression to designate the difference which, I conceive, exists between the two tissues of which the kidneys are composed:—a rather bold expression, inasmuch as it is not in accordance with the opinions, generally received among physiologists, upon the characters assigned to these two tissues. This epithet, emplóyed by me to characterize one of these tissues, presented itself at the moment to my mind, as the most appropriate, to mark the distinction which, I thought, existed between the secretor and the motor portions of the organ: the functions of the latter being, especially, the excretion of the urine into the infundibula and pelvis. The remarks made on that point appeared to me to be capable of being submitted to the test of experimental researches. Accordingly, I performed the following experiment: but, before so doing, I perused attentively, in various authors, all the passages which presented any relation with the subject, but discovered nothing indicating that the agent, which I purposed trying, had been previously employed. It must not, however, be concluded, that I assert it has never been made use of with a similar intent.

In order to ascertain the degree and extent of the contractions, with which the tissues of the kidneys were endowed, I exposed to view, in a strong and healthy animal, the renal gland, still adherent by its vessels, and by the ureter, and submitted it to a current of electricity, obtained by the usual machine. I regret that I had not an opportunity of performing the experiment on an animal of larger size than an adult rabbit, as the smallness of the organ, and of its component parts, increased the difficulty of recognizing, even with the help of a lens, what took place in its tissue when exposed to the electric current.

Two incisions, in the form of a T, were made in the right loin, sufficiently large to permit the urinary organ to escape with ease out of the abdominal cavity, during a violent respiratory effort, or on the movements indueed by pain. This, in fact, took place as expected, without the protrusion of any other part, excepting a small portion of the intestinal tube. The gland presented its normal colour, size, firmness, and form; but, shortly after its having been submitted to the action of the electric fluid, the following changes took place.—*Colour*: it assumed a reddish-brown tint.—*Form*: it became rounder, shorter from above downwards, smaller from its convex to its concave edge.—*Size*: sensibly diminished.—*Firmness*: increased considerably. A distinguished physician, present at the experiment, compared the organ, in this state, to the turgescent condition produced in some viscera, by the accumulation of blood; but it will be seen, presently, that this comparison can only be admitted with some restriction, since the parts were not swoln, but retracted. A needle, plunged into three different parts of the kidney, allowed the escape of a greater quantity of blood, than would have taken place, had this been performed on the organ, when in its normal condition. These different changes in colour, form, &c., took place at the same time, and in a gradual manner, but without any apparent contraction or shock being perceptible, even when a lens was made use of. The secretion and excretion of urine evidently continued, as was visible from the distension of the ureter by that liquid, and the sinking in when it had passed on towards the bladder.

I regret having made two faults: the first was, cutting the ureter, too near to the kidney, as I was thus prevented from ascertaining the precise quantity of urine; and all I could perceive was, that it escaped by intervals; was limpid; of a slight greenish colour, and that it moistened the neighbouring parts. The second was, not examining whether the secretion was acid or alcaline. Besides this, I neglected to test the urine expulsed from the bladder, and which was, apparently, *jumenteuse*.

As soon as I supposed that the changes in size, form, and colour had ceased, and that the retraction of the organ had reached its maximum of intensity, I divided the kidney on its external, or convex, edge. A great deal of blood flowed from the incision, when compared with the size of the organ; it was principally furnished by the cortical substance: in small quantity by two large veins, which had been cut, and hardly a drop from the uriniferous substance. When the flow of blood diminished in intensity, that liquid formed small lines, convex internally, as if its escape on the surface of the tubular substance was prevented by hollow lines or wrinkles, developed on that part. However, when examined with a lens, nothing of the kind was perceptible; but, instead, it presented a granulated aspect, somewhat similar, with the exception of colour, to the cortical substance. Thus, the normal disposition of the tubular substance, which, as is well known, is formed of small bundles of elongated cones, easily separated from each other, was completely changed; and this alteration, though very slight, is deserving of attention.

Whilst these phenomena took place, another fact occurred, which demonstrated, with more precision, if such were possible, the retraction of the organ produced by the electric fluid. Of the two halves of the kidney, one only was submitted to the influence of electricity: and it retracted anew, so much so, that its size, when the two parts were united, was, in all directions, at least a line less than the other; this last, having retained the form it had, when the organ was divided. This retraction continued the whole time the experiment lasted, which was about an hour; and it became more evident, when the other kidney was taken out of the abdomen, and divided like its fellow. This last presented all the characters of the ordinary state, after death: colour normal, tissue soft and flabby, and very different from that observed in the gland on which the electric fluid had acted. The animal being now in a dying state, its sufferings were put an end to, by the division of the spinal marrow near the occiput.

The foregoing observation on the action of electricity on the kidney, during life, needs some additional remarks, to render it as complete as possible. In the first place, may not an affinity be established between the action of boiling water, by which the tissue of the kidney is rendered firmer, and that of certain acids—hydrosulphuric, hydrochloric, nitric, &c.—which cause it to shrivel, and also between that of the electric fluid, whose mode of action has been just described? Again, the result, obtained by these various methods, seems to prove that, in different component parts of the gland, especially in the parts improperly called *fleshy columns*, and in the dense, resistent, radiated, bundles of the medullary substance, a motor power, more or less modified it is true, exists, in various degrees of force and intensity, according to the parts acted upon.

And, now, it must not be forgotten, that, if one of the tissues of the kidney is that which secretes the urine, there is likewise another along which the liquid flows as it is secreted; and, moreover, several eminent physiologists endeavour to explain the circulation of the urine in this canal, which carries it to the bladder, by the throbbing and motion of the blood in the arteries and veins, and by the contractions which take place in the neighbouring organs. But, in the experiment just related, the kidney, having been taken completely out of the abdomen, and isolated from the organs which surround it when in its normal position, could not receive shocks or pressure from the blood vessels or other parts, and yet the urine was expulsed into the infundibula and pelvis. Consequently, the flow of the urine is evidently owing to a contraction, let the nature be what it may, of all, or of one, of the component parts of the kidney. It cannot be asserted, that this opinion is founded on theory, since, in the experiment, the urine was perceived to escape from the ureter; and, the kidney being separated from the surrounding parts, evidently its expulsion, into the infundibula and pelvis, must have been performed by the action of the tissue itself.

But, what is the nature of this action, which is peculiar to the renal tissue under certain conditions? This may be easily answered, by reflecting on the result of the foregoing experiment, in which the resistance, presented by the infundibula and pelvis, was overcome by the impulsion given to the urine in the renal tissue! Again, when the urine passed from the pelvis (this part being but the commencement of the ureter), into the ureter itself, it dilated that canal, as if driven forward by some *vis a tergo!* Now, the introduction of this flow of urine, from the pelvis into the ureter, cannot reasonably be attributed to the extensibility and contractility with which the latter is endowed, throughout its whole extent. The ureter was distended by the urine, and this liquid was pushed onwards, *darted*, perhaps, from the papillæ of the uriniferous substance. *Darted* is an expression, which may be considered by some as improper; but why should we refuse to admit this to be the case, when an analogous effect sometimes takes place from the nipples; and a fact has been recorded, of a queen of France, who, whenever she experienced any great grief, not only wept, but, likewise, from whose puncta lachrymalia, the tears darted forth. It may, therefore, be asserted, that at least one of the tissues of the kidneys is endowed with a certain degree of force, varying according to the state of the organ, which contributes, by its contraction to the normal expulsion of the urine, from the parenchyma of the gland, into the pelvis and commencement of the ureter.

Finally, in expressing myself thus, on this and some other points, which have been merely glanced at in this memoir, I readily admit, that the experiment related, the comments, deductions or inductions, which accompany it, though they appear to me to be worthy of acceptation, yet require other experiments to be performed with the same agent, to remove all doubts. This may be accomplished by operating on the kidneys of animals of a larger size than rabbits, because the phenomena, thus produced, will be more easily perceived, more readily isolated from each other, and the results, obtained, determined with the utmost exactitude. It is not, therefore, with the view of its being received as a constant fact or phenomenon, that I publish the preceding experiment, but simply to raise the curiosity, and draw the attention, of the profession to the subject.

* *Recherches Experimentales sur les Fonctions du Systeme Nerveux Ganglionnaire, et sur leurs Applications à la Pathologie.* 1837, p. 322.

THE PHYSIOLOGY OF MATERIA MEDICA,

AS ESTABLISHED BY THE LATEST RESEARCHES IN ORGANIC CHEMISTRY, PHYSIOLOGY, PATHOLOGY, &c.

By the celebrated Professor T. F. SOBERNHEIM.

(Continued from page 468.)

Very numerous substances have been discovered in the *urinary excretion*. After the use of the carbonates and bicarbonates of soda and potash, the urine exhibits distinct alcaline reaction. Vetter observed that individuals, who used *eau de Vichy*, in gravel affections, discharged urine, having an alcaline reaction. Landerer describes a case where fœtid exhalations from the feet (the principal constituent of which was an acid substance) were cured by the internal and external use of alcaline remedies. Orfila, in a case of poisoning by acetate of lead, found the poison in the urine. J. F. Simon took ten grains of ferrocyanate of potass, in the morning, before breakfast; after the lapse of twenty minutes, he found the salt in the urine: he also took six grains of iodide of potassium, and examined the urine every five minutes,

in the following manner:—he first added a solution of starch, and then carefully poured chlorated water into it; in ten minutes, the iodide of potassium was shown in the urine by a lively blue colour; he, also, found it as long as one and two hours, and even thirty hours, after. Orfila's latest experiments show, that a great number of dogs, to which, from 20 to 50 *centigrammes* of arsenic acid were administered, were saved, even though the œsophagus had been tied, if the animals were caused to discharge a great quantity of urine by taking diuretics. Animals, in which symptoms of poisoning were manifested, after introducing tartar emetic into the cellular tissue of the abdomen, were all saved where diuretic beverages succeeded in causing an abundant evacuation of urine. Orfila treated five dogs with diuretics, after having applied one *decigramme* of tartar emetic to the cellular tissue of the inner surface of the thigh. One single dog died, which had discharged scarcely any urine. The urine of the four others, that were saved, contained tartar emetic. Orfila has attempted to promote, by diuretics, those secretions, which are arrested by opium. He gave to several dogs, from two to six *grammes* of opium, but, in spite of the most energetic diuretics, no urinary excretion could be produced. Meurer found the observations of Orfila confirmed by his own experiments; arsenic was found in abundance, not only in urine, but also in the excrements, intimately combined with the organic mass. Meurer considers, therefore, the administration of purgatives as very useful in cases of poisoning by arsenic, partly to promote evacuation of the fæces from the alimentary canal, and partly to increase the biliary secretion, and, with it, the excretion of the arsenic from the liver. Landerer discovered quinine in the urine of a patient, suffering from intermittent fever, who had taken large doses of this medicine, and, at last, he isolated as much as one drachm of quinine. According to Rey, balsam of copaiva, and cubebs, impart to the urine a whitish precipitate, on being treated with nitric acid Nitrate of potash, is, according to Pereira, one of those substances most easily found in the urine. Borate of soda was found in urine by Tiedemann and Gmelin; mercury by Cantu, Jourdan, and Buchner; tannic acid by T. G. Mitscherlich; citric and malic acids by Morichini, and sweet almond oil by Fernel, &c.

The following substances have likewise, at various times, been discovered in the urine: Oil of turpentine, and oil of juniper (to be recognised by the urine having a smell of violets); assafœtida, musk, *viola tricolor* (urine displaying the smell of feline urine); valerian and castoreum (the urine smelling like myrrh); camphor, as also indigo, rhubarb, madder, campeachy wood, saffron, mulberries, black cherries (the urine is coloured green by alkalies, and red by acids). Some substances are found in the urine, assuming other combinations; for instance, *benzoic* and *cinnamonic* acids are transformed into hippuric acid, easily obtained in the form of crystals. Keller took 32 grains of pure benzoic acid, and from the strong acid urine which resulted, he separated crystals of pure hippuric acid. According to Erdmann's experiments, *cinnamonic* acid is likewise transformed into hippuric acid. According to Wohler, the tartrates, acetates and citrates, of potass and soda, are partly found in the urine, as carbonates of these alkalies. O'Shaughnessy found hydriodic acid in the urine of a dog, to which he had administered iodine only forty minutes before.

Sulphur is partly transformed into sulphuretted hydrogen in the *gastric secretion*; and in this form it is also found in the urine. Sulphuret of potassium is partly found as sulphuretted hydrogen and partly as sulphate of potass. The presence of several remedies, in the urine, is likewise shown, by the urine having the same medicinal effects as those substances. Thus, Runge observed, that the urine of rabbits, fed with belladonna, stramonium, and hyoscyamus, produced distinct dilatation of the pupil, when dropped into the eye of another animal. Langsdorf observed that the urine, after the use of toadstool, possessed a more narcotic power than the remedy itself.

In the *secretion of the skin*, several substances may likewise be discovered, mostly known by their peculiar smell, and by the colour they communicate to the fluid exhaled. Thus, camphor, musk, saffron, assafœtida, garlic, onions, &c., impart their smell to the secretion of the skin; indigo and rhubarb, on the contrary, their colouring matter. Iodine was discovered in the secretion of the skin by Cantu, and mercury by Buchner.* Dieterich observed that iodine might be recognised in the mucus of the nose by its smell, a proof that it is likewise excreted from the body by transpiration. The continued use of sulphur causes the metals, brought into contact with the skin, to become black.

In the *fluid exhaled from the lungs*, many of the substances taken were, likewise, discovered. Breschet and Milne Edwards injected into the peritonæum of several dogs, alcohol saturated with camphor; three minutes afterwards, the expired air displayed a smell of alcohol, and after six minutes a smell of camphor. Half an ounce of tincture of assafœtida was injected into the rectum of a cat, and it (the rectum) was afterwards tied. In four minutes, the alcoholic smell could be perceived in the expired air, and that of assafœtida after twenty-two minutes. Garlic, rubbed into the soles of the feet, shewed its peculiar smell in the exhalation from the lungs. The breath of an animal, killed by the injection of the sulphurous water of Bareges, blackened, according to Magendie, a paper dipped into a solution of acetate of lead. In *the saliva*, mercury was discovered by Buchner. Cantu and O'Shaughnessy discovered iodine in the saliva. Garlic, tobacco, rhubarb, and vinegar, are said to impart a specific taste to the saliva. Even that the *lachrymal secretion* contains substances, introduced into the body, is proved by the following interesting observation of Fricke: on an individual, who had previously taken iodide of potassium, applying chloride of mercury to the eye, for the removal of an attack of ophthalmia, violent irritation was produced by the iodine, contained in the tears, combining with the mercury, and forming iodide of mercury in the tissue of the eye. The experiments of Peligot, (with asses' milk,) prove the *absorption of many substances by the milk*. Bicarbonate of soda is abundantly absorbed by the milk, and imparts to it a strongly alkaline reaction. The sulphate of soda was perceived, after having been taken three or four times, in the dose of one ounce. Iodide of potassium was detected in this secretion, after the administration of forty-eight grains; oxides of iron and of zinc, nitrate of bismuth (taken as an hydrate, and mixed with honey) were, likewise, discovered after various intervals; but nitrate of potass, sulphurets of potassium and of sodium, some salts of mercury, and sulphate of quinine, could not be recognised in the milk on the most careful examination of its serum and its caseïne. Taylor lately discovered lead in the milk of a cow, poisoned by carbonate of lead. Barbier mentions a case where symptoms of narcotic poisoning appeared, and lasted for several hours, in a child, after taking the breast of a nurse, who had shortly before swallowed a strong dose of tincture of opium. Delille describes another case, where a syphilitic child was treated by the milk of a goat, into the skin of which a drachm of the grey mercurial ointment was rubbed daily; salivation ensued, and the child completely recovered within a month. Remedies are also found in *the organic tissues themselves*. Thus, Wibmer, after the continued use of the carbonate and the acetate of lead, for fourteen or seventeen days, found the metal, by chemical reaction, in the liver, spinal marrow, and in the muscles; and, after the use of sulphate of copper, for several weeks, he found this metal deposited in the substance of the liver. Lassaigne also discovered lead in the liver and kidneys of animals, poisoned by it. Orfila has, likewise, shown, by a series of experiments, that acetate and sulphate of copper, introduced into the stomach or cellular tissue of animals, are absorbed by, and communicated to, all the viscera, from which metallic copper can be obtained by chemical re-action. Metallic copper, and metallic mercury, were found in the brain by Picker. Christison mentions a case, where globules of mercury, as large as the head of a pin, were found in the frontal bone, the sternum, and in the tibia. Similar cases have been observed by Otto and Fricke, and Voigtel mentions several instances, where, in the bones of such individuals as had been treated for some time with bi-chloride of mercury, metallic mercury was obtained by reduction. Arsenic was found by Emmert in the spinal marrow of animals. According to the recent experiments, that have been published by Orfila and others, arsenic may be discovered, after poisoning, in all the organic tissues. Morphia has been discovered in a corpse, even after having laid a long time in the earth. According to the latest experiments of Orfila, tartar emetic is found, after poisoning by it, in all the organs, and especially in the liver and the kidneys. But, since it is partly decomposed, and rendered insoluble, by the animal matter, it is necessary to exsiccate the whole organic tissue, and particularly the liver and kidneys; to treat them with nitric acid, and, in fact, employ a similar process to that described by Orfila, in poisoning by arsenic. Wedemeyer found reduced silver, in the *plexus choroides*, and in the *pancreas* of an epileptic patient, who had taken nitrate of silver for some time before his death; all the internal parts, moreover, displayed more or less of a dark-blue colour. Mayer discovered the injected ferro-cyanate of potass, in all the solid tissues, with the exception of the nerves and muscles. According to Reil and John, sulphur is found in the bones of such individuals as have worked, for a long time, in sulphur mines. Madder is easily recognised by the red colouring found in the bones of animals fed upon it. Ogston found, *in the brain* of a woman, who drowned herself during intoxication, four ounces of a fluid which was possessed of all the qualities of alcohol. Cook and Wolf discovered a distinct smell and taste of alcohol, in the brains of individuals who indulged habitually in the excessive use of alcoholic beverages. Indigo and lead were found *in the bile*, by Ficinus and Seiler; ferro-cyanate of potass, by Tiedemann and Gmelin; and mercury, by Zeller. The reception of medicinal agents *into the blood*, is, lastly, put beyond all doubt, by the circumstance of external applications producing effects in organs distant from the place of application. Thus, inhalation of arsenious vapours, the application of arsenious acid to the mucous membrane of the nose, to the vagina,* nay, even to the uninjured skin of the head,† produced the well-known symptoms of poisoning by arsenic. Dassit communicates the particulars of four cases, where sulphate of quinine, exhibited in the form of ointment to the armpit, completely removed intermittent fever. Raciborski mentions ten, and Liebig fifty, cases of intermittents, where the use of quinine, by the endermic method, brought about a perfect cure. It is known, that even the external application of iodine, produces a wasting away of the breasts in females, &c. In one case, a mere application of dried tobacco-leaves to the chest and abdomen, produced all the symptoms of narcotic poisoning. This case is the more remarkable, as it happened to a whole squadron of hussars (who marched from Hungary to Galicia,

* White filtering paper was laid on the skin of a syphilitic patient, who was treated internally with bi-chloride of mercury. The paper was then acted on by diluted nitric acid, and the liquid evaporated. The quantity of mercury dissolved was such, that it could be obtained in a metallic form by placing a piece of copper in the liquid.

* A case may be mentioned, here, where a Danish countryman poisoned three wives, by introducing a mixture of flour and arsenic into the vagina, immediately after coition.

† Schulze describes a case of poisoning, terminating fatally, after twenty-one days, where arsenic had been used instead of hair powder. The *post-mortem* examination shewed a violent inflammation of the stomach. An analogous case is related by Desgranges, where the use of arsenious pomatum, for the purpose of destroying vermin of the scalp, produced all the symptoms of poisoning by arsenic, and the patient's life was saved with great difficulty.

and tried to deceive, in this way, the officers of exeisc.) According to Schervel, tartar emetic, rubbed into *the sound skin*, caused vomiting; and Krimer found, that merely two grains, applied to a deep wound which he made in the humerus, caused him to vomit seven times in the space of two hours. Pelletan found all the symptoms of narcotism in a child, aged two months, to whom a cerate, containing fifteen drops of aromatic tincture of opium, was applied for a slight excoriation of the skin, and left on for twenty-four hours. Hufeland saw narcotic symptoms appear from a piece of opium, kept for some time in the hand, on a hot day.

From the above numerous and varied observations and experiments, the absorption of remedial agents, into the blood, is proved beyond a doubt; and we may hence conclude, that all remedies must be introduced into the blood, ere they can cause general effects, though chemical reaction may not always be able to demonstrate their presence.

(To be continued.)

SELECTIONS FROM GERMAN JOURNALS.

By SIGISMUND SUTRO, M.D.

Experiments on Amylum or Starch.—Berzelius says, in describing the properties of starch: "The formation of paste is not to be considered as a solution; it is merely a swelling of the starch in water, which it absorbs like a sponge, giving it off again, when laid upon a porous body, which has a tendency to share the water with the starch or paste." I found the above assertion beautifully confirmed, by the following observation. In the winter of 1840, the temperature was very low in Copenhagen, and occasioned many articles of food to freeze, which had not previously done so. Thus, among others, a dish of sago, that had been put by the day before, became completely frozen. According to *Vogel's* theory, as regards the effect of freezing on a solution of starch, I had expected to see a part of the amylum separate in the form of a powder, when the above-mentioned soup was again thawed. But, this did not take place. The whole mass divided in two parts: a coherent spongy body, and a clear solution. When the solid mass was taken out of the solution, and pressed between the hands, it appeared as a porous paper-like substance, which, when dipped into water, almost immediately filled with the liquid, like a sponge. When dry, it resembled horn, though common starch, when boiled to a paste and then frozen, yielded a mass that looked like paper, wet at first, and then torn by pressing the liquid out. Repeating these experiments, I found that this spongy appearance was only exhibited, when the amylum had been boiled in water for some length of time. A solution of iodine produced a strong, blue, colour in the filtered liquid. When the spongy mass had been repeatedly washed with distilled water, till the liquid expressed from it produced no longer any blue colour with iodine, it was once more boiled with water, and frozen, and the clear solution again contained so much amylum, that a blue precipitate was produced by iodine. In repeating this experiment, I always found that a new portion of amylum was dissolved from the mass. Thus, it seems that the layers of starch gradually lose the property of being separated by freezing, or, in other words, the chemical layers of amylum can be chemically dissolved but by continued boiling in water. An elementary analysis of the amylum, separated by frost, gave results similar to those of common starch. (*Scherer in Annalen der Chemie und Pharmacie.*)

Camphine produced by the action of nitric acid on amber.—While preparing succinic acid from amber, it has been observed, that more acid can be produced, if a small quantity of concentrated sulphuric acid be added during the distillation of the amber. Sulphuric acid when heated with organic substances, is decomposed into sulphurous acid, which escapes, and into oxygen, which generally combines with the substance in the retort. The larger quantity of succinic acid, produced by the addition of sulphuric acid, suggested to me the idea, that this increase of acid is partly due to the oxydation of a portion of the amber by the disengaged oxygen of the sulphuric acid. To ascertain this point, I subjected a quantity of amber and nitric acid to distillation. The amber was reduced to pieces of the size of a bean. It was gradually transformed into a yellow, tough, fusible mass, covering the surface of the nitric acid. A clear solution was produced, which, evaporated to the consistence of syrup, was again boiled with nitric acid. After repeating this operation several times, the acid liquid was finally evaporated at a gentle fire, and then allowed to stand. After some time (several weeks), little crystals are thrown down, which are to be separated from the liquid by a funnel (the upper opening of the tube being covered with asbestos). The liquid is further acted on by nitric acid, and evaporated; crystals are again obtained in the same manner. The crystals, still adulterated with organic matter, are to be now heated with strong nitric acid, by which they are not affected, but the organic impurities are destroyed. After the liquid is cooled, the crystals are obtained pure. They are in the form of prisms, possessing an acid taste; easily soluble in water and alcohol; producing no change in a solution of sulphate of lime, after being neutralized with ammonia. Out of six ounces of amber I obtained, in the above manner, half an ounce of pure succinic acid. The liquid, contained in the receiver, possesses during the distillation, a greenish-blue colour, which disappears after some time. If this acid is neutralized with a ley of caustic potash, a strong heat is produced, and, after the subsidence of the reaction, a strong and unmistakeable smell of camphine is perceived. Shake the liquid, after cooling, with æther, and pour it into a suitable vessel, so that the products may be deposited in its neck and removed from the liquid portion. After the spontaneous evaporation of the æther, for instance—on a watch glass, a crystalline residue will remain, which is nothing but pure, crystalline camphine bearing, in all its physical properties, the greatest similarity to the camphine of the *laurus camphora*. The quantity of æther used for the extraction of the camphine must not be excessive, or else a part of the camphine will escape during the evaporation of the æther.—*Dæpping, ibidem.*

On butyric æther.—This æther, which has so agreeable a smell of apples, is said to be much used now as an aroma in the preparation of rum. For this purpose, it is easily obtained, by treating butter with a concentrated ley of potash, and dissolving the soap produced in the smallest possible quantity of pure alcohol under the action of heat, mixing this solution with alcohol and sulphuric acid, till it exhibits a strong acid reaction, and distilling it so long as the liquid, passing over, displays a smell of fruit. By repeated rectification, and treatment with chloride of calcium, butyric æther is obtained in a pure state. According to an analysis of M. Bornträger, it seems to consist of: Carbon 61·57; Hydrogen 10·91; Oxygen 21·52.—*Wohler, ibidem.*

Odour of Castor.—The *carbolic acid* discovered by Runge in coal-tar (obtained later as a product of the decomposition of salicylic acid, and named *hydrate of phenyle*), has an odour (particularly when disolved in water) so similar to fresh castor, that the latter must be supposed to contain some carbolic acid. The ætherial oil, obtained by distillation from castor, is probably nothing else but carbolic acid. It is readily known by its peculiar reaction on chromic acid, which renders it perfectly black. Should this supposition be confirmed, experiments might be made as to the effect of carbolic acid on the system, and perhaps castor, which is so expensive, might thus be superseded. —*Wohler, ibidem.*

Caoutchouc as a Remedy for Tooth-ache.—Caoutchouc, becoming very smooth and viscous by the action of fire, has been proposed by Dr. Rolffs, as an excellent remedy for filling hollow teeth, and alleviating the tooth-ache proceeding from that defect. A piece of caoutchouc is to be put on a wire, then melted at the flame of a candle, and pressed, while warm, into the hollow tooth, and the pain will disappear instantly. The cavity of the tooth should first be cleaned out with a piece of cotton. In consequence of the viscosity and adhesiveness of the caoutchouc, the air is completely prevented from coming into contact with the denuded nerve, and thus, the cause of the tooth-ache is destroyed.—*Buchner's repertorium fur Pharmacie.*

NOTICES TO CORRESPONDENTS.

"A Reader."—*The New Bill is given verbatim in No. 256 of the* Medical Times. *Surgical Fellows and Physicians are to pay* £2 *for the first registration,—all others,* 5s. *The annual or occasional registration is not, it would appear, to cost anything. It will be a misdemeanour, by the New Act, to pretend to be on the register, the punishment being fine or imprisonment, or both, at the discretion of the court.*

The notice of the Birmingham Medical Association came too late.

The Sydney Morning Chronicle *has been sent us and gives the details of a prosecution by an unqualified against a qualified practitioner; the latter, Dr. Tierney, being charged with defamation, because denying the competency or skill of the former, Mr. Duigan. The plaintiff, by an odd decision, which speaks well for the state of law, was successful.*

"An Old Subscriber."—*The lists of the College of Surgeons contain the names of all members to the date of publication. We are not aware that Practitioners, not Members, have been appointed Fellows.*

The case of Mr. Deshon *will be treated on next week.*

Mr. *H.*'s *case is a puff, and a very bad one. It should be sent to the Lancet.*

"A Member of the Committee" *is thanked, but we have already noticed the circumstance. We shall be obliged by any future details.*

"A Pupil."—*We should prefer the book recently reviewed in our pages,* "Rigby on Dysmenorrhœa."

Mentor's *strictures on the apprenticeship clause of the Apothecaries's Act, offers nothing new to our readers.*

A Provincial.—*The* Encyclopœdia of Domestic Economy *is published by Longman and Co. We are not aware of its merits, but it is favourably spoken off.*

S. *on a contemporary's fear of mentioning our names to his readers, is amusing, but the matter is not worth notice.*

A correspondent announces to us the death of Mr. Payne, late President of the Pharmaceutical Society.

Barabbus *is considerably too severe for our pages. His letter is a revived Phillipic. We must ask leave, however, to retain the analysis of evidence.*

2. *It should be sent to the Royal Society, Somerset House.*

"A Bedfordian' *draws our attention to the resolutions agreed to by medical men at Bedford, condemning the bill for encouraging quackery, yet admitting that penalties for pretending to be on the registrar would be an effectual check. He remarks correctly, that there is such an "effectual check" on the face of the Bill. This certainly appears to be a small oversight, but in the resolutions generally there is a very admirable spirit displayed. We see that judicious, action, and gentlemanly language, which the profession cannot have too frequently displayed.*

Much correspondence has been received which is yet under consideration.

THE MEDICAL TIMES.

SATURDAY, SEPT. 14, 1844.

At nos virtutes ipsas invertimus, atque
Sincerum cupimus vas incrustare.

AFTER the guarantees given that future members of our body shall do us credit by their high attainments—the next most important provision of the New Bill is that which secures us a complete registration. We have here a boon of immeasurable value to every medical man who takes pride in his profession: a boon which has been one of the most prominent demands in every movement

for Medical Reform: always asked for—we have noticed—with an earnestness and intensity exactly proportioned to the enlightenment of the petitioners.

What is the great evil which meets us in our practice, and which forms much of the unhappiness of our professional lives? Why, this—that, properly, we are neither known to ourselves nor to the public. We suspect each other, and the public suspects us all in turn. The people have no means of clearly detecting the true member of the flock from the wolf in sheep's clothing: and we have no means of setting them or ourselves right on the important difference. There exists not—under the present system, there cannot exist—any obviously-marked or clearly-defined segregation of the quack from the doctor. From the very summit of professional orthodoxy to the lowest depths of quack infamy, the intermediate gradations run so much into one another, that it is impossible to say where licit practice ends, and illicit tampering begins. What does, what can the vast community know of us, amid our numberless conflicting diplomas, from almost numberless colleges, recognizing numberless degrees and kinds of practices? How are they to know that the owner of this small drug shop is a doctor, and the owner of that larger one a mere pretender: that this man, who calls himself surgeon, has never passed a college, or that the other, who appellates himself Doctor or Professsor, has never had a month's medical teaching? Why, we cannot ourselves detect the true brother from the imposter, and how are the less-informed public? They cannot: and the consequence is, that every shop, with windows clothed with coloured bottles, is taken for a doctor's residence; and two-thirds of the minor medical practice of England is in the hands of unqualified people. And let it be remembered that this universal encouragement of a dangerous imposture arises from none of that love of deception Sir James Graham spoke of—but from the utter inability of the uninformed to say who is, and who is not the honest and the competent practitioner. The middling and humbler classes thus mislead, could aequire *competent* assistance on just as easy terms as those they now are compelled to pay through most probably a longer period; and there can be no doubt that if our Profession stood before them in its true position, with the distinction between its educated members and the uneducated quacks clearly made out, two-thirds of the empirical practice of the day would disappear as by enchantment.

This, though a great good to us, would not be more to be prized than the unity and good fellowship, and combined strength, a perfect registration would give to ourselves—as a Profession. The pale drawn closely round us—all being circled into one firm body—instead of wasting our energies in mutual squabbles, we should be able to stand shoulder to shoulder, in unbroken file, for mutual improvement, or defence from external aggression. Petty, separate interests would combine into one grand, aggregate cause,—high thought and great action would be possible; we should become a power in the State—Who shall say that this would not be to *our* dignity, and society's advantage?

A registered profession and great grievances cannot co-exist. One of the first things its united voice would secure, would be either the legislative extinction of quackery, or the state separation of empirics into a badged body—known, and notorious—one, and indivisible. We should argue thus:—"if we are the only persons competent to deal in a matter where incompetency is the mutilation or murder of her Majesty's subjects, we demand the cessation of so grievous a peril to the state's children—and of so great an injustice to those who, at great expense and labour, have provided you with the skill you require." If our appeal here failed, we should insist at least that, if it were of importance that the people's benefactors should be honourably distinguished, it was of no less consequence that the people's *male*factors should be notoriously badged. After our long and costly studies, we are entitled to know the persons who dare, to our injury, to live on the perils of their brethren, who, ignorant of the causes and treatment of *any* disease, hazard the lives of the foolish and uncunning, by essaying the cure of *all*.

We should not stop here. The strange, singular, and, we are almost sure, *very temporary* omission in the new bill, on the constitution of the seven corporate bodies (which retain the power of granting diplomas) could not continue six months with a registered profession. As the Council of Health is to govern in great part the Profession, and as that board is to be formed principally by the choice of the Colleges, the members of these Colleges must, as surely as fate, some day have the direct power of choosing their honoured representatives. The principle is so clear that there is no gainsaying it in discussion, and with our united Profession no resisting it in practice. We must govern our Colleges—and through them the Board of Health, that will govern all. We yet trust, from the good sense of Sir James Graham, that the Bill will not finally fail us in these important matters. We hope to see them next session take their true place in his project. If they do not, the bill will be only half itself; and will win but a half gratitude. It will not end our long-lived agitations, and so will be of little honour to the minister: it will, however, give us a power of reaching that happy settlement, and so will not be unworthy our acceptance.

And here arises matter for a serious word from ourselves to Sir James Graham. "We have done the good of your measure full justice. We have gone to the brink of partiality in claiming for you your merits. The same rigid truth that spoke in commendation, speaks now in equally conscientious warning. You are in dangerous hands. Sir Benjamin Brodie may be as honest as you think him: but in legislation, and in the *higher* parts of human conduct, he is not sound. His infinite tact with individuals, is mere misapplied acuteness with a community; and if his schemes of medical adjustment look well on foolscap, take our advice and let them stay there: they will never look so well anywhere else. He is the medical Abbé Sieyes: he can write out a new constitution as easily as a prescription. The one is worth your guinea—the other, not a farthing. His only legislative feat—his Charter—has thrown his College into inextricable confusion: without State intervention, it can never know another hour of peace or contentment. This is not encouraging for you. Your present Bill concedes us some of the grand points we need: they luckily did not oppose the interests of the Brodie section: it tacitly denies us others—where the denial is a frivolous ceremony, or insignificant reservation on your side—and a prolongation of unscientific wrong and corporate injustice on ours. These, unfortunatly, were points of deep interest to the Brodie section. We implore you, then, to think and re-think over these things for yourself; above all things, to keep clear of the magic circle in which your Mephistophiles of an adviser would enclose you. If you would be safe, follow him where he has no interest in wrong—and go in the opposite direction where he has. Few men pursue what suits them more energetically than Brodie: a mental diathesis, beyond his own power, blinds him to the folly or wrong of a project, when the project is to his advantage. In the language of phrenology, his conscientiousness plays the part of the Vicar of Bray to his enormous and tyrannical acquisitiveness. To like and to approve, to want and to seek, is to him the same. His convictions are the dictates of honesty, for they spring pure from his feelings; they are always as right as his prepossessions—no more. Such being his character, we ask you to bring to this important Bill not his mind, but yours. Weigh against the delicate *convenances* of the small class he naturally fosters, the strong feelings of that far larger class whose subordination is his height, whose lowness is his distinction. You have no interest—no prejudice—no pension; take pains then, and decide for yourself between the two antagonistic sides. Remember that the lowest members of the College have the position, and hold the aspirations of gentlemen; yet, if you follow the "serjeant-surgeon's" advice, you will make the great bulk of them ciphers in their own profession; the powerless spectators and sufferers of any wrong or folly, the Brodies of their science, may perpetrate. Is such a dream not insane? In action is it not most unsafe? Try it—and take our word for it—you risk the existence of the profession. Try it,—and men's minds will revolt against so hugely unjust an outrage. There will be large secessions. State connection, instead of an honour and service will be felt a slavish chain—a degrading yoke—you will have a recent Scotch event reproduced. The non-registered will be the Profession. We shall show you a Free Church of Medicine! If the crotchet please you, have two classes of us: Doctors of Surgery and Medicine, and Licentiates of Surgery and Medicine—both attached to Colleges. If not necessary, or useful; they are ornamental, and look not unseemly on paper. But proceed no further. Deny not the Licentiates more than the Fellows a direct control over the funds and officers of their own institutions. Your large knowledge of human nature—your intimate acquaintance with the characteristics of the English educated mind, must tell you, that if you do, you will give a lease to agitations greater than we have yet had, and to alienations fatal for a time to the cultivation of science; and doing a mortal injury to the usefulness of your labours for Medicine, you will deprive yourself of a brilliant opportunity of distinguishing yourself as a statesman!"

"The correction of one is the warning of many."—Old Proverb.

Has the new Medical Association of Marylebone, with its humble secretary and guide — William O'Connor — entered into any plot publicly to humiliate our Profession? Can the three resolutions they have transmitted us be *genuine?*—really and truly the literary production of *medical* men?—members of our time-honoured and once-learned Profession? We put the question with earnestness. We ask evidence before believing that our Hibernian brother—a veritable *medical* secretary—could have perpetrated such atrocities on the Saxon language: or if he has—carrying his outrages further—could have put

the Society to expence, to advertise in daily papers his sublime contempt for this country's conventionalities of common sense and grammar. Intrepid, indeed, must be the ignorance, exorbitant, beyond measure, the accompanying vanity which could court publicity while immolating our Profession's educational character by writing of this kind :—

1. Resolved That *this* Meeting *feel* the *absolute* necessity *which exists* for medical reform, and *are* ready to admit that the bill introduced by Sir James Graham, *Bart*, might lead to some beneficial results, yet *they* have no hesitation in declaring, that while it contains provisions allowing persons to *practice* who are not *qualified* by *previous* study, it will prove *highly dangerous* to the public *at large, more especially* to the poor, *and ruinous* to the profession ; *they*, therefore, pledge themselves to use *every* constitutional means to prevent it passing into law.

It was well done, well, truly, that the Meeting, i.e., the Secretary, should resolve to feel the necessity—we beg pardon—the *absolute* necessity of Medical Reform. The consciousness of our deficiencies is a thing much to be sought ; and though, here, surprisingly tardy in coming, is better late than never. Truly, Mr. Secretary, there is need, much need, of Medical Reform. If only that portion of it which demands a preliminary education, had been conceded us three years ago, our unhappy body would have been spared, in 1844, a great disgrace—this startling piece of literary composition!

And then this accomplished Medical secretary—whose qualifications are far more complete for breaking than curing the head of Priscian—assures Sir James Graham, *Baronet*, that he will oppose the Government Bill (" so absolutely necessary" and so pregnant with benefits—no—" beneficial results") by " every constitutional means,"—which, in the Chartist phraseology of the resolve, means, we suppose, that he will abstain from beer, gin, tobacco, and all such exciseable articles. Poor, unconstitutional Sir James Graham, *Baronet*, will rue the day he was opposed by the constitutional Wm. O'Connor, *Secretary!* But what is the secret of this deadly hostility? Let us hear it in logic rarely offered in such quintessence. The Bill, to use elegant and unambiguous language, " will allow persons to practice who are not qualified by *previous* study;" and—recreant as he is from gratitude,—the suicidal secretary will use every constitutional means to prevent it passing into law! Did one ever hear of such energetic self-sacrifice?

Passing over such elegancies, as " people *at large*," which wide term does not appear to *confine* the *poor* and the *Profession*' (these, of course, are not the same classes)—and the happy idea that people qualified have usually become so by *previous* study,—let us record our second professional transgression, committed by our secretary's unhappy instrumentality :—

Resolved, That it is the opinion of this Meeting that the Society of Apothecaries, since the passing of their act in 1815, have done their duty admirably and to the great advantage of the public, and that they have elevated the standard of education of the general practitioners to its present creditable position; it therefore deprecates most *cordially* any attempt to repeal the Act of 1815, unless *another tribunal* be instituted that will continue the education of the general practitioners under the control of *his* own class, and *contain some penal enactment* for the protection of the public from the intrusion of unqualified practitioners.

Exquisite English! A " *cordial*" deprecation! The Act of 1815, a tribunal which must not be repealed without instituting " *another* tribunal!"—which " tribunal" must *contain* a penal enactment! The writer of such a sentence has a title constantly to displace—as he conscientiously does—the plural for the singular. He must be out of his element when not revelling in a grammatical *singularity*. What lucid evidence does he not offer of the creditable standard to which the Apothecaries' Company has " elevated" *his* education!

And now for the last :—

Resolved, That this Meeting expresses its earnest *hope* that meetings of the members of the medical profession will be held in the metropolitan districts as well as throughout the country, and Committees formed with the same objects as *those of the Borough* of St Marylebone, and that a conference *should* take place with a view of ultimately forming a deputation from the different associations for the purpose of obtaining an interview with Sir James Graham in order to lay before him the strong objections entertained against the bill, and also to point out many of the evils the profession has long laboured under.

The " Meeting *hopes* that a conference *should* take place," and with objects like " *those* of the *Borough* of Marylebone!" Whether the objects of the Borough of Marylebone are Chartist, Radical, Whig, or Tory, is a matter to be explained and advertised, we suppose, in some future resolutions. Meanwhile, we bid adieu to this *sanspareil* of vulgarity, with the hope that the Proberts, the Penningtons, the Squibbs, the Birds, and the Ancells, will take the earliest occasion of letting their brethren know that they are not responsible for opinions so absurd in reasoning, and so ridiculous in expression, as those their honorary secretary has so freely laid at their door. We know no worse injury to the best interests of the Profession than the publication of such blundering and Chartist-like attempts at literature and statesmanship (!), by men who appear to have a formal authority for their attempts to make members of a learned calling the laughing-stocks of society. If these resolutions be not the sole work (as, of course, they are) of the Secretary, the Marylebone Medical Association stands, self-proclaimed, self-advertised, in utter want of the elements of a common, a very common, English education. The older youths of a charity school would write better grammar.

SIR JAMES GRAHAM'S NEW BILL.

At a meeting of the following medical men of this county, and neighbourhood, held at the General Infirmary, on the 4th inst.

Present Isaac Hurst, Esq., in the chair ; J. Thompson, Esq.; L. Rudge, Esq. ; R. Couchman, Esq. ; Wm. Bailey, Esq. ; — Hemming, Esq.; H. Veasy, Esq.; N. Godfrey, Esq.; Edwd. Daniell, Esq. ; — Paxon, Esq.; H. Raynes, Esq. ; — Sandall, Esq. ; W. Forbes Laurie, Esq., M.D. ; W. R. Mesham, Esq., M.D. : — Hilliard, Esq. ; T. H. Barker, Esq. ; Thos. Woolridge, Esq.; G. D. Hedley, Esq.; A. Hamilton Esq.; J. Brunton, Esq. ; J. Williamson, Esq.; Robt. Inerarity, Esq. ; — Hemming, jun., Esq. ; T. Layman, Esq .; Rd. Stevens, Esq.; Geo. Witt, Esq., M.D.; J. Gregory, Esq. ; John Harris Esq.; Thos. Mitchell, Esq. W. Blower, Esq. ; Thos. Chapman, jun., E q. ; R. Collison, Esq. ; G. O. Rogers, Esq. ; — Philson, Esq., M.D.; W. Wootton, Esq. ; W. Heygate, Esq., M.D. ; Wm. Thurnall, Esq.

The following resolutions were unanimously ageeed to :—

1st. That the protection afforded to the public and the profession by the Apothecaries' Act, although imperfect, has been of great service in advancing the progress of medical art ; and that the unconditional repeal of that Act will not only be injurious to the public, but unjust to the medical profession.

That, in the opinion of this meeting, the summary infliction of a penalty on all persons pretending to be on the Register, or practising medicine without being duly qualified, would effectually check such practice.

2d, That the constitution of the proposed Council of Health is objectionable, as throwing too much patronage into the hands of the government, and also inasmuch as members of the councils of the different colleges would, in the Council of Health, have the power of confirming bye laws which, in the councils of the colleges, they had already sanctioned; it would, therefore, be desirable to exclude persons holding any office in the colleges from the Council of Health.

3d. That the introduction of a third grade in the profession is objectionable and uncalled for That it be determined to establish such a grade, it is, in the opinion of this meeting, inconsistent to require that persons wishing to practice surgery or physic alone, should continue their studies four or five years beyond the time at which they might have been declared competent to practice both.

That if it be intended to afford an opportunity of distinction in those branches of the profession, it should still be compulsory upon all to undergo the preliminary examination in both physic and surgery, for the degree of licentiate.

4th. That it is the opinion of this meeting, that the appointment to public situations of those persons who have been duly registered, and the infliction of penalties on unqualified persons, for practising in public offices, may be regarded as protective to the public and the profession only to a very limited extent, inasmuch as public appointments are held but by a few from amongst the number of medical practitioners ; and that such an enactment would be an inefficient substitute for the repeal of all restriction to general practice.

5th. That the profession do not expect nor require any exclusive rights or privileges, but that, considering the inability of the public to become judges of medical skill, it ought to be protected from the ignorance of pretenders, and that the present medical practitioners having been required to make themselves acquainted with their profession at great expense, it is the opinion of this meeting, that all persons practising medicine or surgery, should also be duly qualified for that purpose.

6th. That an association be formed for the purpose of watching the progress of the Bill, and taking any steps that may be necessary to oppose the objectionable clauses, and that the members of the profession, residing in the county and neighbourhood, be invited to enrol themselves as members of such association, and that a committee be appointed to transact such business as may arise in carrying out the objects of the association.

That a subscription of ten shillings each be paid by the members of the association for the purpose of defraying necessary expenses.

7th. That a deputation be formed, to wait upon various members of Parliament, to afford them any necessary explanation, and request them to support the views of the association.

8th. That this meeting views with unfeigned concern the admission of Sir James Graham, in his place in Parliament, of his inability to grapple with the crying evil of quackery, an evil admitted in all ages, and involving, as it does, the life and health of every subject in the realm, and, therefore, possessing a paramount claim upon the attention of the legislature.

That other governments have not considered the evil to be so insuperable, and that the success of their efforts to suppress it, and to protect the lives of their subjects, prove that much may be done by legislation to diminish, if not to extinguish the evil altogether.

9th. *That while this meeting deprecates any measure tending to throw medical practice open to the public, it also expresses its approval of many of the provisions of the new Bill, which are unquestionably calculated to raise the standing of the profession, and to place medical practice on a more liberal and firmer basis : this meeting therefore hopes that Sir James Graham will not be deterred by the opposition which some parts of the bill have called forth, from reconsidering the subject, and from granting such protection as may guard the public from imposition, and the profession from the inroads of the uneducated and unqualified.*

10th. That the thanks of this meeting be presented to the Governors of the Infirmary for the use of their Committee-room on this occasion.

ISAAC HURST, Chairman.

11th. That the thanks of this meeting be presented to the Chairman for his able conduct in the chair.

STATE OF MEDICAL FEELING.

Proofs are every day offering themselves, that medical men will offer Sir James Graham the discriminatory opposition and support we have advised, instead of the insane hostility recommended by some ultra-oppositionists. A most respectable correspondent of the *Brighton Gazette*, after announcing some opinions agreeing with our own, proceeds thus:—"It is really not on private interests that "should depend the profession's conduct in reference to a "bill which so immediately concerns public health. Though "a pure surgeon myself, I cannot but see that hundreds of "deaths and diseased malformations originate in giving "the general practitioner so low a position, and such degrading titles, that the public in a great measure think him "often scarcely, if at all, better than the druggists, The "source of two-thirds of the illicit practice of the day, which "kills so many of Her Majesty's subjects, is to be found in "the fact that the laws do not, in the first place, provide a "strict check on examining bodies—of which we have about "nineteen—so that improper persons shall not enter our "body; and secondly, that the character of the great body "of practitioners, by one legal trick or another, is not supposed to guarantee one-half the enlightened skill and "science, which it really does.

"That this bill has faults, I do not deny; but that its merits greatly outweigh them, is what I strenuously contend. "To my mind it would be a mad thing for general practitioners to reject the present bill, with the remote hope of "some day getting something better. We might as well "reject the use of our steam packets, in the hope of finding "some fine morning a dry passage across to our excited "Gallic neighbours.

"In conclusion, I will remark that though these opinions "will be doubtless opposed by a few of the less discerning "readers who yet remain to the *Lancet*, (which very stupidly "insists that the bill should be opposed by every means the "forms of the House will allow), yet that they are stoutly "and *disinterestedly* maintained—and with an eloquence "and power I should despair to rival—by the accomplished "editor of what is now really the organ of two-thirds of the "profession,—the *Medical Times*."

Dismissing this sensible—this very sensible—letter, (which offers a good example, by the way, to some of our active and kind readers), we come to the meeting at Bedford, at which, after a number of objections, some ill—some well-founded, but all expressed in a very gentlemanly way, we have a distinct resolution, accepting the Bill, but very properly insisting on further improvements. At Hereford, a meeting was held, on the 2nd of September, in which the following resolution was carried:—

"That this meeting, whilst it hails with satisfaction such "portions of the 'Bill for the Better Regulation of Medical "Practice throughout the United Kingdom,' just introduced "to Parliament by Sir James Graham, as are calculated to "increase the influence of the profession, and improve its "character, cannot but regard with one feeling of regret and "disappointment that general principle of the Bill, which "removes all restriction from the practice of medicine, as a "measure most dangerous to the public at large, and most "prejudicial to the best interests of the profession.

Though the language here is strong, it is not, on the whole, objectionable, and the views on both sides—satisfaction here, and opposition there—are those we would ourselves urge on the profession. A writer in the *Provincial Medical and Surgical Journal*, writing in the same spirit, suggests a central meeting of the members of the Association of Derby and Nottingham—"not to oppose the Bill, but, on the contrary, for calm deliberation, and the expression of the members' opinions." He continues—

"We should strictly avoid all personalties and all invective; and we should take care to point out to Sir James "Graham, and to the Houses of Parliament, what are the "clauses of the bill we think it right to *retain*, what to "*omit* or *alter*, and what clauses we require in *addition*. "We are in the responsible position of the guardians of the "public health, and any injury or hindrance to us, in our "usefulness, is a direct injury to the public. We can respectfully ask for a Committee in the House, if there be "any doubt about the sentiments of the profession. We "are not in any way justified in assuming Sir James "Graham intends either to injure the profession or the "public. I have not the honour of the least personal "acquaintance with the Right Honorable Baronet, but I feel "quite satisfied his own feelings and wishes are to do good "to both. I think the proceedings I propose are more in "accordance with the character and dignity of the profession, than the childish giving of nic-names, or the writing "of abusive articles."

We think the suggestion ought at once to be adopted. It is most important to the association, but still more so to the profession. The assembly would, doubtless, be most numerous, and we should consider it of such interest to our readers, that we should send a reporter specially to attend the meeting. We trust, that the able editor of the Association's journal will lend his aid in recommending this very judicious step.

We finish these notices of professional movements by respectfully urging our medical brethren, generally, to meet in each district, in a spirit of cordial good feeling and harmony, to examine the Bill, each man for himself, and if they think with us, that it is very useful for good, in some points, to give their honest acknowledgment of the fact, and that if there are important deficiences in others, to do their best in getting them supplied. If each local body make known their opinions to their representatives, there cannot be the least doubt that Sir James Graham will be influenced to introduce in his measure those further improvements which will make it generally satisfactory to the profession.

THE LANCET'S ABANDONED INJUNCTION.

By the *Medical Times* of the 29th ult., we are informed that the proprietors of that Journal are threatened with a proseeution by those of the Lancet for a breach of copyright, in consequence of the publication in the former Journal of abstracts of some important papers published in the latter. If it is to be held unlawful, or dishonorable, for one Journal to copy from another, giving the proper credit, either entire articles or abstracts of them, it will greatly circumscribe the usefulness of such publications. By this all parties must be losers. No Journal can be permanently injured by the transfer of valuable matter from its columns to the pages of another, when it is properly acknowledged; on the contrary, it serves to attract attention more generally to it, and thus promote its circulation. It is only when the matter of one journal is taken without acknowledgment by another,—in other words,—*stolen*, that there is any just cause of complaint. And even then, when not flagrant, a noble mind will often bear the injustice rather than expose the culprit.—*Philadelphia Medical Examiner.*

THE LEICESTER CASE OF MESMERIC AMPUTATION.

The recent operation during mesmeric sleep, at Leicester, continues to excite much attention. In the *Leicester Journal*, of last week: the following letters are published, from two of the medical men, who witnessed the operation:—

To the Editor of the "Leicester Chronicle."

"Sir,—Various statements having appeared in the public journals, purporting to be reports of an operation performed last week, upon a young female, whilst in the mesmeric state, and in which my name appears in such a way as to give a sanction to the belief *that no doubt could exist* as to the reality of the mesmeric condition on the occasion in question, I beg to say, that I am by no means prepared to give my unqualified assent to such a proposition, as the patient, unquestionably, exhibited strong marks of sensibility to pain during the operation: in fact, I do not consider that it was borne with more fortitude than is frequently displayed under equally trying circumstances, and without any adventitious aid. At the same time, it is only justice to say, that *the eyes were closed during the whole time, and the features scarcely disturbed; and we have the solemn assurance of the girl that she felt no pain during the operation—no suffering during the last half hour.*

"From the above statement, it is evident that no conclusion can be arrived at with certainty as to the condition of the patient during the operation, nor is the truth or fallacy of mesmerism established thereby.

I am, Sir, your obedient servant,

George Shaw.

New-street, Leicester, Sept. 5, 1844.

To the Editor of the "Leicester Chronicle"

"Sir,—A report of an operation with mesmerism having appeared, in which my name occurs, I hope, by kindly publishing a short statement, you will afford me the earliest opportunity of obviating a very probable misconception—namely, that I vouch for the accuracy of that report.

"I am sorry to see my friend, Mr. J. F. Hollings, put forth as the source of information. Talented, principled, and respected as he is, one almost hesitates to dissent from any statement of fact made by him. The extreme agitation, however, produced at the time by the novelty of his situation, he himself will, I doubt not, readily admit—admit, also, that it rendered him a less capable observer, a less credible witness, than myself, who am more inured to scenes of this kind. This supposed to be granted, I beg to make the following statement:—

"During the operation *there was a considerable groaning, writhing, and an approach to screaming;* indeed, I have seen those who, under operations equally severe, have, without mesmerism, given far less indications of pain; and, but for the after-declaration of the patient herself, I should have concluded that she had endured with *no very unusual* fortitude, the ordinary amount of suffering.

"I am sorry to feel obliged to thrust such details before the public; it seems far better that affairs of the kind should be confined to those who are surely best prepared to appreciate the real worth of new agents in the healing-art, and who eagerly catch at any chance of adding to their means of curing or relieving. An agent professing such power over the human frame, so impressive in its aspect—at the same time so obvious, so floating, as it were, on the surface of things, and liable to be called into action every day—yet unrecorded, unnoticed, unknown, during six thousand years, will require an immense amount of testimony for its establishment.

"I remain, Sir, your obedient servant,

"Thomas Paget.

"High-street, September 4, 1844."

Nothing can be juster than Mr. Paget's concluding observation. The very fact claimed in this operation is so astounding, that even the convinced mind must shrink back from its own conviction, and we can imagine ourselves witnessing the whole operation without a single circumstance taking place to allow a doubt, and yet hours afterwards, finding our minds in hesitation about the accuracy of our senses—the evidence of the latter becoming daily less convincing as the memory grew weaker. The different statement of facts given by Dr. Shaw and Mr. Paget is very remarkable, and, it seems, that Mr. Tosswill, the Surgeon to the Union, and Mr. Hollings, agree rather with Dr. Shaw, than Mr. Paget. We may add, if correctly informed, that both letters are in some important points contradictory to the notes taken by Dr. Shaw during the operation, and assented to by Mr. Paget. We are further informed, that the case was one of Fungus Hæmatodes; that the patient is doing surprisingly well, *though* subjected daily to mesmerism, and that on the tenth day the stump had healed over by the first intention, six-sevenths of its extent.

A circumstance for deep regret is, that the Medical Book Society of Leicester have apparently taken offence at Mr. Tosswill's presence at the operation, and in consequence of that, and some trumpery and false report about his *intending* to take out a patent, have hesitated as to his admission as a member. We earnestly trust, that they will at once retrace so false a step, and make Mr. Tosswill an honourable reparation for the injury of their temporary aspersion. Reputation is the jewel of a medical man's life, and as we value it for ourselves, so chary should we be in dulling its lustre in another. To condemn, or asperse causelessly another, is the sure sign of unprincipledness in oneself. No medical man can express belief in Mesmerism for a dishonest end; in even a sincere belief there is much to be lost, and nothing, except on the score of science, gained; in a dishonest belief there can be no profit, and there must eventually be much discredit. Enquirers into the claims of Mesmerism have strong title to, at least, the forbearance of even the most resolute sceptic; for if enlightened he will know how to respect even a mistaken pursuit of truth. Let us not multiply the occasions which are to justify among us bad opinions of our brethren; rather let the bond of charity and good feeling extend to all things good, and all things in themselves indifferent. If we will needlessly injure ourselves, how shall we ask protection from those "which are without?"

REVIEWS.

Popular Cyclopædia of Natural Science, Zoology. Part I, *including General Principles, and part of Class Mammalia.* By W. B. Carpenter, M.D., F.R.S., &c. London. Orr and Co. 1844.

In our late review of a work,* by Dr. Carpenter, belonging to the same series of which the present half-volume constitutes a very important portion, we found ourselves called

* "Animal Physiology."—See *Medical Times*, vol. ix,, pages, 349, and 465.

upon to expose, in a tone of just yet painful severity, the errors and defects wherewith that work abounded. The glaring proofs of thoughtless haste and negligence, which we then adduced, would, however, serve to justify with every candid and impartial reader, the austerity thus exhibited. Upon the present occasion, it is most gratifying to find that we can conscientiously pronounce a far more favourable sentence than on the former. The "Zoology" of Dr. Carpenter displays few or none of the flagrant defects which characterize its predecessor. It is, in fact, as far as it has yet gone, a very clever and interesting work. The modifications which the author proposes to introduce into the arrangement of the Mammifera, as constructed by Cuvier, are uncommonly judicious; with some exceptions, perfectly unobjectionable; and breathe the spirit of the deeply-reflecting and philosophic naturalist. His account of the quadrumanous, cheiropterous, and insectivorous orders of this "aristocratic class of the vertebrata," is particularly luminous, correct, and satisfactory. And, if the volume be concluded in the same spirit, and with the same care and ability, which have signalized its commencement, Dr. Carpenter's "Zoology" will, indeed, form a valuable contribution to the mass of elementary works destined, in the present day, to elucidate one of the most interesting departments of natural science.

Yet even in Dr. Carpenter's separation and arrangement of the mammiferous orders, certain errors and inconsistencies have been suffered to remain; which, when his attention has been particularly directed to them, the author himself will, we are well assured, be the first to acknowledge and correct. Candour, and a love of truth, sacrificing to the promotion of its pure and holy cause, every selfish consideration, constitute the almost invariable—the essential—attributes of the lofty and enlightened mind; and such a mind, Dr. Carpenter, from the character of his writings, and the enviable celebrity which he has already acquired, must necessarily possess. In the first place, we emphatically object, for reasons hereafter to be assigned, to his proposed separation of the phytophagous from the zoophagous cetacea, and the amalgamation of the former with the pachydermata. Again, in divers instances, the orders of the mammiferous class, and the families constituting those orders, have not been arranged by Dr. Carpenter according to the analogies of structure by which they are connected, or the development of certain organs which he has, himself, most luminously indicated. Thus, his fourth family of insectivorous bats, noctilionidæ, ought assuredly to have been ranked at the head of the cheiropterous order, and the genus, dysopus, or cheiromeles, at the head of that family; as possessing "a hinder thumb placed at a distance from the rest of the toes, and capable of being opposed to them,"—a character which obviously connects the cheiroptera with the galeopitheci or lower family of the quadrumana. On these subjects, however, and on others involving a more philosophical and consistent arrangement of the mammifera than any yet existing, we shall expose our peculiar views in an elaborate article, when the concluding portion of Dr. Carpenter's volume, which every student of zoology, who has read the first, will look for with impatience, shall have issued from the press.

Still, must the fervour of our eulogy of this most creditable production of Dr. Carpenter's intellect be tempered by a passing shade of reprehension. The artifice exhibited in the style and manner of its getting-up, is utterly unworthy of the scientific character of the work. Not only are many of the engravings which decorate this half-volume of the "Zoology," reprints of those given in its predecessor, the "Animal Physiology;" but in divers instances, the same figure is here repeated in the course of a few pages.* Again, had Dr. Carpenter been acquainted with Captain Scoresby's correct and masterly delineation of balæna mysticetus,† he assuredly would not have disgraced his own fair page by the admission of a figure of that stupendous animal, fit only to decorate the sign-post of some village hostelry, or signalise the doorway of one of those too long tolerated nests of moral pestilence and ruin, the licensed beer-houses. Lastly, we would exhort Dr. Carpenter to expunge, with an indignant hand, from the wrapper of his "Zoology" the book of the elements, and the bat's head; desecrating, in the opinion of all sober and enlightened men, the character of a work which needs for its recommendation, no such base and meretricious ornament; and sacrificing to the cupidity of an hungry bibliopole, his best and fairest interests. Literary trash may well be elaborately bedizened to attract the eye of the booby, as gingerbread is sometimes gilded to stimulate the cravings of the brat. But the productions of genius should be characterized, as genius itself is ordinarily characterized, by a dignified modesty of exterior. And nothing, which wears even the most distant semblance of trickery, should be allowed to slur the purity of Dr. Carpenter's honoured name in the world of letters, or obstruct the progress of his lofty and still rising reputation.

PARISIAN INTELLIGENCE.

(FROM OUR OWN CORRESPONDENT.)

Paris, Sept. 5, 1844.

On Diseases of the Eye. By Professor Velpeau.—Before commencing the study of the affections of the cornea, there is a point to which I wish to draw your attention, and which I omitted while speaking of conjunctivitis: I mean, the mode in which the redness and the swelling disappear in these diseases. In general, it takes place as follows: these symptoms disappear, first on the upper half of the globe of the eye; next, on the inferior half; afterwards, on the outer, and finally, on the inner canthus. This may easily be ascertained in the following manner: as soon as resolution has commenced, and ere the eye, when in its normal position, appears to have undergone any change for the better, on raising the upper lid and causing the patient to look downwards, you will perceive that the conjunctiva has assumed its natural colour; the same remark is applicable to the lower lid, though in a later stage. To what is this to be attributed? In all probability to the mechanical pressure to which the eye is subjected. Thus, the part which is compressed most, is that covered by the upper lid; this, added to the position of the part, favors resolution greatly; the lower lid likewise presses on the eye; but not only is the pressure less uniform, but, also, this portion of the organ being the lowest, resolution takes place with less rapidity; lastly, it occurs in the two canthi, this part of the eye not being subjected to any pressure whatever: consequently, the redness and swelling will naturally disappear there last.

Keratitis.—The inflammations of the cornea constitute a very important category of the diseases of the eye:—1° *From their frequency*: on consulting the published statistical tables, they are found to form one half of the diseases of the eye, whether acute or chronic; my experience has led me to a similar conclusion, and this appears to be the case in other countries, as the tables of Saunders and Mc Kenzie indicate. Another proof is to be seen, in the number of persons who, after having been affected with inflammation of the eye, retain spots on the cornea, shewing that keratitis existed. —2° *Their danger.* This is owing to the fact, that they are followed by a disturbance in vision, far more frequently than is conjunctivitis, excepting, however, conjunctivitis purulenta. This, on the least reflection, is easily accounted for. Thus, when conjunctivitis disappears, the eye assumes its normal condition: on the contrary, after keratitis, consecutive accidents often take place, such as: ulceration, suffusion, or spots, causing more or less disturbance in the function of this organ.—3° *The difficulty of establishing the treatment*: for, as will hereafter be proved, we do not possess remedies, against this disease, so efficacious as in conjunctivitis.

Classification.—Notwithstanding their frequency, it is only within the last twenty years, that they have been classed separately, and distinguished under a peculiar name. Before this epoch, they were comprised under the generic denomination of ophthalmy, or ulcers. A. Paré, Guillemot, St. Yves, Maître Jean, speak of ulcers of the cornea; but, then, not only were all the phlegmasiæ of the eye confounded together, but, likewise, practitioners were unable to discover the differences which exist between the parenchyma of different organs, and the membranes which envelop them: thus, meningitis, pleuritis, and peritonitis, were confounded with encephalitis, pneumonia, enteritis. It was Bichat, who first divided the different internal diseases, according to the tissue affected; but surgery was far from having attained that degree of perfection; and, as to the diseases of the eyes, oculists did not consider it of any moment to ascertain the precise part attacked. For the last twenty years, however, the attention of practitioners has been directed towards this important subject, and it was in France, that these diseases were first studied separately, according to the tissue which is their seat.

Divisions.—Like all inflammatory diseases, they may be divided into acute and chronic:—*acute keratitis* is more frequent than the chronic; it may have its seat in the external or the internal layer of the cornea, or in their interval; and may be divided into keratitis diffusa, or without ulceration, and keratitis ulcerosa. 1° *Keratitis diffusa*—*Local symptoms:* redness of a peculiar nature; for, when the disease is general, it presents itself under the form of an immense number of red streaks, which form a radiated ring on the sclerotica, ending at the circumference of the cornea. This redness is easily distinguished from that which supervenes in conjunctivitis, because it increases in intensity as it draws near to the cornea; whereas, in conjunctivitis, the contrary effect takes place. Besides this distinction, there is another:—in keratitis, the small blood-vessels are nearly straight, and parallel; whilst, in conjunctivitis, they form a net-work, are arborescent, and cross and recross each other; in the former, they cannot be made to change their position: in the latter, on the contrary, they are mobile. The hue, likewise, differs: in the former, it is of a rose or vermillion colour, being evidently arterial; in the latter, it is of a violet-red, brick, or vinous colour, evidently venous. The other symptoms, peculiar to keratitis, are: in the beginning, the cornea assumes a greenish or sea-green hue, which, though very slight, may still be easily distinguished; at a later stage, it is covered with a sort of mist, which destroys its transparency: this symptom is similar to what is seen, when the finger is placed on a looking-glass, or a bit of polished marble. After this, effusion takes place: the transparency disappears, and, instead, a grey or whitish body is seen in the membrane; there is disturbance of the sight; a dull, obscure, fatiguing, pain is felt around the orbit, rather than in the eye itself; no sensation of a foreign body, under the lids; photophobia and epiphora take place; these two last are more intense than in conjunctivitis, and appear as if the one produced the other. To resume: keratitis *diffusa*, when general, is characterized by a red ring, formed by parallel blood-vessels in the sclerotica; sight im-

* As the brain and spinal cord of man, pages 77 and 85; and the Porpoise, pages 92 and 241.

† See his *Account of the Arctic Regions*, vol. ii., plate 12.

paired; cornea obscured; pain; photophobia and epiphora, though not very intense. But these symptoms are modified when keratitis affects the central or deep-seated layers of the cornea; thus, when it is seated in the former (interstitial keratitis), the eye is covered by a mist, ere the redness makes its appearance; effusion occupies the interior of the membrane; the circumference assumes an opaline tint, which masks the radiated ring just described; a dull, milky, or yellowish, and sometimes purulent, zone, separates the diaphanous portion of the eye from the anterior rays of the vascular ring. When it occupies the deep-seated layers, the redness and vascularization are unchanged; the conjunctiva is almost always sound; the red ring is of a bright vermillion tint, and very often does not extend on to the cornea; the aqueous humour loses its limpidity; a whitish or yellowish substance is deposited between the cornea and the iris, and a certain degree of functional disturbance is perceived in the latter membrane. These three varieties of keratitis cause the sight to be more or less disturbed, and to take place as through a mist; and they may be distinguished with as great ease, as the opacities seated in this membrane. These are of three kinds: according as they occupy the anterior, central, or posterior layers; and the same effect is produced by superficial, interstitial, or deep-seated keratitis.

On Orchitis.—Several critical remarks having been made on an operation, proposed by Dr. Vidal (de Cassis), against certain forms of this affection, and by which instantaneous and, as it were, magical relief is obtained. as may be daily seen in his wards at the Hopital du Midi, I consider it useful to draw the attention of the profession to the subject, so that it may be submitted to further trials, though this is perhaps superfluous, to establish its utility. A patient (whose case shall be given in my next, at length) was affected with orchitis; Dr. Cullerier, who attended him, considered the operation as useless, if not injurious, and, consequently, employed the usual means, such as: leeches, emollients, &c.; finding them of no effect whatever, and the symptoms growing alarming, he determined upon dividing the albuginous tissue: the relief was instantaneous. It must not, however, be supposed, that the distinguished surgeon of the Hopital du Midi employs it in every case; but only in those where serious symptoms appear, in consequence of the phlegmasia of the parenchyma of the testicle itself. In ordinary orchitis, which is simply epididymitis, the cure may take place spontaneously; and, where remedies are employed, such as: leeches, topical applications, compression, &c., the disease is not at all modified, but goes through its regular stages, just as if nothing at all had been done for it. When epididymitis is complicated with inflammation of the tunica vaginalis (epididymitis with acute hydrocele), puncturing the latter sometimes affords relief. But, when the testicle itself becomes inflamed, and produces severe vomitings, colics, intense pains extending from the scrotum, upwards into the corresponding fossa iliaca and lumbar region, and downwards on the thigh, insomnia, fever, &c., the ordinary means are useless, and, on the contrary, often hasten suppuration; and it is here, that Dr. Vidal's method produces such beneficial results. It consists in dividing the skin, the tunica vaginalis, and the fibrous envelope of the testicle: the cause of the morbid symptoms being the resistance presented by this membrane, and the pressure exercised on the gland, tumefied by the inflammation which has attacked its tissue. Here, the relief given by the incision (which must not be more than five or six lines in extent), is similar to what takes place when we plunge a lancet through the fibrous tissue of the hand in onychia. The result of this treatment is:—1°, to cause the inflammation to end by resolution; 2°, to prevent suppuration. As to the incision, it heals rapidly, and the cicatrix, which takes place, unites the testicle and the tunica vaginalis to the skin, and, consequently, becomes an obstacle to the accumulation of serosity in the serous membrane, an accident which occurs so frequently after orchitis. Finally, this variety seems to affect principally young men (from 19 to 21 years old). To these details, for which I am indebted to the kindness of Dr. Vidal himself, it may not be amiss to add, by way of evidence, four cases, published by one of his pupils, in the *Gazette des Hopitaux.*—F——, ætat 21, contracted in April, 1843, a blennorrhagia, which, after lasting five months, disappeared spontaneously; in Dec. last, he was affected with a second blennorrhagia, three days after sexual intercourse with an affected person. The disorder had already lasted three weeks, offering the usual symptoms, when, after a long walk, orchitis supervened, attacking first the right, and then the left testicle. A few days' rest, aided by hip-baths, emollient poultices, &c., caused the affection of the left testicle to disappear, but produced no effect on the right; on the contrary, the pain increased to such a degree, that F—— decided upon entering the hospital, where he was received on the 25th January: on examination, the tumour was found to be of the size of an egg, formed by the highly-inflamed testicle, and masking entirely the epididymis. Emollient poultices were ordered to be applied, and the patient to be kept quiet. Three days after, the pain all at once increased considerably, and was accompanied with fever, colics, and vomitings. Ordered: an opiate at bed-time; an enema, with laudanum; poultices to the abdomen, and emollient fomentations on the swelling. The next day, the symptoms not having abated, Dr. Vidal made an incision, six lines in length, on the anterior surface, deep enough to penetrate into the parenchyma of the testicle. About a teaspoonful of serosity flowed out; a few hours after, the pain and all the other outward symptoms yielded; cicatrization took place promptly, and the patient left the hospital quite well.—The three other cases occurred in young men, aged 17, 19, and 20; the symptoms were in every respect similar, and the division of the albuginous tunic produced instant relief.—These, to which numerous other cases might be added, prove that the operation relieves the patient; that cicatrization takes place promptly; that the testicle is in no wise injured; and, finally, that in such cases it ought to be had recourse to.

While speaking of the success obtained by Dr. Vidal, in orchitis, I will briefly allude to the modifications, proposed by the same surgeon, in some other operations:—1° *Lithotomy*—"In my opinion," says this practitioner, "the infiltration of urine is the accident, most to be feared, after the high operation, and it is this which makes the greatest number of victims. Now, in order to avoid it, the cellular tissue must be rendered denser, and less permeable, before opening the bladder; and this may be attained, by dividing the skin and subjacent tissues, as deep as the bladder, and permitting a slight degree of inflammation to take place, ere the latter is incised. The first operation might be performed by means of caustic potass, or, according to Dr. Monod, with the bistoury. As to the different methods proposed, that of Lecat is most appropriate, when the calculus is small; when voluminous, it is not proper; still, the operator must not make, as Cheselden recommended, a large incision, as *the size of the stone does not necessitate an increased length of the division in the bladder, but merely a greater number of incisions:* thus, for a small calculus, unilateral lithotomy should be adopted; for one of a middling size, bilateral; and, finally, for a very large one, quadrilateral. In the two last, after dividing largely the integuments in the form of a crescent, its convexity corresponding to the pubis, if the stone is not very large, two incisions must be made in the prostate gland, in the same direction as that of the skin; on the contrary, when the calculus is very large, in addition to these incisions, two others must be made: the first on the left side, upwards and outwards; the other, also, upwards and outwards, on the right side: the operation being, in this case, *bilateral externally, and quadrilateral internally,* and the removal of the calculus may thus be obtained without lacerating the parts." This method has been tried with success, by Professor Velpeau, and Dr. Guersant, jun., in Paris, and by Dr. Goyraud of Aix, Rolland of Toulouse, and M. J. Roux-Martin, Surgeon in the Navy. Dr. Rolland inserted in the *Journal de Médecine and de Chirurgie de Toulouse,* August 1837, a memoir, containing several cases, in one of which, from the bladder of a man, aged 69, two calculi were removed, weighing together $4\frac{3}{4}$ oz., and the largest presenting 66 lines in circumference. In another, the calculus weighed 6 oz., and presented 68 lines in its small circumference; the patient was 84 years old.—2° *Strangulated hernia:* instead of dividing the stricture largely in one spot, this had better be done by several small incisions, their number being more or less, according to the size of the hernia.

Cyst of the Mamma containing Milk.—A woman, ætat. 26, the mother of four children, remarked, after her first accouchement, that a tumour began to develope itself in the right breast, which increased after each successive delivery, and, when pressed, milk flowed from the nipple. On her entry, at St. Louis, in one of Dr. Jobert de Lamballe's wards, the tumour was of the size of the head of a child, globular, indolent, fluctuating, mobile; the skin, of a natural colour, was thin and flabby. When on the point of operating, Dr. J. plunged a trocar into the swelling, and permitted a liquid to escape, which, on analysis, presented all the characters of human milk. Two semi-circular incisions were made, so as to remove the parts of the skin which were too thin; the cyst was next opened, when about a quart of milk escaped, and the sac was finally removed by means of the bistoury and scissors. The tumour adhered to the mamma superiorly and externally, and, when removed, milk was seen to flow from the divided orifices of the excretory ducts. On examining the cyst, after its removal, several of these ducts were found to open on its interior, and, thus, the milk secreted was collected in the cavity. The wound healed promptly, and the patient left the hospital cured.

Pertussis.—Dr. Levral-Perroton, in the *Revue Medicale,* recommends the following remedy against this affection: ℞ Aquæ distill. lactuc. viros. ℥iv., aquæ distill. flor. aurant. ℥ij., syrup. pæon. officin. ℥j., syrup. belladon. ʒij., ammon. liquor. gtt. vj., m. ft. mist. sumat cochleare magn. q.q. horâ; at the same time, he applies leeches to the arms.

Syphilis: secondary symptoms of Dr. Ricord.—M. Emile Pitton published, in the last number of the *Journal des Connaissances Medico-Chirurgicales,* the cases of two children, brothers, who, previous to being vaccinated, appeared to be in perfect health, but on whom the phenomena, produced by the vaccine virus, caused syphilis to show itself. One boy was vaccinated at fourteen months, the other at thirteen months; the former died, the latter recovered; the sores were dressed with pledgets of lint, covered with the ung. hydrargyr. fort. Salivation did not take place. The vaccine, in both instances, though it went through its different stages as usual, was evidently the determining cause of a disease, which, had it not then appeared, would have done so at some future period. The communication ends by the following question: "Can vaccine matter transmit, from one child to another, an affection of a different nature to that generally produced by this virus?"

Academy of Sciences. Sitting of the 2nd September. Dr. Serres in the chair.—Books received: "The Journal of the Royal Geographical Society, vol. 14, and the general index of the contents of the first ten volumes of the same journal," compiled by J. R. Jackson, Secretary to the Society.

Dr. Pariset, M.A.M., *Academicien libre* of the Academy of Sciences, presented his panegyric on Bourdois de la Motte, and a printed memoir on the plague.

On Osmium and its Compounds.—Memoir read by M. S. Fremy.—Among the acidifiable metals of the two last classes, one of the most interesting is osmium (contained in platina ore), and which forms, with oxygen, a volatile and crystallizable acid. It may—as the history of this metal is but little known—not be amiss, before examining the principal compounds formed with osmic acid, to study the metal itself.

Platina ore exists under two forms: as a black powder, or in crystals. The former contains but little osmium, and about 20 or 25 per cent. of iridium; the latter contains greater quantities; in order, therefore, to obtain osmium, it must be taken and calcined with three parts of nitras

potassæ, which transforms it into osmiate and iridiate of potass, and it is from these two salts, that osmic acid is obtained by the addition of nitric acid. But the residue, left by calcination, still retains a certain quantity of the oxide of osmium, and, in order to obtain the metal, it must be dissolved in aqua regalis, and precipitated by sal-ammoniac. Sulphurous acid is next added to the double salt, thus formed, by which the iridium is dissolved, leaving a red compound (an ammoniaco-osmic chloruret), which deposits the osmium, when submitted to the action of hydrogen gas. Pure osmium having thus been separated, the author adopted the method, proposed by MM. Dumas and Stass to determine the equivalent of carbon, in establishing that of this metal: consequently, he burned the metal in pure oxygen, weighed the osmic acid produced, and the result was:—

Osmium ..... = 0·365
Osmic acid ..... = 0·482
Oxygen ..... = 0·117

In indicating osmic acid by the formula Os. O^4, it follows, from the preceding analysis, that 4 equivalents of oxygen are united with a proportion of osmium represented by the number 1247·8, which differs very little from that indicated by M. Berzelius, who found 1244·49.

Two combinations of oxygen and osmium exist, and which form salts with the different bases; those with osmic acid (Os O^4), or *osmiates*, are non-crystallizable, deliquescent, and partially decomposed by water; those with *osmious* acid (a substance hitherto unknown), whose formula is Os O^3,—or *osmites*, crystallize easily. These are obtained by de-oxydizing the osmiates: thus, on adding to a solution of osmiate of potash, a few drops of alcohol, the liquid becomes warmer, disengages aldehyde, assumes a rose colour, and deposits a crystalline precipitate of osmite of potash. If the osmiate be placed in contact with a substance which absorbs oxygen readily, the crystals are larger; for instance, an azotite is converted into an azotate, and crystals of osmite of potash, in the form of octohedrons, are deposited. The osmites may, likewise, be obtained, by adding to an alcaline osmiate the deutoxyde of osmium; solution takes place immediately, and the osmiate is converted into an osmite.

Osmious Acid (acide osmieux).—Its formula is Os O^3, but, like many other acids, it cannot be obtained uncombined, being converted into osmic acid and deutoxyde of osmium. *Osmite of potash* is obtained, by adding to a solution of osmiate of potash, a substance which absorbs oxygen readily; it is of a rose-colour; soluble in water; insoluble in alcohol and ether; crystallizes in octohedrons; is decomposed by water into osmiate of potash and deutoxyde of osmium; the decomposition is almost instantaneous, when the liquid reaches the boiling point; a solution of osmite of potash, exposed to the air, absorbs oxygen, and is converted into an osmiate; becomes anhydrous, when heated in a current of pure nitrogen, but is not decomposed; calcined in the air, or in oxygen, it deliquesces, and is converted into osmiate, retaining, however, a certain quantity of osmite; heated with hydrogen, it is changed into water, hydrated potash, and metallic osmium. The analysis of this substance was established, as follows:—the loss, sustained when the salt was exposed to a current of nitrogen gas, indicated the proportion of the water contained in the crystals, or 9·7 per cent.;—the anhydrous salt, combined with hydrogen, gave rise to water, indicating the proportions of oxygen, or 8·7 per cent.;—by heating it with nitric acid, the osmious acid is converted into osmic acid, and the osmite of potash into neutral nitrate of potash, which indicated the quantity of potash, or 24·7 per cent.—These analyses prove that the formula of the anhydrous salt is, Os O^3 KO. and that it crystallizes with 2 equivalents of water, or Os O^3 KO+2HO.—Finally, the proportions of osmium are 52·2 per cent.—When a current of sulphuretted hydrogen gas is made to pass into a solution of osmite of potash, the salt is decomposed, a black precipitate of hydrated sulphuret of osmium takes place, and the liquid retains a polysulphuret of potassium:—the proportions of sulphur, in the sulphuret, are 18·1 per cent., water 26 per cent.: the formula Os S^2 + 5HO. All the acids decompose the osmite of potash into osmic acid and deutoxyde of osmium, which is dissolved by an excess of acid. Sulphurous acid has a peculiar action on the osmite of potash; vapours of osmic acid are disengaged, and a precipitate of a beautiful indigo-blue takes place. This compound, pointed out by M. Berzelius, is a real base, which forms, with the acids, salts coloured blue.

Action of Ammonia and Ammoniacal Compounds, on the Osmite of Potash.—On pouring ammonia into a solution of the osmite of potash, the osmite is decomposed; the liquid loses its rose-colour, and, when heated, becomes brown; disengages azote, and deposits an ammoniacal oxide of osmium. Cold ammonia, on the contrary, forms a compound, whose formula is, Os. O^2 Az. H^2, or a combination of oxide of osmium with the radical Az. H_2. When, to a solution of sal ammoniac, osmite of potash is added, a precipitate of a citron colour is obtained, which is insoluble in an excess of sal ammoniac. This compound is soluble in water; insoluble in alcohol; presents none of the characters of the osmites, but is converted into one by the addition of a concentrated solution of potash; finally, it is decomposed if heated with an acid, and, in a current of hydrogen, it furnishes water, ammonia, hydrochlorate of ammonia, and pure osmium. The proportions of the different component parts are: osmium, 53·6 per cent.; chlorine, 18·7; hydrogen, 2·7; nitrogen, 15·1; whence the formula:—

Os. O^2 Az. H_2 +H Cl. Az. H^3

The reaction which takes place may be represented by the formula:—

Os. O^3, K O+2 (H Cl. Az. H^3)=(Os. O^2, Az. H^2 +H Cl. Az. H^3)+2 (H O)+Cl. K.

The osmite of soda is of a rose colour; does not crystallize so easily as the osmite of potash, and, when ammonia is added, it is converted into an *osmiamide*. The other osmites are insoluble; may be obtained by double decomposition, but soon blacken, and disengage vapours of osmic acid. Finally, the author recommends the following method, as the simplest and easiest, to obtain osmium:—saturate osmic acid with potash; convert the osmiate into osmite, by means of alcohol; precipitate the solution of osmite with sal ammoniac, and calcinate the yellow salt, thus obtained, in hydrogen; osmium is the result.

On the Fabrication of Sulphuric Acid.—M. Baudremont addressed a letter, claiming his right to the invention proposed by M. E. Peligot, in his memoir, read at the previous Sitting, having published it a year ago in his *Traité de Chimie Generale et Experimentale.*

Academy of Medicine; Sitting of the 3rd September.—(Dr. Ferrus in the chair.)—The president informed the Academy, that Dr. Barbier (d'Amiens), corresponding member, was present.

Discussion on some points of Dr. Segalas' Memoir.—Dr. Segalas: Dr. Ollivier d'Angers combated a conclusion, drawn by me, relative to the necessity of having recourse to artificial means in delivering a woman affected with paraplegia, and founded his opinion on two facts, observed by Chaussier. They were reported by Dr. Gaultier de Claubry, in the *Journal General de Medecine*, and, on perusing them, I do not find that they come to the support of our honourable colleague's opinion. In the first place, only one woman was brought to bed, and that for a very simple reason: one only was *enceinte;* and she was not completely paralysed, since the excretion of the urine and fæces was not involuntary, only the desire was not so frequent as in the normal condition; proving that it was the sensibility, rather than the contractility, of the organ which was affected. Therefore, since the spinal marrow had not lost its influence on the bladder, in all probability it acted also on the uterus, so as to facilitate the accouchement. Finally, there is a great difference between paraplegia produced by traumatic lesions of the spinal marrow, and those caused by hydatids; in the former, the abolition of the functions is permanent, whereas, in the latter, the compression may not be continual, and, consequently, its effects will, also, be intermittent.—Professor Velpeau: Even admitting that Chaussier's facts are not so conclusive as supposed, that is no reason why Dr. Segalas' conclusion should be adopted. I should feel obliged, if our honourable colleague would inform me, on what facts he founded his opinion.—Dr. Segalas: On my own physiological experiments; on those of Dr. Brachet; and on a case, published by that physician, of a woman affected with paraplegia, who, to be delivered, needed the aid of an accoucheur.—Professor Moreau: I have asisted a lady suffering from paraplegia, in three different accouchements. They took place naturally; and this is easily explained, when we reflect that the uterus receives nerves from the ganglionary system, as well as from the spinal marrow.—Professor Velpeau: Accouchement is a complex phenomenon; two kinds of muscular contraction preside over it: those of the uterus, independent of the will, and those of the abdominal muscles and diaphragm; now, the latter, according to the seat of the lesion, may or may not be paralyzed, and the accouchement thereby rendered difficult, or impossible; but not by the influence of the spinal marrow on the contractions of the uterus. As to the innocuousness of the lesions of the spinal marrow on the secretion of the urine, I am not of Dr. Segalas' opinion, having seen cases in which the quality and quantity of this secretion were changed. Did Dr. S. found his opinion on physiological experiments, or on clinical observations?—Dr. Baudelocque stated, having observed a case in which a paraplegic woman was brought to bed, without being aided.—Dr. Segalas: My conclusions, as to the secretion of urine and its composition, are founded on my own experiments, and on the two cases related, in which the urine, removed by the catheter, for several months remained perfectly normal.—M. Dupuy asked, in what way the destruction of the spinal marrow was performed?—Dr. Segalas, in reply, repeated the manner in which he operated, and the results which he obtained (this will be given at length in the memoir).—Dr. Gerardin does not think the question can be decided at present; more facts are needed; the more so, as he had not witnessed a case, though he had been for the last twelve years physician to the Lying-in hospital, nor was he aware that Professor Moreau had ever seen one (Professor M. here made a negative sign).—Dr. Castel: In the last sitting, I stated, contrary to the opinion of the author of the memoir, that incontinence of urine, consecutive to retention, was not caused by the distention and irritation of the bladder, but by the progress of the paralysis; that, in strangulation, erection is produced by the flow of blood towards the genital organs, and, in paralysis, by the increase of the sensibility, which, diminished in the central parts, accumulates near the extremities. Our honourable colleague asserts that, after these traumatic lesions, the composition of the urine is not changed; but the existence of inflammation must necessarily cause a change in the quantity and quality of the urine, and can a traumatic lesion be produced without causing inflammation? I do not say that ischuria renalis exists, but, from the fact of the secretion continuing, I deduce this important physiological conclusion: that the kidneys, to perform their functions, do not require the excitation produced by the spinal nerves. Of what use would a direct communication with the brain be to these organs? Nothing more than to produce numerous anomalies. For, how little sensibility would remain to the intellectual faculties, were each phenomenon of the internal organs, such as contraction of the heart, stomach, &c., perceived by the individual? All that is needed, is the *rapport* of the different viscera with each other; and this is obtained by means of ganglions and anastomoses, of which the number is in proportion to the wants of each viscus: and this shews how great is the wisdom of the Creator, in the formation of the human frame. In concluding, I may remark, that the experiments of our colleague are in direct opposition to an assertion of Legallois: that the roots of the sympathetic nerve are in the spinal marrow.—Professor Royer Collard: During the reading of the *proces-verbal*, the following phrase struck my attention: that the morbid phenomena, which take place in the genital organs, are produced rather by a lesion of the

brain, than of the spinal marrow. This is so different from my own opinions, that I should be obliged to the *secretaire annuel*, to mention if it be thus stated.—Dr. Dubois d'Ameins, in reply, read the phrase, which shows that the opinion is not so absolute as supposed by Professor Royer-Collard.—Dr. Rochoux: However isolated the ganglionary system may appear, there is always a mutual dependency between it and the nervous system in general; and this may be seen on consulting Dr. Muller's work on the nervous system. As to the facts, contained in Dr. Segalas' memoir, they are not sufficient to establish a conclusion.—Professor Moreau: no one denies that the two systems are mutually dependent on each other; yet there are certain organs which receive their nerves from the ganglionary system, and others from the brain and spinal marrow. The former are not submitted to the will, and contract without our being able to prevent them: the uterus is in this class; why, then, should not an accouchement take place in a person affected with paraplegia? Nay more, females have been known to be delivered after death; an authentic fact of this kind is recorded by Riolan *(Anthropologie)*. A woman died when on the eve of being brought to bed; she was taken to the *salle des morts*, and the next morning a fœtus was found on the table beside her. Accouchement is not a voluntary act, inasmuch as it will not be produced by the most violent contraction of the abdominal muscles and diaphragm, but only when the uterus itself enters into action.—Dr. Baudelocque: the fact of an accouchement taking place after death, is owing to the development of gases in the uterus, which expulse the fœtus.—After some further remarks from Dr. Segalas, and Professor Velpeau, the discussion ceased.

Dr. Martin Solon read a report, on a memoir of M. Hoffmann, of Vienna, on the administration of the *carsuba* of Judœa (pistacia terebinth.) in asthma. Conclusions:—thanks to the author;—publication of a translation of his memoir;—and its deposit in the archives of the Academy.—Dr. Gerardin did not think it possible to form a decision from the cases enumerated, as they were incomplete.—After some further remarks from Dr. Virey, and a reply from Dr. Martin Solon, the conclusions were adopted.

Professor Pappenheim, of Breslaw, presented to the Academy the instruments he employs in operations on the ear, and staphyloraphy.

GARLAND DE BEAUMONT D.M.P.B.L., & S.&c.
Honorary Physician to the Spanish Embassy.

POISONING BY ORNAMENTAL SUGAR.

BY WM. ARMSTRONG, M.R.C.S.

The substance with which the poisonous sugar was taken, was a pudding of the simplest kind, composed of eggs and flour. It would be difficult to state the quantity used by each individual, but as the sugar was so strongly impregnated with the verdigris, a small quantity only would be required. There were five persons in the establishment who took more or less of it. The chamber and kitchen maids were the first to be affected (probably from their using it more liberally); they became sick in about a quarter of an hour. The most prominent symptoms were, severe headache, succeeded by vomiting, and purging. After these had in a measure subsided, tympanitis supervened, which in one case was very distressing, her abdomen becoming tense as a drum, which, however, was not very long in subsiding. Associated with the above, was the copper-like taste in the mouth, followed by severe numbness of legs and arms, accompanied with great trembling, especially of the hands, which incapacitated them from holding anything with safety. A little girl, about ten years of age, and who, evidently, had not taken so much of the noxious substance, was not attacked till the next day, when similar symptoms came on, but not in such an exaggerated degree, as in the above cases. But another little girl, who had taken more of it, was very severely affected with all the symptoms, especially the vomiting and purging.

The nurse, an old person, was the last to shew the effects; probably she might not have got so much as the former, as she was not affected till the third day, when symptoms similar to the foregoing, but not in such an aggravated degree, came on. Her convalescence, as was to be expected, was more tardy than with the rest, which might be accounted for by her advance in years.

It would be supererogation here to remind medical men, of the duty they owe to their lay brethren, in impressing them with the injurious effects of many of those things which at present disgrace the festive board. No doubt they would often have to speak in vain; but I would hope the day is not far distant, when our rulers will give more care than at present, to the dietetic welfare of the people.

[We have received some of the sugar. On testing, it gives a very considerable proportion of acetate of copper.]—ED.

HOSPITAL REPORTS.

KING'S COLLEGE HOSPITAL.

Comminuted Fracture of the base of the Skull.—Elizabeth Webber, æt. 10, was admitted into King's College Hospital, under the care of Mr. Partridge, at half-past two o'clock, p.m., on July 30th. She was well till a few minutes before her admission into the hospital, when she fell off the banisters, on the third floor, of a house in the neighbourhood, whilst playing. At the time of her admission, she was very pale and cold, especially in the lower extremities; eyes closed; pupils dilated and insensible to light; pulse 68, very feeble; respiration 12 in a minute. She was stripped, and put into a warm bed; a stomach-warmer was applied to the spine and epigastric region, and a foot-warmer to the feet. There was no bleeding from the nose or ears; she vomited a good deal of undigested food, soon after her admission into the hospital. The pulse beginning to sink, she was ordered:—

℞ Spt. ammon. aromat. mx.
Aquæ ℥ss. m. haustus quart. part.
horæ sumendus, si opus sit.

The pulse improved after taking the draught, and the surface generally became warm; the head was shaved, and carefully examined, but no bruises could be detected, except a slight swelling over the occipital protuberance; is very drowsy, from which state she cannot be roused; does not answer questions put to her; feels when any part of the body is squeezed or slightly pinched; there is some difficulty in getting her to swallow.

Three, p.m.—Has vomited repeatedly since her admission; is in the same drowsy state, from which she cannot be roused; lies on the left side; pupils more sensible to light; pulse 70. intermitting; respiration 16.

Four, p.m.—Pulse 80, fuller, and not intermitting; respiration 20 in a minute; all the muscles of inspiration seem to be acting; has no stertorous breathing; there is less difficulty in swallowing.

Six, p.m.—Pulse 100; respiration 20; is in the same drowsy state as on her admission; has taken four doses of the ammonia.

July 31st, Ten a.m.—She remained in the same drowsy state, till about half-past one o'clock this morning; she then became very restless, endeavouring to get out of bed, and screaming loudly every half hour—in this condition she has continued ever since; can put out her tongue straight, when asked to do so; during the night she recognised her aunt, who sat up with her, and her mother, who came to see her this morning; pupils dilated, but sensible; there is more swelling on the back of the head and neck; in the night, she vomited about a tea-cupful of coagulated blood; there is some ecchymosis behind both ears, also a little swelling; has had no motion since her admission; passed her water unconsciously; has taken a little beef tea, frequently, during the night.

Three, p.m.—Has been in much the same state since the last report; pulse 80; respiration 28; she still screams and gets up in bed suddenly; puts her tongue out straight when asked to show it; grinds her teeth frequently; bowels not open since her admission. Ordered:—

℞ Hydr. chloridi gr. v.
Statim sumend.
℞ Haust. sennæ comp. ℥j.
Statim et repet post horas tres
si opus sit.

Eight, p.m.—Bowels not open; continues very restless; the pulse and the respiration about the same. Ordered:—

℞ Haust. sennæ comp. ℥jss.
Statim sumend.

She took the draught without any trouble, and did not seem to know but that it was barley-water, which was her drink.

Twelve, p.m.—Has been very quiet since the last report. Bowels not open; complains of no pain anywhere.

August 1st, eight, a.m.—Was very restless early this morning, and screaming at intervals of about half an hour (as if from a darting pain); complains of no pain in the head; puts out her tongue when desired to do so; tongue is covered with a white fur; is very thirsty; in consequence of the restlessness, and several attempts to get out of bed, it became necessary to secure her arms to her side; feels when any part of the body is squeezed; pulse 80, small; respiration 15 in a minute; bowels still confined, notwithstanding the calomel and house medicine, that has been administered. Ordered:—

℞ Mist. assafœtidæ ℥j.
Spt. terebinthinæ ℥ij.
Decoct. avenæ lb.ss. M. ft. enema
Statim tepide injiciend.

Two, p.m.—The greater portion of the enema was returned directly, a very copious, hard, dark, evacuation coming away;—since, the bowels have been freely open twice; she appears a little better; puts her tongue out more readily than before; pupils fully dilated, but quite sensible to light. Ordered:—

℞ Ung. hydr. fort. ℥j.
Capiti. bene infricand. secundis horis.

Ten, p.m.—Still very restless; has not been purged again; has made several attempts to get out of bed, and is now continually screaming; pulse 80, intermitting; on account of the restlessness, ordered:—

℞ Morphiæ gr. ¼.
Statim sumend.

2nd, eight, a.m.—She remained quiet till two o'clock this morning, but has been very restless since, occasionally screaming, and in the intervals drowsy; has had no stertorous breathing, and is quite sensible when pinched; respiration is performed slowly, and with great effort; all the muscles of inspiration seem to be acting; about nine o'clock, the pulse began to sink, and she died in a convulsive fit.

Sectio cadaveris: twelve hours after death.—There were no external injuries about the head, except those that were observed during life. On examining the head, a great deal of coagulated blood was found upon the temporal fascia, extending as far back as the occipital protuberance, and forwards to the boundary of the temporal fossa; a clot of blood of the size of a shilling was found on the dura mater, in the spot corresponding with the frontal eminence on the left side; a similar clot at the corresponding part was likewise found: of the surface of the brain there was also an effusion of blood, forming a cavity in the right hemisphere, above the level of the corpus callosum, besides several clots of various sizes in the right anterior lobe, and in the anterior extremity of the middle lobe; a small quantity of blood was also found diffused beneath the pia mater of the right hemisphere of the cerebellum, which was in other respects healthy. There was also very extensive effusion of blood beneath the dura mater, covering the petrous portion of the temporal bone. The fracture commenced about the middle of the occipito-parietal suture, on the left side, and extended forwards to the left side of the foramen magnum; near the condyle, close to the foramen magnum, was a comminuted portion of bone, almost separated from the rest, and, corresponding to this, was a laceration of the dura mater. The spinal cord was afterwards examined, by making a longitudinal incision from the occipital protuberance, to the spinous processes of the

dorsal vertebræ; there was very extensive effusion of blood among the muscles in this region. The posterior arches of the vertebræ being removed, and the dura mater exposed, which appeared healthy, a small quantity of blood was found upon the dura mater, a little below the atlas; upon making transverse sections of the cord, a small quantity of blood was found effused in its substance. The lungs, with the exception of a little ecchymosis on the convex surface of the right organ, were healthy; heart was healthy; stomach contained a great quantity of mucus; the anterior and posterior internal surfaces were much congested, particularly where the mucous membrane formed folds; there was a slight hour-glass contraction of the stomach; there was also a little blood effused into the gastro-splenic omentum.

PERISCOPE OF THE WEEK.

Diseased Teeth.—[This, and the fifteen following articles, comprize the principal contents of the two last numbers of the *Lancet*.]—Mr. Liston mentions the case of a gentleman who came from the West Indies, to be treated for an ugly ulcerated tumour of the cheek, produced and kept up by the irritation of a carious tooth. The cause of the ulcer not having been recognised in the West Indies, he had several times undergone extirpation, and had corrosive agents applied in all sorts of ways, and finally, the actual cautery had been used more than once. The removal of the decayed tooth effected a cure in about a week. Such cases used to be by no means uncommon.

Prolapsus uteri.—Prolapsus uteri is an affection of very frequent occurrence, more especially among the working classes. It may be caused, first, by whatever tends to relax the vagina, fluor albus, frequent child-bearing, excessive hæmorrhage, &c.; secondly, by whatever increases the weight of the uterus, without adding materially to its size; thus it is often found connected with disease of the uterus. It occurs, too, when the uterus has aequired a certain size from pregnancy, or is diminished to a certain size. A slight degree of prolapsus is mentioned by some authors as one of the early signs of pregnancy. Dr. Heming has known it to exist to such an extent during the early months of pregnancy, as to oblige the patient to recline on the sofa, although at other times quite free from it; and he has little doubt but that it is more frequently the cause of abortion than is supposed. A slight degree of prolapse occurs in some women at each catamenial period, producing pain in the back and groins, and a sensation of bearing down, a kind of dysmenorrhœa, the pain going off entirely when the catamenia cease. Thirdly, any force acting from above downwards, may produce prolapsus uteri, such as violent straining to evacuate the bowels, violent blows, or shocks. Dr. Heming has known ascites cause it in three cases, the vagina being first protruded, and afterwards the uterus, constituting a case of procidentia uteri. When the operation of tapping was performed, and the fluid contained within the abdominal parietes was abstracted, the uterus regained its normal position, and remained there until the fluid again accumulated. Prolapsus is most frequently induced by sitting up too soon after confinement, especially when the patient has had frequent labours, in which case, not only is the vagina relaxed and enlarged, but the ligaments are also relaxed and yielding; the uterus has not resumed its natural size, and it is heavier, and not large enough to receive support from the bones of the pelvis. When the prolapse is but slight, the uterus having descended very little, the os uteri will be situated more backward, and the fundus more forward, than in its natural condition, and may thus become a cause of barrenness, by the obstruction of the orifice. It may also produce, mechanically, obstruction of the bowels, and uneasiness in the rectum. As the uterus descends lower in the vagina, the direction of its long diameter is changed, the fundus is thrown more backwards, and the cervix is directed more in front, so that the os uteri is found in the axis of the vagina, in which direction it descends gradually, until it protrudes through the os externum. It may, however, lodge for a time in the perinæum, as on a shelf, and then the tension of the ligaments and the dragging sensation are removed. When the uterus protrudes externally, the tumour will be of a more or less elongated form, and of greater or less magnitude, according to the viscera which have descended with it, and are contained within the inverted vagina. The bladder, rectum, and sometimes a large quantity of the small intestines, descend, giving the tumour more of a round form, and occasionally it becomes of an immense magnitude. If leucorrhea has existed prior to the occurrence of procidentia, it then ceases, and does not return until after the prolapsed parts have been reduced. Superficial ulceration of the mucous membrane generally follows procidentia, principally at the lowest part of the tumour, and on those parts of its surface which are most exposed to friction. It soon heals when the organ is reduced to its proper situation. The local symptoms of prolapse are, a sensation of fulness in the vagina, and of something about to escape from the passage, a feeling of dragging and of weight about the hips and loins, and considerable uneasiness about the groins. The uterus may press upon the bladder, or this viscus may be dragged down into the inverted vagina, giving rise to retention of urine, or stranguary, or the rectum may be pressed upon, and tenesmus or confined bowels may be caused. A sensation of weight at the anus on rising from a sitting posture, or on walking, is very distressing; but it is more frequently found in connection with procidentia of the posterior part of the vagina. A train of nervous symptoms, accompanied by dyspepsia, also are produced by prolapsus, and the strength is materially reduced. Slight cases are often mistaken for a stomach complaint, and so treated for weeks without benefit. A manual examination is absolutely necessary, and it should be made when the patient has been up some time. If the case be recent, or only existing in a very slight degree, it will be necessary that she should have walked for a short time previously, and that the rectum and bladder should be emptied. The examination should be made with the patient either sitting upon the edge of a sofa, or supported in bed by pillows; but what is far better, if she will submit to it, while standing. In the natural situation of the uterus, the os uteri can be just reached with a finger of moderate length; but in slight cases of prolapsus, it can be touched by passing in the finger about half its length. When the uterus has passed through the os externum, the case is not easily to be mistaken. Prolapsus may be confounded with congenital shortness of the vagina, but it may be distinguished from it by our being able to push up the uterus, and thus lengthen the canal. When the prolapsus is complete, and the tumour protrudes externally, it is often confounded with elongation of the neck of the uterus; from this affection it may be distinguished by our being able distinctly to trace the cord-like elongated cervix uteri with the finger introduced into the vagina, or rectum; and should there still be a doubt about the nature of the case, and the woman not be pregnant, a bougie, or female catheter, may be passed into the os uteri, and it will be found to pass in six or seven inches, instead of two, or two and a half. The presence of the os uteri at the lowest part of the tumour, will distinguish prolapse from inversion of the uterus. The same sign will equally distinguish this displacement of the uterus from procidentia of the bladder, and of the posterior paries of the vagina. In procidentia uteri, the tumour usually returns into the vagina on the patient's reclining, or may be replaced with the slightest effort of the fingers. It is rare to encounter difficulty in effecting this, but it is sometimes impossible, from the existence of previous inflammation, and consequent adhesions; and the attempt may be attended with considerable danger. Whenever acute lasting pain has occurred in the tumour, particularly when this has been accompanied by other marks of peritoneal inflammation, such as thirst, white tongue, small quick pulse, tenderness of the abdomen, and vomiting, no attempt should be made to replace the uterus within the body, and if at any time the attempt to do so is attended with great pain, it should be abandoned. If it be determined to return a prolapsus uteri, the bladder and rectum must be previously emptied, the one by the catheter passed with the point downwards, and its convex part inclined towards the abdomen, as the bladder may be situated within the tumour formed by the inverted vagina, and the other by an enema. The patient is then to be so placed, that the pelvis may be higher than the shoulders, and the fingers and thumb must be applied about the centre of the tumour, where the os uteri is situated, and gentle and careful pressure made. The after treatment consists in the employment of position, and instruments to maintain the uterus in its proper situation, and attention to the general health; cold and astringents locally applied, and sometimes even an operation, to contract the vagina. In recent cases, position, with the use of astringents, the cold hip-bath, and constitutional treatment, will often effect a cure without pessaries, which should not be employed until after this plan of treatment has been found to fail. The astringent lotion is best used by soaking a piece of sponge in it, and inserting it into the passage. This should be done two or three times a day. The sponge must not be so large as to distend the vagina; and to prevent its becoming larger, after its introduction, it should be sewed in a piece of muslin. A cold hip-bath should also be used, and the patient should continually recline upon the sofa. If this should fail, support must be given to the prolapsed uterus by means of a pessary. These are made of different shapes and materials, to suit the nature of the case. When the uterus and vagina are tender and irritable, Dr. Heming has found a round piece of sponge, covered with Indian-rubber, or oiled skin, to prevent its absorbing moisture, and of a size adapted to the relaxed state of the vagina form the best pessary; and in those cases where the canal has been greatly distended, and remains much relaxed, he prefers employing a stemmed pessary, made of boxwood. It consists of a circular plate, the upper surface of which, upon which the uterus rests when introduced, is slightly concave; this is supported upon a hollow stem, about three inches and a half long. The stem may be lengthened or shortened by a screw, as occasion may require. In almost all cases the concave plate requires to be a little more than an inch in diameter. The vagina is but slightly distended by the instrument, so that the former means for inducing it to contract, may still be employed. In long standing obstinate cases of prolapsus, where the patient is past child-bearing, Dr. Heming practises the following operation:—It consists in obtaining the protrusion of the tumour as much as possible, by the efforts of the patient; two parallel incisions are then to be made through the mucous membrane covering the tumour, from the sides of the os uteri along the course of the protruding vagina, to the os externum. The portion of membrane included between the two incisions is to be removed, leaving the space of an inch and a half in breadth, and the entire length of the vagina completely denuded. A suture is then to be inserted near the os uteri, and others at short distances, extending to the os externum; these sutures must be tied successively, and as each ligature is tightened, they will be found to be moving, and supporting the os uteri upwards. The diagnosis of the disease must be made correctly before the operation is performed. The statements contained in the preceding paper are illustrated by cases. The operation just described, appears to have been performed successfully on several occasions.

Midwives' midwifery.—Dr. Burnes describes a case where an ignorant woman, in attendance on a case of prolapsed cord, mistook the presentation, and grossly mistreated the case. As a matter of course, the child was born dead.

Styrol.—One of the most remarkable substances yet met with in organic chemistry, has been obtained by Dr. Blyth, in an investigation carried on in the Giessen laboratory, upon the storæx liquidus; it is in the form of a colorless transparent, and very limpid fluid, with very high refracting powers. Upon heating it in a clo

essel, beyond its boiling point, it is converted nto a solid hard body, retaining its transparency nd its refracting power unimpaired, and looking ike a piece of pure glass. The term styrol has een given it.

CYSTIFORM TUMOUR IN THE ANTERIOR CHAMBER.—A girl, 16 years of age, became a patient at he London Ophthalmic Hospital, under the care f Dr. F. Farre and Mr. Dalrymple, presenting he following appearances in the left eye. In the nterior chamber there was a roundish or slightly val body, cystiform in appearance, semi-transarent, or gelatinous-looking, and adherent to the iliary border of the iris at the inner side. It was ttached to the internal junction of the cornea and clerotica, but its superior, outer, and part of its inerior, borders, were free. It was not moveable, nor o round as the lens ; it occupied rather more than alf the anterior chamber, extending in front of he pupil, which was nearly shut out, and dimly een through the semi-transparent mass. It was f an opaline tint almost throughout. The iris as healthy and bright, as far as it was visible. From the history, it appeared, that a small speck ad been observed at the inner border of the corea, within the anterior chamber, three years efore, but unattended with pain or redness. It ad rapidly increased in size for the six weeks mmediately previous, and vision was quite conused in consequence. The cystiform character of he tumor becoming evident, after a time it was unctured, and a semi-opaline fluid of a saponaceous feel was evacuated. Two-thirds of the iris ould then be seen, the pupillary margin was free, nd vision at once restored. The cyst soon filled gain, but afterwards gradually decreased in size, nd became more transparent, and it was then seen hat a considerable opening in the iris existed at he inner side, around the margin of which the yst was firmly adherent. Another puncture was ade in the cyst, rather more than a fortnight fter the first, and as it did not fill again, the girl as dismissed ten days afterwards. The case is ery rare.

LIGATURE OF THE CAROTID.—Mr. Greville Jones narrates a case where ligature of the carotid as practised, and was followed by slight cerebral isturbance, with paralysis of sensation and motion n the left side of the body. Sensation was restored entirely, and motion partially by appropriate reatment.

NEURALGIA.—In an ample communication, Dr. Binns states that in 1828, when examined for his degree at Edinburgh, he mentioned cold as a curative agent in neuralgia, and gave as a reason for advising it, that he imagined there was congestion of the blood-vessels surrounding the neurilema, which caused pressure on the nerve in its adit and exit from the osseous canal.

FLUORIDE OF AMMONIUM.—An useful application of fluoride of ammonium has recently been discovered in mineral analysis. It is easily obtained by saturating silico-fluoric acid with carbonate of ammonia, and boiling; the hydrated silicic acid separates, and fluoride of ammonium remains in solution. This solution when in a state of concentration, etches glass in the same manner as fluoric acid; the fluorine goes off with the silicon of the glass, as fluoride of silicon. The fluoride of ammonium must of course be evaporated in dishes made of lead, silver or platinum. It is of particular value as a means of rendering minerals containing silica, soluble. The usual methods of fluxing are laborious, and after all, uncertain. By adding dilute sulphuric acid and fluoride of ammonium, to the mineral, all the silica is made to separate, and to go off as fluoride of silicon, whilst the other constituents are obtained in solution, combined with the sulphuric acid.

AMMONIA AND BISULPHURET OF CARBON.—Ammonia, Liebig says, undergoes a particular kind of decomposition in contact with bisulphuret of carbon, although neither body is *per se* readily decomposable, the decomposition presenting a great analogy with that which ammonia undergoes in contact with oil of bitter almonds, and with many other substances. If to a solution of the bisulphuret of carbon in alcohol there is added a solution of ammoniacal gas in alcohol, there ensues a complete decomposition of both substances, even at a temperature no higher than the freezing point ; the result is two new compounds, one of which separates after the lapse of half an hour, whilst the other separates at a later period in a very regular yellow crystal. Three equivalents of bisulphuret of carbon and three equivalents of ammonia, forming a sum total of their constituent elements, $C_3\ S_6\ N_3\ H_9$, yield $C\ S_3\ N\ H_4$ =first compound,—$C_2\ S_3\ N_2\ H_5$ = second compound. The first is a combination of bisulphuret of carbon, $C\ S_2$ with sulphuret of ammonium, S Am., corresponding to the carbonate of oxide of ammonium ; the second is a combination of hydrosulphocyanic acid with sulphuret of ammonium, $C_2\ N\ S_2\ H \times S Am$. From the solution of the latter compound will be obtained, by the addition of solution of chlorine, a white precipitate containing the elements of sulphocyanogen, $C_2\ S_2\ N$, and of sulphuretted hydrogen $S_2\ H_2$, whilst sal ammoniac and sulphocyanide of ammonium remain in the solution.

AMPUTATION.—Dr. Bullen gives the result of his experience with respect to amputations. The cases from which he draws his conclusions, are fifty-eight in number ; of these, 29 were amputated below the knee, 26 by the circular, and three by the flap operation ; two cases terminated fatally after the circular operation, and one after the flap, being a proportion of one in thirteen cases in the former, and one in three in the latter. Of the operation, above the knee, thirteen were circular, of which five died, and six flap, of which one died. Of the arm, there were three circular, and no flap operations ; all recovered: of the forearm, five circular, and one flap; all recovered: and of the shoulder-joint, one flap ; which, also, recovered. Dr. Bullen prefers the circular operation below the knee in primary cases, and where the integuments are vascular and healthy ; but when the subject is feeble and emaciated, and the circulation languid, he thinks operating with the posterior flap presents decided advantages. The flap operation does not appear very applicable above the knee ; the arteries are cut obliquely, and, without great care, may be productive of secondary hæmorrhage, and the bone is apt to protrude at the external angle of the wound, even after the lapse of several days, and after considerable union has taken place. The circular operation in amputation, above the elbow and below the lower third (this locality for operating is not clearly defined), seems preferable to Dr. Bullen. The superficial position of the brachial artery and nerve militates against the feasibility of the flap operation. If the operation be needed in the upper third of the arm, Dr. Bullen advises disarticulation at the shoulder-joint in lieu thereof, on account of the exceeding difficulty with which the artery is compressed, and also because there is a possibility that the extremity of the bone may be drawn by the spasmodic action of its muscles in such a way as to compress the axillary plexus. An example of this is recorded by Dr. Bullen, in which case the pain was so severe as to cause the patient to solicit the removal of the bone. It was relieved by padding and bandaging, by which application, the bone was kept stationary. Amputation at the shoulder-joint, Dr. Bullen regards as a safe and easy operation. In injuries of the hand, it is important to preserve as much of the member as possible. Much of the success of modern operations, is due to the use of small ligatures, in securing the blood-vessels, and the very simple manner in which the wounds are dressed. This improvement in surgery Dr. Bullen attributes to his father, who had recourse to it in an operation he performed in 1800, although it is claimed by Dr. Hennen and Mr. Cooper, for Mr. Veitch, a naval surgeon. In those cases where amputation has been performed upon old subjects, in whom the lower extremity has been for a long time the seat of chronic inflammation, the veins of the leg are sometimes found enormously enlarged and varicose, and the arteries few, and much diminished in size. When the limb is removed, the venous hæmorrhage is profuse, and difficult to check. The tourniquet, by causing venous congestion, increases the flowing of blood, and even the compression of a bandage brings on a recurrence of venous bleeding for hours after the operation. On carefully examining the condition of the limb, the muscles are found to be purple and soft, and do not retract, and the integuments are flabby, and inclined to a blueish colour. There is a manifest atony of the parts, a deficiency of the vital energy which is requisite to set up and carry on the reparative action, by means of which a sound union can be effected. From the moment of operation, the torpid and relaxed state of the blood-vessels demands stimulation. The first object is to arrest the hæmorrhage; for that purpose the tourniquet, and whatever may cause pressure on the limb, should be immediately removed, the thigh bent upon the pelvis, so that the stump may be thrown up, and kept in a perpendicular position, and a stream of cold water should be poured from a height over the face of the stump. These means generally check the more profuse discharge of blood, but a venous oozing continues, which is increased by closing up the wound, and putting on a bandage. Should they fail, however, dossils of lint, dipped in a hot saturated solution of alum, applied to the bleeding surface, and leaving the limb exposed in a current of cool air, will, generally, succeed. It is useless to attempt to obtain union by the first intention in cases of this description ; for if, after some hours, when the danger of hæmorrhage has ceased, the edges of the wound are brought together, and the usual dressing applied, it generally happens that at the end of three or four days the stump becomes gangrenous. Gangrene following amputation in old and enfeebled constitutions is generally fatal, and we should, therefore, endeavour to avert it by the immediate use of proper local stimulants, and by sustaining the constitutional powers with an invigorating course of treatment. Pressing the surface of the stump with pledgets of lint, dipped in warm elemi ointment and turpentine, soon excites healthy suppuration, and an abundant growth of florid granulations, and, at the same time, the steady use of opium, carbonate of ammonia, wine, and nutritious broths, must be persisted in.

PROCIDENTIA VESICÆ.—Dr. Heming states that this affection is of much more frequent occurrence than is generally supposed, and it is undoubtedly often confounded with procidentia uteri. The means of diagnosis, however, are very clear. The general symptoms are very slight, comparatively speaking; the stomach does not sympathise, unless the bladder is diseased, nor is the nervous system affected. The peculiar symptom of procidentia vesicæ is a pain and tightness referred to the navel, which is most complained of when the bladder is distended with urine, and is referred by Sir Charles Clarke to the elongated and tense condition of the superior ligament of the bladder. On examination of the tumour, the os uteri will not be found at its lowest part, as in prolapsus; it is still within the vagina : transverse rugæ may be observed, especially at the upper part of the tumour, and these are more or less marked, in proportion to the degree of distention of the bladder, upon which also will depend the size of the tumour. Any doubt as to the real nature of the case may be at once removed by the introduction of the catheter, which will not only remove any urine which may be contained in the pouch of the bladder, but the point of the instrument can be felt with the fingers applied to the surface of the tumour, the parietes of the vagina and bladder intervening. The tumour formed by procidentia vesicæ proceeds from the anterior part of the vagina, and the displaced bladder is covered by the anterior paries of that canal; so that the finger cannot be passed between it and the pubes to touch the os uteri, which is within the vagina above it. This orifice will be found to be distorted in a manner peculiar to this displacement of the bladder. Its anterior lip is elongated, and it is no longer found in the centre of the pelvis, but opens directly backwards, and lies in contact with the posterior part of the vagina. It is the posterior and inferior part of the bladder which descends: a kind of pouch is first formed, filling up the vagina, till at length it protrudes through the os externum, and shews itself externally. The treatment consists in keeping the bladder as little distended as possible, keeping the bowels open, by saline pur-

gatives, wearing an ovoid pessary, and the use of a cold hip bath.

PROCIDENTIA VAGINÆ.—In these cases a pouch forms in the rectum, just above the upper edge of the sphincter ani, and this is often brought on by habitual costiveness or hæmorrhoids; the os uteri generally remains unaltered, but its posterior lip may be elongated. The tumour is sometimes as large as a goose-egg, and when the patient reclines, becomes somewhat smaller, but does not entirely disappear; the finger cannot be passed along the posterior part of the tumour to the os uteri, but this can be done in front, and there is a discharge of mucus from the vagina. This affection is often accompanied with a dull pain in the back, and there is almost always a distressing sensation of weight at the anus, especially upon rising from a sitting posture. The treatment should consist in emptying the pouch, and keeping it empty, and at the same time by pressure, by the use of pessaries, and of astringents applied to the vagina, to endeavour to obliterate it. Dr. M. Hall has recommended the contracting the pouch by removing a slip of the mucous membrane covering it from the vagina, and uniting the edges by the interrupted suture, as in the operation for the radical cure of prolapsus uteri.

NITRATE OF UREA AS A DIURETIC.—Mr. Kingdon has narrated two cases of dropsy, in which the nitrate of urea appeared to act as a diuretic. He professes himself unable to account for its action, except on the principle of the homœopathic dogma, "*similia similibus curantur.*" The nitrate of urea was given in the dose of a grain and a half three times a-day.

PRESERVATION OF SECALE CORNUTUM.—Mr. Nunn states that he preserves the ergot of rye, by first reducing it to powder, and then putting two drachms in a two drachm bottle, in which a drachm of sulphuric ether or spirit of wine had been previously placed. The bottle is then corked, and either sealed with wax, or covered with bladder. When required for use, the contents of one of these bottles is put into a tumbler, and a small quantity of boiling water poured on it; a violent effervescence takes place, which quickly subsides, and during which the ether is evaporated; as much boiling water as may be necessary is then to be added, after which it is fit for use.

CARCINOMATOUS TUMOUR OF THE NECK, MISTAKEN FOR ANEURISM.—A labourer, 44 years of age, of sallow, unhealthy appearance, was admitted into Jervis-street Hospital, having an oval tumour, of the size of a turkey's egg, situate on the right side of the neck, penetrating deeply, so as to push forward the right tonsil. A distinct pulsation could be felt in every part of the tumour, ceasing when the carotid artery was compressed, without, however, any diminution of size. It presented a peculiar, boggy, inelastic feel; the skin was not discoloured; and the pulse and respiration were natural. The tumour had been in existence two years. The disease being regarded as aneurism of the external carotid, the common carotid was tied, the operation being followed by an attack of apoplexy, from which the man partially recovered, but gradually sank, and died nine days after the operation. On examining the body, the right carotid artery was found to be perfectly sound throughout its entire course, except where the ligature was applied. The tumour that in life so much resembled an aneurism, was found to be carcinomatous, and was partly lodged in the angle formed by the division of the common carotid. The brain was not examined.

FRACTURE OF THE BASE OF THE SKULL.—A case, presenting some of the symptoms of this serious lesion, is reported from the Westminster Hospital. It terminated favourably.

MELANOTIC TUMOUR OF THE LEFT LABIUM PUDENDI.—Dr. Green has published, in the *Transactions of the New York Medical and Surgical Society*, the case of a lady, 32 years of age, who, about eight years previously, discovered a small tumour in the left labium pudendi, soon after the birth of her first and only child. At first it gave no uneasiness, but after a time it increased rapidly in size, and was attended with distressing neuralgic pains, occupying not only the labium, but extending down the whole length of the limb of the affected side. The limb had become partially paralysed during the past year. Dr. Green, on examination, ascertained that the tumour was of an oval form, and occupied the whole length of the labium. It was hard and unyielding on pressure, so much so, that it was at first supposed to be of bony origin; this, however, was found not to be the case. The diseased growth was removed by operation by Dr. Green, and when cut into, was found to be encysted, and evidently of the melanotic species. Its contents were an inorganized mass, of a dark-brown, or a dull bistre colour, and resembled very much the pigment of the choroid. The patient bore the operation with great firmness and resolution, and recovered without a bad symptom. The parts healed kindly; the limb regained its natural action, and the distressing neuralgic pains did not recur.

FRACTURES OF THE CLAVICLE.—In a short paper on fractures of the clavicle, published by Dr, Cox in the *New York Journal of Medicine*, he recommends a modification of Desault's bandage. Instead of making the axilla of the sound side the point of support of the shoulder of the fractured side, he proposes that this point of support be sought close to the neck, on the side of the fracture. The roller may start from the sound axilla, pass over the other shoulder, down behind the arm, and under the elbow, then upward over the fracture, obliquely across the back, and under the axilla of the sound side, thus making a figure of eight, by which the elbow will be drawn directly upwards, and the point at which the bandage crosses on the shoulder being properly secured by pins, will be retained permanently close to the neck, by means of the turns which pass under the sound axilla. It is well to commence by preparing the arm of the affected side with a roller, carefully and accurately applied. This precaution has the double advantage of guarding the arm from the pressure of the turns of the first roller, and also of furnishing the means of fastening the last application to the elbow by means of pins. Dr. Cox has tried his plan in only one case as yet, but in that it succeeded, even although Desault's bandage, and the old figure of eight, with several modifications thereof had previously failed.

STRUCTURE OF THE UTERUS.—M. Jobert de Lamballe, in a paper published in the *Journal de Chirurgie* on the structure of the uterus, comes to the following conclusions:—first, the proper tissue of the uterus is not fibrous yellow tissue, but muscular tissue, and that at all periods of life, and in all animals; secondly, in pregnancy the uterus is merely in a state of muscular hypertrophy; thirdly, the uterus is formed by one muscle and not by several; fourthly, there exists an uterine mucous membrane, but without the epithelium; and fifthly, the direction of the uterine fibres shows how they act in freeing the uterus of its contents. The longitudinal layer of fibres, which originates at the fundus, and is inserted into the neck and vagina, tends to diminish the length of the uterus, whilst the semicircular fibres by their action diminish its cavity in every sense. The longitudinal and annular fibres of the Fallopian tubes explain the mode of progression of the product of conception, and those which surround the uterine vessels appear to diminish, by their contraction, the rapidity of the circulation, and to prevent hæmorrhage during parturition.

GOSSIP AND NEWS OF THE WEEK.

MEDICAL MEETING AT BIRMINGHAM.—On Tuesday evening a meeting of medical men was held at the public-office, to take into consideration Sir James Graham's Medical Reform Bill. Among the gentlemen present were Dr. B. Davies, Dr. Mackay, Dr. B. Fletcher, Mr. Wilders, Mr. Green, Mr. Baker, Mr. Russell, Mr. Knowles, Mr. Swinson, &c.—Dr. B. Fletcher said, that as Sir James had asked discussion during the recess, he had a right to expect that the members of the medical profession would answer to his claim upon them and that they would deliberately consider the bill proposed, and offer to him such suggestions as they deemed it expedient that he should adopt. If the opportunity offered was silently passed over by the medical men of Birmingham, Sir James Graham would naturally infer their silence was an approval of his measure. (Hear, hear.) He (Dr. Fletcher) gave Sir James Graham every credit for sincerity in his exertions to promote the welfare of the medical profession, and the welfare of the public: but nothing worse for both could have been attempted, than to lay open the practice of medicine and surgery, and by so doing sanction the slaughtering of quacks and impostors.—Mr. Wickenden said, not having attended the preliminary meetings, and consequently not having acquired the knowledge of the probable consequences of Sir J. Graham's Bill, should it be carried through Parliament, nor having seen a copy of the resolution which he had the honour to hold, until he entered the room, he could not but lament that the same had not been entrusted to another and abler advocate. He insisted on the necessity of raising the standard of medical qualifications. Let it not be thought that the medical profession saw no excellence in the measure of the Right Hon. Bart. There was much to be commended, but there was also something to be deprecated, and it was against that only which they protested. He concluded by moving a resolution deprecating Sir J. Graham's Bill, and subsequently, a petition to Parliament, against its passing, was passed unanimously.

(We are indebted for the above abridged report to the *Times* paper. It will be observed, that only nine gentlemen are described as present, and only two as speaking, one of whom gives the Bill as much support as opposition. We see here fresh evidence, that our brethren are determined not to lend themselves to any factious, or wholesale denunciation of the Bill.—ED.)

The *Dispatch* has followed the *Times* in taking up the subject of Medical Reform, and promises to be about equally well informed. It begins an article with the very amusing heading: "Expiration of the Charter of the Royal College of Surgeons!" It then proceeds thus:—"What is the object of Sir James Graham's Bill? It is to proclaim a ban upon the aristocracy of talent—to hold out a premium for quackery—to expose men whose extensive and important discoveries upon matters involving the issues of life and death render them immortal, to persecution and poverty, and to supersede the unwearied labours of a *Juncker*, an Alberti, a Darwin, and a Hunter, by place-hunting, family jobbing, and a system of corruption of which even a common roadside farrier would be ashamed. Why is the Act of George III., which constitutes the medical profession a truly representative body, consisting of a President, Council, and commonality, to be done away with? According to the Charter (as the *Weekly Dispatch* has already remarked) none but the 'Pures' can enjoy the privileges of the College of Surgeons; which, in plain English, means that men practising midwifery, or compounding their own prescriptions, are branded with infamy, and excluded. And yet the immortal Hunter, the greatest physician that ever adorned medical science—whose discoveries entitle him to the gratitude and admiration of ages unborn, acquired his knowledge and fame by his immense, varied, and mixed surgical practice. The College of Surgeons has capped its atrocious acts, by refusing a deputation from 12,000 (!) general practitioners, who had graduated within its walls, and whose characters are spotless. Mr. Wakley has told the body of general practitioners, who reckon 30,000! that the battle and victory are are in their own hands, and that if he had only nineteen to back him in the House of Commons, he would have successfully combatted their enemies." The constant succession of *munchausens* in this pithy piece of writing, needs no help to secure our readers' notice. The writer (said to be a Dr. Lynch, of Farringdon St., Newgate) must be a good hand at an easy assertion.

Royal College of Surgeons.—Gentlemen admitted members on Friday, August 9, 1844:—J. P. M Smith, W. Hitchman, J. Clarkson, C. C. Mead, F. Renard, J. L. Crosby, J. Marshall, E. F. Palmer, T. H. Smith, H. I. Hunter, E. Robinson.

Apothecaries' Hall, 5th Sept. 1844.—John Fox Cartner, Samson Davis.

Metropolitan Mortality for the Week ending Saturday, September 7.

Causes of Death.	Total.	Average of 5 Springs.	Average of 5 Years.
ALL CAUSES	915	900	946
Zymotic, or Epidemic, Endemic, and Contagious Diseases	266	191	178
SPORADIC DISEASES—			
Dropsy, Cancer, and other Diseases of uncertain or variable Seat	87	106	111
Diseases of the Brain, Spinal Marrow, Nerves, and Senses.	134	159	157
Diseases of the Lungs, and of the other Organs of Respiration	210	233	286
Diseases of the Heart, and Blood-vessels	25	19	21
Diseases of the Stomach, Liver, and other Organs of Digestion	78	88	69
Diseases of the Kidneys, &c.	8	5	5
Childbirth, Diseases of the Uterus, &c.	13	9	10
Rheumatism, Diseases of the Bones, Joints, &c.	10	5	6
Diseases of the Skin, Cellular Tissues, &c.	2	1	1
Old Age	57	56	71
Violence, Privation, Cold, and Intemperance	22	25	26

No. 261. **SUMMARY.** Sept. 21.

CLINICAL LECTURES ON SOME IMPORTANT POINTS OF SURGERY, BY SIR B. C. BRODIE, BART.:—
LECTURE XVII.—On the Importance of Operative Surgery—Its Dangers as well as Advantages to the Patient—States of Constitution in which Operations should, if possible, be postponed—Inflammatory Diathesis indicated by the State of the Urine—Necessity of Examining this Excretion, before performing even the most simple Operations—Cases in Illustration of this Point—The Old System of "Preparing" for Operations—Its evil Consequences—Proper Treatment to be adopted in such Cases 499

LECTURES ON THE THEORY AND PRACTICE OF MEDICINE, BY DR. C. J. B. WILLIAMS, M.D., F.R.S.:—
Duodenal Dyspepsia—Form of Constipation corresponding with Inflammation—Predisposing Causes, Symptoms, Illustrative Cases, and Treatment 500

PARISIAN INTELLIGENCE:—
Professor Chomel on Chorea—Its Causes—Symptoms—Pathology—Diagnosis—Prognosis—Treatment 502
Case of Inversio Uteri, by Professor Velpeau 502
Academy of Sciences; Sitting of the 9th Sept. 503
On the Distillation of the Resin of the Calamus Rotang .. 503
Prof. Pappenheim on the Fibrous System and its Nerves .. 503
Dr. Matthieu on the Oxide of Zinc 503
M. Guyon on a Race of Men called Cagots 503
Case of Anæsthesia of the Left Side of the Body, without Paralysis of Movement 503
Academy of Medicine; Sitting of the 10th Sept... . .. 503

REPORTS ON UTERINE DISEASES, BY E. RIGBY, M.D. 504

ON THE INFLUENCE EXERCISED BY TRAUMATIC LESIONS OF THE SPINAL MARROW ON THE FUNCTIONS OF THE GENITO-URINARY ORGANS WITH THE ANALYSES OF THE DIFFERENT SECRETIONS, BY — SEGALAS, M.D. 506

TREATMENT OF CONVULSIONS IN CHILDREN, BY A. W. CLOSE, ESQ... 507

MR. JACKSON'S VIEWS ON THE SPLEEN, BY JONAS KING, ESQ.. 508

SELECTIONS FROM GERMAN JOURNALS, BY SIGISMUND SUTRO, M.D.:—
On Delirium Tremens 508
On the Treatment of Pneumonia in Old People, without Abstraction of Blood 508
Sulphate of Copper in Croup 508
Croup Terminating Fatally, without the Formation of False Membranes 508
On the Proximate Cause of Enlargement of the Spleen, in Intermittents and Fevers in general 508

LITHOTRITY, LITHOTOMY, AND THE DISEASES OF THE URINARY ORGANS, BY W. B. COSTELLO, M.D. 509

THE LEICESTER CASE OF MESMERISM 510

MEDICAL REFORM.—Its Policy Considered 514
————————, A Correspondent on, ... 515

STATE OF PROFESSIONAL FEELING 515

TO CORRESPONDENTS 517

LEADERS:—
The Council of Health and its Constitution 518

FELLOWSHIP OF THE COLLEGE OF SURGEONS.. .. 519

THE IRISH APOTHECARIES AND THE NEW BILL .. 519

MEDICAL CLUBS.. 520

THE DANGERS OF LITHOTRITY 520

THE "LANCET" ON THE APOTHECARIES' COMPANY 521

REVIEWS:—
A Practical Treatise on Diseases of the Eye. By Samuel Jeaffreson, Esq. 521
Lecture on Physical and Intellectual Life. By Samuel Dwight, M.D. 521

HOSPITAL REPORTS:—
St. Bartholomew's Hospital.. 522
King's College Hospital 523

PERISCOPE OF THE WEEK:—
Stone in the bladder, complicated with extensive scrophulous disease 523
Lithotomy 524
Fungus hæmatodes of the eye 524
Puerperal Convulsions 524
Effects of Ague on Tea-totallers 524

GOSSIP OF THE WEEK 525

A SELECT PRACTICAL FORMULARY 526

METROPOLITAN MORTALITY TABLE 526

A COURSE OF CLINICAL LECTURES ON SOME IMPORTANT POINTS OF SURGERY,

Delivered at ST. GEORGE'S HOSPITAL, by Sir BENJAMIN C. BRODIE, Bart.

(Reported by G. SAYLE, Esq. M.R.C.S., late Curator of the Museum of St. George's Hospital School.)

Lecture XVII.

GENTLEMEN,--The subject of to-day's lecture is one of no small importance; indeed, it must be acknowledged, that no part of our science is of greater importance than operative surgery. The good which follows a successful operation is so manifestly the result of the operation itself, and the surgeon, by operation, so frequently steps in between the patient and his dissolution, that it is of moment to us as of service to the patient. But, although this is the general rule, still there are very many exceptions; for, every operation is an injury done to the animal body—a severe injury,—and, although the human body powerfully resists that injury, not unfrequently very severe symptoms, and sometimes death, will follow. But there are many diseases which would destroy life, if operation were not resorted to: take, for example, a case of stone in the bladder; in such a case, the patient submits to a present risk, to avoid certain death at a future period, and in most cases he has a good chance of getting through. Again, operations are frequently performed for diseases which are not dangerous, but only troublesome; for diseases in which the danger is remote. Every now and then, too, a patient dies after an operation, when the danger appeared so small as not to be worthy of notice; so that you see, it is essential to look always at every circumstance which may affect the safety of the operation. Hence, therefore, I wish now to bring before your notice, particularly, the circumstances which render an operation dangerous; for a knowledge of these is the first step towards avoiding them. There was a time, when surgeons took very little trouble on this matter, or else (which is, perhaps, nearer the truth) did not possess a knowledge of these previous symptoms; for, when a disease seemed to require an operation, the operation was performed without thinking of what might be the result. But this is not what we should do now, when surgery, physiology, and animal chemistry are so advanced. In all cases, your first step will be to examine the patient carefully, to see whether there is anything in the state of the constitution to render an operation dangerous, whether such cause of danger may be removed by art: and if not, unless the operation is very urgent, you will postpone its performance. If there is something rendering operation dangerous and you cannot remove it by art, then your duty will be to make the patient and his friends aware of it, and let him consider whether or no he will submit. There are many states of the constitution which tend greatly to increase the danger of operations,—even so simple a matter as this. A man comes to you who is apparently a healthy person, and, from his general appearance, you would be led to judge him to be of strong constitution; but cross-examine him, and perhaps you will find, that, although he has a good appetite, his digestion is bad; though he sleeps well, yet that he is frequently disturbed by disagreeable dreams—doubtless, arising from excess of acid in the stomach; his urine will be moderate in quantity and high coloured, transparent when first excreted, but thick, opaque, and staining the chamber-pot like a pink saucer, when it cools. Such a case must always be considered as unfavourable for an operation; but still the case may be one in which you are compelled to operate, and that, too, immediately: for example, in strangulated hernia, where two hours would make all the difference; or again, in femoral aneurism, where you must take up the external iliac artery at once, or, whilst you are trying to mend the general health, at some unexpected moment, the aneurismal tumour may burst, and, before assistance can be procured, the patient may bleed to death; and indeed, in such cases as these, so essential is it that the operation be performed immediately, that I think it scarcely worth while making these general enquiries.

There is, also, a yellow deposit occasionally observed in the urine, but it is of comparatively trifling importance. Where there is an abundant red precipitate, which is principally lithate of ammonia, the system is in an inflammatory state. Persons who are repeatedly subject to this state, are to be looked upon as always being in danger,—like a man with a sword hanging over his head, suspended by a mere thread. None of these go on any length of time, without an inflammatory affection shewing itself somewhere; it may be inflammation of the knee-joint—of its synovial membrane; well, you try to cure it, but do not succeed; nor will you, until you have first removed that state of the system which produces the red deposit. Another person may have inflammation of the pleura, or a determination of blood to the head, threatening apoplexy. Severe effects are often produced by very slight causes. A man sprains his ancle and it becomes slightly inflamed, but this rapidly increases, and the whole leg becomes affected, which would not occur were the system in a healthy condition; or you remove a loose cartilage from the knee-joint—an operation which, under favourable circumstances, is followed by no violent symptoms: but in such cases as I have been describing, the limb, if not the life, of the patient might be sacrificed. In such conditions, then, the operation should be postponed. Again, a lady has ovarian dropsy and wishes to be tapped; perhaps, from the great pressure of the tumour, she is in danger of suffocation, and then you must tap her immediately; but if this is not the case, then, if she has pink deposit in the urine, you must not operate, as inflammation will follow—and inflammation of the ovarian cyst generally proves fatal. Now, as regards the treatment to be adopted in such cases:—the system is charged with lithic and other acids, for, although there is a copious deposit of lithate of ammonia in the urine, this is by no means an exact measure of the quantity of acid in the system. Sometimes, the deposit is pure lithic acid in the form of red sand; but even this is not sufficient to indicate the existence of a large quantity of acid in the system, nor of the absence of ammonia, because the other acids in the system combine with the ammonia, and the lithic acid is thrown down in a separate state. It is to those, who deposit the lithate of ammonia, you are to look with the greatest suspicion. In the first place, then, put your patient on proper diet, and though his appetite be good, if his digestion is weak, he should eat but little: each must make use of his own discretion as to what best agrees with him; meat in small quantities, with cooked vegetables, are best; beer, acid wines, and fruit should be avoided. In these persons, after digestion has been completed, there is a superabundance of acid in the stomach, and it is this which causes the restless nights, and forms the red deposit in the urine. It is necessary that this superabundance of acid be corrected, and this is best effected by administering an alcali in combination with a vegetable acid. This singular fact was first observed by Sir Gilbert Blaine, that, when potass was administered in combination with lemon juice, the acidity was sooner corrected than when the alcali was given alone. I cannot explain the cause of this, but, nevertheless, such is the fact. I generally prescribe the bi-tartrate of potass, combined with the carbonate of potass, and find it answers very well. In this country, the employment of alcalics has been carried too far, and the state of the system, I have described, is best corrected by combining the alcali with a vegetable acid. You can have too much of a good thing. I have generally found fifteen grains of the bi-carbonate of potass sufficient for every purpose; but, sometimes, potass does not agree, and then magnesia, or any of the preparations of soda, may be given instead. This state of system is closely connected with what is called the gouty diathesis, and is met with much more frequently in the affluent state of society, than in hospital practice, because, in the former, they eat and drink too much, and take very little exercise. Many diseases are met with in this class of society, which are to be attributed solely to these causes; but there are some other states of the system, indicated also by the condition of the urine, which may render the performance of an operation unfavourable. When the urine is alcaline and deposits the triple phosphate, or becomes alcaline soon after excretion, changing the reddened litmus, blue (for it may not be sufficiently strong to affect turmeric). This alcaline urine, it is true, may be the result of accidental causes—such as a course of mercury, a long illness, producing great debility, great mental anxiety, and so on. Persons of a weakly constitution are especially liable to this state of urine. None of these are in a proper state to bear the shock of an operation; not that they are liable to the inflammatory diseases which attack persons with very acid urine, but they are in a weakly state, and sink rapidly. Then, if the operation is

not urgent, postpone its performance till you can get the patient's health into a better state, by change of air and good diet; but they will not bear much food, as it produces flatulence; it should be light, and easily digestible; they should have a moderate allowance of wine, and a little acid fruit will occasionally be both grateful and of service. As a general rule, however, you will find the mineral acids act better on the urine than the vegetable: especially the nitro-muriatic acid, combined with tonics. Opium is useful in these cases, but should not be given to persons with acid urine.

You will meet with persons who void urine loaded with albumen, and of these there are two classes to be noticed as far as surgery is concerned. In the first, the urine is voided turbid, looking like whey, and not of a low, but high specific gravity. Sometimes, flakes of albumen will be seen floating in the urine, and, generally, (but not always) it is alcaline. If boiled, it becomes more opaque than before; the same thing occurs if nitric acid be added to it. If allowed to stand any length of time, it deposits albumen, and the remainder becomes clear; but even this will become opaque, if treated as I have just mentioned. Where this condition exists, there is always actual disease of the kidney, sometimes abscesses exist in it, and you will find pus in the urine. Sometimes, mucus is secreted in large quantities by the pelvis of the kidney, and, in these cases, if the body be examined after death, the capsule is found loosely adhering to the surface of the kidney, and you may remove the latter, leaving the capsule behind. The kidney itself will be found red, soft, and vascular; so soft, indeed, that the finger passes readily through it; not unfrequently, little specks of extravasation may be seen in the cortical structure. This excretion of mucus may be the consequence of diseased bladder, of chronic inflammation of its lining membrane, or of the presence of calculi; but, sometimes, it occurs without any of these. I believe it is, not unfrequently, produced by the large quantities of eubebs and pepper administered for the cure of gonorrhœa, because, several times, I have been able to trace its commencement to the time when the patient was taking this medicine. The second form of this disease comes most frequently under the care of the physician, where the patient does not complain of the kidneys or back at all; the urine is clear, and looks healthy; but, when boiled, or nitric acid is added to it, it becomes opaque. In the former case, the albumen is secreted by an inflamed kidney, whilst, in these latter cases, it certainly is not inflamed, at least, in the first instance. These persons are in a more dangerous state than those who void the cloudy urine; because the secretion of albumen is not dependent upon disease of the kidney, but of the system generally. The albumen, which should go to supply the requirements of the system, is draining off by the urine, and such persons become peculiarly liable to dropsical and cerebral affections, and the majority of persons who die of these diseases are found, on examination, to have had albuminous urine. Both these classes of persons are bad subjects for operations. I have been accustomed to say that no operation was less dangerous than "ligature of internal piles," that is, so long as the ligature was properly applied: even in this disease, however, a bad state of the system may make an operation followed by fatal results. I have, here, many times saved persons' lives, when they were threatened with death from hæmorrhage. I have performed this operation between three and four hundred times; out of which number, I have lost only three cases. The first of these was a gentleman who had been much in India, and had long been troubled with internal piles. I tied them for him, not thinking at the time to inquire after his general health, or the state of his urine; in a few days after the operation, pain attacked him in the abdomen and loins, and he sunk rapidly, and died. On examination, I found diffuse inflammation of the cellular tissue behind the posterior lamina of the peritonæum, nearly as high up as the mesentery, with lymph and pus effused throughout the whole extent. In this case, the urine, a few days after the operation, deposited coagulated albumen, without the addition of either heat or nitric acid.

From the analysis of the urine, by Dr. Prout (who saw this patient with me), we were led to believe, it had been in a bad state for a great length of time. The kidneys were found soft and spongy, of a dark color, and very vascular; the cortical structure being filled with little spots of ecchymosis, and the capsule easily peeling off. A second case, similar to this, came under my notice, but I am not aware of any disordered state of the urine existing previous to the operation. The third case, was that of a clergyman, in whom the operation was obliged to be performed immediately, on account of the profuse hæmorrhage, proceeding from internal piles. Here, I performed the operation, without thinking of the state of the urine; a few days after the operation, the same symptoms as I mentioned in the first case came on, and he also died. There was the same unnatural appearance of the urine, but, at that time, I did not so well understand these things, and, after death, the examination showed the same diffuse cellular inflammation behind the peritonæum, and between the laminæ of the mesentery, as I before described. The kidneys, also, were in a precisely similar state, being soft, vascular, and covered with spots of ecchymosis. In this last case, I found a calculus in the bladder, nearly transparent, looking like a piece of amber. When put by, it dried and shrunk; it was the only case I ever saw of fibrous calculus; fibrine and albumen are nearly analogous. Ever since these cases occurred, I have been careful always to examine into the state of the urine, before performing this simple operation. Where the urine is albuminous, the operation for stone will generally fail; for, if so much danger attend the simple operation of tying internal piles, how much must that danger be increased in such an one as lithotomy. In Dr. Prout's new work, you will find some important observations relative to patients who have saccharine, or what is commonly called sweet, diabetes. We know that this is at all times a dangerous disease, and no one would consider such a patient in a favorable state for bearing an operation; but Dr. Prout has shown, that there are some special reasons for avoiding it in such cases. He has shown, that a large proportion of those persons, who die of carbuncles, have diabetes; and in carbuncle there is a local inflammation, which runs speedily on to gangrene, and when this is the case, of course you would not choose such an one for operation. There is another class, in whom gangrene not unfrequently follows operations, viz., such as have been great gin or porter drinkers, and persons who have led very irregular lives. It is quite astonishing, how, in such persons, the slightest injuries will run on to gangrene, and mortification. A man comes into the hospital with a slight wound of the leg; then follows what we call diffuse inflammation of the cellular membrane; the limb becomes œdematous; the pulse small and weak; countenance sallow and anxious; the skin and cellular membrane about the injured part sloughs, and the patient rapidly sinks into a state of low muttering delirium, and dies; and the same thing will follow all operations in this class of persons, as I have seen continually. In persons who have been much addicted to drinking, in whatever station of life they may be placed, there is always this danger attending every operation, or mechanical injuries of any kind; therefore, in such persons, always, if possible, avoid operation. But the case may be urgent, and then you must perform the operation, and the patient must take his chance, whether he be a claret and champaigne drinker, or, as most frequently occurs, a humble gin drinker. Then you are to consider in what way you can make the danger less. Formerly, we used constantly to hear it said, that patients should "be prepared" for operations; by which it was understood, that they should be kept low, and bled a few days previous to its performance. I can very well remember the time when "inflammation" was the only danger expected to follow an operation; the fact is, that this preparation, as it was called, rendered them less able than they otherwise would have been, to bear the shock. What are you to do then after an operation? Formerly, patients were kept very low, but be assured this treatment is improper; the day after the operation, give them some stimulus, a little food, also; but, of course, not so much as they, in their profligate habits, had indulged in. I saw a person in the country, yesterday, with a medical man, who told me she had been accustomed to drinking spirits. She had been compelled to submit to an operation, and I advised him, by all means, to allow her a certain quantity of her accustomed stimulus: in this case, the parts had already begun to slough, and there was diffuse inflammation of the surrounding cellular tissue. Give a patient, in this state, stimulants, and he will improve directly. In the case I have just mentioned, there was pain in the left shoulder, which might have gone on to secondary deposits, but the stimulants removed it, and she is doing well. Precisely the same thing occurred in the man upon whom I operated last year for inguinal aneurism; this treatment was pursued, and he did well. The same rule applies to persons who drink large quantities of fermented liquors. You will find it equally necessary to attend to this in private practice, as it is in hospital practice; for it is astonishing how little will kill such persons. I was called in, the other day, to a young tradesmen, who was dying from the effects of a slight injury of the fore-arm; the inflammation had spread over the whole limb, and he died; on inquiry, it was found he had led a very irregular life. I once saw a man die in this hospital from a leech bite, another from the sting of a bee: diffuse cellular inflammation running rapidly into a state of gangrene from such slight causes; and, I have no doubt, these patients had been in the constant habit of drinking spirituous liquors.

COURSE OF LECTURES ON THE THEORY AND PRACTICE OF MEDICINE.

Delivered by C. J. B. Williams, M.D., F.R.S., Professor of the Practice of Medicine, and of Clinical Medicine, at University College.

Duodenal Dyspepsia. (*Continued.*)—Before entering on the subject of constipation, I have a few words to say on duodenal dyspepsia, which I shortly noticed yesterday. In this affection, it is especially necessary to pay attention to the diet, avoiding those articles which tend to irritate the duodenum, such as greasy and fatty pastry, which is very indigestible. These matters tend to irritate the duodenum, and produce disorder not merely in the stomach, but also in the liver. It is also necessary to avoid spirituous and fermented liquors, in any quantity, during these attacks. The treatment consists much in the same measures as are appropriate to the different forms of dyspepsia, whether inflammatory, atonic, or irritable—remedies which tend to increase the secretions; mercurial powders, blue pill, and hydrarg. eum cretâ, given once or twice a day, and carried off by a mild saline aperient. This may be continued for a longer or shorter time, and, in some cases, even for several weeks. But, inasmuch as mercury sometimes exercises a prejudicial effect on the system, and the digestive organs, it is often desirable to substitute other medicines for it, to keep up the action of the liver and the duodenum. Dandelion, in extract or juice, nitric acid, and nitro-muriatic acid, are useful, because they act as tonics, at the same time that they exert an influence on the liver. Muriate of ammonia is supposed to have a similar effect, combined with taraxacum. It is in cases where the disease is obstinate, and assumes the chronic form, that saline waters are efficacious; particularly those of Cheltenham, and such as contain an excess of alkali, and sub-sulphate of soda in a diluted form.

We now pass on to the consideration of that form of *constipation*, which corresponds with indigestion. This affection is principally seated in the colon, and may be regarded as opposed to diarrhœa; it may consist in defective secretion of the canal, or defective muscular action, or both combined; and each of these, defective secretion and defective muscular action, may depend on different pathological causes. Generally speaking, defective secretion and defective muscular action go together, just as excessive secretion and excessive muscular action of the canal constitute diarrhœa. They produce torpor of the bowels, and extreme irregularity in its action.

Now, among the *causes* to which we may trace this imperfect action, we find, in the first place, the character of the food to be the main source of costiveness. For example, food of a certain nature will produce fæculent matter, but does not, by its presence, excite the biliary secretion, or the peristaltic action of the bowels. This is the character of all farinaceous food generally; more particularly of those kinds which abound in starch, as arrow-root, gluten, and rice. Rice and arrow-root we find are constipating, not from any astringent property they possess, but merely negatively so, from the want of any stimulating property. Fæculent matter, formed in large quantity, tends to lessen, rather than increase, the peristaltic action; and the bowels are liable to become costive, from the mechanical obstruction offered to the passage of the food. Further, the food may be astringent, by having the effect of arresting the secretions of the canal, or else by its acrid and irritating quality, causing spasmodic contractions, as is sometimes the case in colic. Some liquids, such as vinegar in any considerable quantity, very often produce costiveness of the bowels, at the same time that they greatly irritate the passages.

Secondly, we may trace constipation to torpor or imperfect action of the intestinal muscles; and, perhaps, not only of the muscles, but also of the secretory power of the intestines; for the intestinal canal is not only a moving organ, but also a secretory organ. This is illustrated after the operation of a strong purgative; the bowels generally become torpid, and inasmuch as the intestines become exhausted, and the secretions otherwise have been excited too freely, they seem to secrete less freely afterwards. But, sometimes, it is a sign of general weakness of the intestinal muscles, a part of the general weakness of the system; and, accordingly, in anæmia, you find torpor of the bowels taking place. The same thing is observed in any state of great weakness, after fevers and illnesses, and after extreme fatigue of the body. Paralysis, and particularly paraplegia, are causes of this. Some other causes act in a similar way. Enervating heat, exhausting the body, greatly reduces the powers of the intestines. Continued cold has a similar effect. Moderate cold, however, increases the tonic action of the intestines, to a high degree. In other conditions—the state of atonic plethora, for example—a costive state of the bowels is frequently present. The excretions are often defective from irritability of the muscles of the intestines.

Thirdly, this morbid condition may arise more directly from deficient secretion, rather than defective peristaltic action, which latter may go on, even if the secretion be imperfect; a scanty evacuation is the result. This is to be met with in connection with defective secretion of the liver, more particularly: arising from different diseases of that organ interrupting its secretion, or from obstruction of the ducts passing out of it. Diseased states, likewise, of the intestine, such as congestion of its coats, connected with derangement of the liver, are often attended with this sort of defective secretion. Inflammation may be considered as, in some degree, interfering with the powers of secretion of the liver, and the intestines. Enteritis is one of the instances in which the secretion appears to be greatly interrupted. There is, here, not merely spasmodic contraction, but the secretion is interfered with. So, with regard to gastritis, where there is much irritation, it frequently happens that the lower part of the canal is defective in excitability, and in secretion. Defective secretion and imperfect contractility are frequently combined together.

Now, from this you may understand, that constipation may be either symptomatic of various diseases, or it may be idiopathic,—itself the chief cause of disease. The frequency of the occurence of symptomatic constipation is one great reason, why purgatives are so often useful in the treatment of diseases of almost every kind; for, in a majority of cases, there is symptomatic costiveness, and a tendency to great constipation of the bowels. It thus becomes an indication to use purgatives; not merely to remove this state, but, likewise, because the accumulation of the fæces becomes a source of still further mischief, aggravating greatly the organic disease, and adding to the local and general symptoms. In febrile diseases, there is apt to be a reaction, and it often happens, that the evacuation of the loaded bowels very much mitigates this effect. Idiopathic constipation, where it exists without any other permanent disorder, is not uncommon, and, in a great number of cases, it, perhaps, consists in an insufficient action of the lower intestines, or of the colon. Sometimes, in costiveness, there is distention of the bowels, especially of the colon, by flatus, causing a feeling of fulness and tightness in the abdomen. There is often, too, considerable tympanitic distention, where wind is secreted in large quantities. Accordingly, the sounds arising from the motion of wind in the intestines are commonly heard in persons of a constipated habit. There are shifting or aching pains felt in various parts of the abdomen, usually, perhaps, in the right iliac, or hypochondriac, region, about the right, and sometimes the left, hip, and in the loins; also, uneasy feelings, such as: restlessness, and inability to be quiet, without being able to explain exactly why. In children, symptoms of chorea sometimes arise from a costive state of the bowels; and, in adults, there are cramps of the legs, which are very common signs connected with imperfect action of the bowels. Other symptoms arise in the general system; headache is a very common sign, and there is, in general, langour and depression of spirits. These different symptoms arise, partly from the direct irritation of the accumulated fæces on the nerves, and partly from the noxious influence of the retained and absorbed excrement, for matters, long retained in the alimentary canal, are partly absorbed again into the system. The fæces are in a compact and dry state, if the bowels are not regularly evacuated, which shows that the moister parts are absorbed away; and those persons, who have habitual costiveness of the bowels, generally have unpleasant smells about them, and the countenance is more sallow than usual; the tongue is usually more or less loaded, and the breath is very fœtid; the fæces, too, are darker than usual, and they present a moulded form from the cells of the colon, or the different portions of the intestines, in which they have been retained. The accumulation of fæces in the abdomen may cause a considerable amount of swelling, and various other symptoms; for example, by their pressure, as not unfrequently happens, on the gall ducts, they may produce jaundice; or, on the stomach, nausea, and a disturbance of the function of digestion, or dyspepsia; and, frequently, hæmorrhoidal swellings, or piles, are caused by their presence. In extreme cases, numbness and swelling of the legs, and even paralysis, have been induced by their pressure on the nerves of the pelvis. Sometimes, the abdomen is enormously distended; and I have seen such patients, who have had the appearance of advanced degrees of dropsy, and who have been pronounced to be labouring under organic disease, and tumours of various kinds. I remember the case of a patient who, when brought into the hospital, was supposed to be affected with organic disease of the abdomen, and had been treated for such for some time, in whom the abdomen had been distended for six or eight weeks, to a very great degree, insomuch that the cartilages of the lower ribs were turned out, and yet all this tumour vanished, after a purgation of some days, and was produced solely by a vast accumulation of fæculent matter. Neglected constipation will lead to local irritation, and, as a result, you may have diarrhœa set up, from the irritation of the parts, and increased secretion results. Dysentery even may ensue, and inflammation of the colon, attended with pains of various kinds; neuralgia, and severe griping pains of the bowels, accompanied with colic, and a spasmodic contraction, ending in deep-seated enteritis, and cholera. These are the local effects. Organic changes, too, may arise; and, in addition, a cachectic state of the whole system, a low febrile state, from the bad influence of the accumulated fæces on the nervous system.

The *predisposing causes* you may deduce from what I have said already, as to the pathological characters of constipation. Sedentary habits, especially when combined with various enervating influences, greatly promote constipation. This occurs very often among females, who are much confined within doors, and who are in the habit of using but little exercise. It is sometimes excited by attacks of hysteria, and, as I said before, by bad or defective diet. Particular kinds of waters, those abounding in iron and calcareous matters, greatly aid in producing constipation. All the different causes that produce general weakness may cause costiveness. Excessive action of purgatives, and neglect of the bowels, will often produce it. But, perhaps, one of the most frequent causes, which it is important to remember, is inattention to the calls of nature, or want of regularity in the evacuation of the bowels. It is a process that ought always to be considered as conducive to health, and should be set apart to be done at a regular time in the day, quite as much so as the eating of any given meal.

Now, with regard to *the treatment*. The first indication of the common form of constipation, where there is an accumulation of fæces, is to unload the bowels; and to fulfil this, purgatives and injections are the chief means. The best purgatives, for this purpose, are the mixed purgatives, those which exercise an action on the whole canal; for, although costiveness often proceeds from the defect of one part of the canal, the torpor ultimately extends to the whole; and it is not a safe practice to administer too strong a purgative of one kind, to act on one part of the canal only. The effect of giving a large dose of aloes, or a large dose of colocynth alone, is to irritate one part of the canal, and leave the liver unaffected, and thus, perhaps, convert constipation into inflammation. For this reason, it is highly advantageous to combine the different purgatives together; and if there is already much pain and irritation produced by the constipation, we should combine with purgatives those medicines which deaden the sensibility, and prevent spasm. For this reason, the combination of calomel, colocynth, rhubarb, and henbane, answers well. If these are not sufficient, great advantage will result from the addition of occasional doses of castor oil, or else of salts and senna, in the form of a black draught. I cannot dwell too strongly on the virtues of castor oil, in cases of prolonged constipation. If given in large doses, it does not irritate as other medicines; yet it acts more thoroughly; it penetrates, and, in some degree, has the mechanical power of insinuating itself into the crevices and curvatures of the intestines, and thus dislodging the accumulated masses, where calomel and other medicines had failed to act. Mercury, though it acts more especially on the liver, and stimulates the secretion of bile, is accompanied with a great deal of griping pain, and is not, by itself, so effective in unloading the bowels. Where the accumulation is very considerable, it is desirable to facilitate the action of the bowels, by copious injections of oil, or soap and water. Remember, that these accumulations of fæculent matter, sometimes, consist of a hard and compact mass—so hard, that purgatives, which merely stimulate the canal to contraction, produce very little effect upon it. Injections of castor oil, with a little turpentine, or of olive and linseed oil, mixed up with gruel, are useful; of this one, two, three, or four pints may be thrown up. The use of turpentine is indicated where there is a tympanitic distention of the abdomen. Rue and assafœtida injections are also useful in such cases. After the fæces have been dissolved, the bowels pass into an irritable state, and there is often a considerable amount of pain. It frequently happens that, after the great accumulation has been removed, the tongue is more furred, the pulse more excited, and the system more deranged. In this state of things, mercurial purgatives, combined with opium, or mercury and Dover's powder, followed by small doses of castor oil, or else rhubarb, or some other mild aperient, may be given, for several days afterwards, with great advantage. If the opium irritates, instead of giving Dover's powder, conium may be employed as a substitute; moderate doses of conium and mild aperients may be given until the bowels are brought into regular action. Where there is a tendency to low inflammatory affections, such as gastritic dyspepsia, which often occurs in costive habits,

the aperient that suits best, will be found to be small doses of castor oil; a teaspoonful, the first thing in the morning, or the last thing at night, acts admirably, and ensures the regular evacuation of the bowels. In some persons, olive oil acts in the same way. Castor oil is extremely valuable in cases of dyspepsia, where stronger purgatives do mischief. Sulphate of potash and sulphur sometimes answer very well.

The diet of persons, disposed to constipation, should be of a plain character, not too much abounding in farinaceous food. Too much bread should be avoided. There is a common error with respect to bread, and many persons will eat it all day long; hence, it becomes a great cause of constipation. It is better to eat it, two or three times a day, in small quantities. A thing you will find of great use—and which is very popular in the sister-kingdom—is oatmeal porridge. It has none of the constipating effects of farinaceous food in general. Fruit is very often taken with a view to counteract costiveness, but I believe its effect has been overrated. The most important part of the treatment of constipation, consists in preventing the accumulation of fæculent matter; and, therefore, the promoting of the proper and natural action of the bowels is far better than any description of diet or medecine that can be given. I must say a few words upon the practice fallen into of late, by a good many individuals, namely: that of confining themselves to the use of injections to promote the action of the bowels. I think this practice is a very injurious one; for, when injections are frequently administered, instead of producing a healthy action in the bowels, they generally tend to bring it into a state of torpor. They mechanically distend the bowels, and thus do mischief. General tonic measures, to improve the health, are sometimes necessary. The application of electricity, or galvanism, has been recommended by some, to promote the action of the bowels; it may be useful so far as excitement of the peristaltic action is concerned.

PARISIAN INTELLIGENCE.

(FROM OUR OWN CORRESPONDENT.)

Paris, Sept. 12, 1844.

On Chorea. By Professor Chomel.—There is now in the hospital, Salle St. Bernard, a young girl, aged 14, who presents a curious example of this affection. The voluntary muscles contract at the will of the patient, but, at the same time, they perform several involuntary movements, so that it would appear as if two powers existed, in direct opposition with each other. From this anomaly it results, that, whenever the child wishes to change the position of one of its limbs, ere she can accomplish it, she performs a number of irregular and fantastical movements, and, when attained, the muscles contract powerfully. For instance, if she wishes to drink, she endeavours to seize the glass, and, as soon as she gets hold of it, her fingers grasp it with force, as if to prevent its escape, and when it has reached her lips, she gulps down the liquid, lest some involuntary movement should prevent her drinking it. As you may remark, the muscular contractions seem to be under the influence of two opposite powers, acting both at the same time. If she is requested to remain motionless, this is not possible, notwithstanding all the efforts she makes to comply; to walk, she makes first very small steps, and afterwards jumps, in order to attain the desired spot. The upper limbs are so violently agitated, that she cannot keep them quiet beside her body; the features are submitted to the same influences, so that she is continually making wry faces; the eyes are in constant motion; speech is impaired; finally, at certain times, pathological modifications seem to exist.

Causes.—Age: This affection, commonly called St. Vitus's dance, is not uncommon at the age of this young girl; it is seldom met with after puberty, unless some disturbance occurs in the menstrual flux, but is essentially a disease of childhood.—*Moral emotions:* Here, it was produced by slight contradictions; and, when it had declared itself, it rapidly increased, in consequence of a manual correction administered by the woman to whom she was apprenticed, and continued to augment, until it reached the degree just described.

Symptoms.—The chorea, in the present instance, is not very severe, and still not very slight. In the latter form, the irregularity in the movements exists in the upper extremities, principally the hands; the lower limbs hardly participate in the affection, and, in very slight cases, not at all; it is in these slight attacks that the patient is able to feed himself with facility, with a spoon; the young girl, whose case is now under consideration, cannot do this, on account of the opposite movements which succeed rapidly in the arms. When very severe, not only the voluntary, but likewise the involuntary, muscles are affected; speech is very difficult, and it is almost impossible to understand what the patient says; the deglutition becomes more and more obstructed; the pharynx rejects the greater part of the food taken; contractions of the diaphragm become irregular; respiration agitated, short; and, if carried to any excess, the disease may be productive of serious, if not fatal, accidents. If the disorder becomes still more intense, the patients must be strapped down on their beds, to prevent, in the sudden movements they make, their striking themselves, or falling; in these, fortunately very uncommon, cases, death may be the result.

Pathology.—The *post-mortem* examinations give but a negative result: here, as in tetanus, the precise seat is unknown, and pathological anatomy furnishes us with no new light. It is well known that the disease is owing to a disturbance of the nervous system, but as to the exact nature of the lesion, we are totally in the dark. All that we can assert is, that, when death is produced by chorea, it is almost always by asphyxia, caused by the disorder in the respiration and circulation. The proof of this is to be seen in the state of the face, which assumes a violet hue, and of the two great organs, the heart and the lungs, so needful to our existence, in which, and especially the latter, evident marks of sanguineous congestion are found.

Diagnosis.—In general, it is easily established, since no disease exists which presents a perfect analogy or similarity with it. Still, it would be erroneous to suppose, that no cerebral affection can be found, in which phenomena, common to both, are not to be met with. I have had opportunities of observing, in acute and chronic affections of the brain, a species of chorea, of a peculiar nature, limited to one side of the body, and which may be called *hemiplegic chorea.* But the irregular and involuntary movements which characterize this species, being symptomatic, ought not to be confounded with idiopathic chorea. In the symptomatic, the disorder is always limited to one side. I remember having been called in, some years ago, to see a young country-girl, affected with violent and abnormal chorea; so much so, that the person, who attended her before, diagnosticated hemiplegia. Now, it was simply choreic hemiplegia. The following case, now in my words, is, likewise, a proof of this condition:—A woman, ætat 37, the mother of five children, of sickly habit; when seven years old, she was taken with a weakness and tremor of the right side, followed by paralysis, which lasted several years, and which obliged her to wear her arm in a sling. In this state, she was received into the Hopital St. Louis, where, appropriate remedies having been administered, her menses appeared, and the paralysis diminished so much, that she could make use of her arms. Since then, she has remained in the same state; from time to time, she experiences tremors in the side, primitively affected, followed by involuntary and irregular movements. At this moment, the right leg trembles so violently, that the patient is obliged to place the left one on it, to restrain its movements. This woman is evidently affected with a tremor of a choreic nature, and what is remarkable, in this case, is:—1°, that it commenced with a choreic tremor, followed by hemiplegia, and, finally, terminated as it began;—2°, that, on comparing the limbs on the right and left sides, a great difference was observed: the former being considerably smaller than the latter. There is, as it were, a sort of atrophy of the upper and lower extremities on the right side, or rather a *non*-development of the muscular system. This, and analogous facts, seem to point out what takes place in the embryo, during the fœtal life. In the present instance, the difference is evident, in the hands especially, the left being of the size of that of an adult, whilst the right is of the size of that of a child about six years old; the same remarks are applicable to the lower extremities, the right being much smaller, and $2\frac{1}{3}$ of an inch shorter, than the left. Thus, a simple modification of the innervation was sufficient to prevent the limbs on one side developing themselves, whilst the others went through the different phases of their normal growth. It is an extremely curious fact, that this *non*-development, this species of atrophy, should have been produced by a functional disturbance of the encephalon, and it is worthy of your serious attention. To resume: I think that it is impossible to mistake idiopathic chorea, for that symptomatic of a disease of the brain; and that, in such cases, the diagnosis will be easily established, on reflecting that the latter is always limited to one side of the body.

Prognosis.—It differs, according to the rapidity, the intensity, and the frequency of the characteristic convulsive movements. When the disease is intense, the prognosis is serious; for, as I have already stated, it sometimes ends fatally. On the contrary, when slight, the cure is almost certain; and this ought never to be forgotten, otherwise, you may attribute, to the remedies employed, what nature alone has effected, it being certain that slight attacks of chorea always end favourably, let the treatment be what it may, and even where nothing is given.

Treatment.—Remedies of so different a nature have succeeded in the treatment of chorea, that it is impossible to quote a single one as infallible, or as useful in every case. Some authors, and Sydenham especially, recommend bleeding, which, though, perhaps, useful, in some cases, still ought not to be employed to a great extent. If general or local bleeding is useful in nervous diseases, when employed in a fit time, so, also, is it dangerous, when performed at an improper one. Tepid baths, taken daily, and persisted in for some time; cold baths; soothing drinks, in abundance, when deglutition is easy; mild diet; moderate exercise. Fright has been recommended, but I would not advise your having recourse to it, as I think it will increase, rather than cure, the disorder; it is, likewise, on this account, that I proscribe sudden immersion, employed by some authors. The internal remedies are: narcotics, antispasmodics, such as, valerian, assafœtida, musk, camphor; tonics, such as, the preparations of cinchona, of iron, &c., which may be useful when anæmia seems to keep up, if it did not produce, the disorder. Finally, it is necessary, during the whole time the treatment lasts, to avoid all contradiction, fright, moral emotions, and all that may increase the disturbance of the nervous system.

Inversio uteri: by Professor Velpeau.—The following case, in which this distinguished operator removed a portion of the uterus, though it terminated fatally, is still deserving of record; the more so, as it gave rise to some remarks from the professor himself:—J. R., ætat. 35, entered the *Charité* on account of violent attacks of menorrhagia, caused by an inversion of the uterus, produced by ill-directed manœuvres during an accouchement about fifteen years ago. This accident, whether complete or incomplete, is sometimes recognised with difficulty after the delivery; consequently, the accoucheur ought never to neglect examining attentively the state of the uterus; the more so, as the symptoms which characterize it are the same as those which follow parturition. In inversion, the uterus may be reduced with ease, if the attempt be made soon after the accouchement, but it is impossible when several months have elapsed: at least, I am not aware of the existence of such a case. The reason of this lies in the organ having assumed its normal density, thickness, and form; for, if it is impossible to per-

orm inversion in the ordinary state of the uterus, t is equally so to reduce it, when the accident ias existed long enough to permit the organ decreasing to its usual size. It constitutes, then, an rremediable deformity, productive of ill effects, such as, frequent and abundant hæmorrhages, which may become fatal. I witnessed six cases of his description: one with Professor Marjolin, in a lady, from Lyons; another, on a patient, from Châtellerault; a third, at the *Charité;* a fourth, with Dr. Capuron; a fifth, a long time ago; and the present one. In all, the disease was identical, and accompanied by the same symptoms; in the first, astringents, pessaries, &c., were tried, but unsuccessfully; and, indeed, the only chance of cure is the removal of the organ, as the patient will, otherwise, inevitably fall a victim to the repeated hæmorrhages which take place. It is true that this operation is a very serious one, but as it is the only means of saving the sufferer, and as it has succeeded once, I think it ought to be attempted.

Two methods may be had recourse to—ligature and excision; the former causes excessive pain, and may be followed by convulsions and peritonitis: the latter by fatal hæmorrhage, or peritonitis; thus, as you may perceive, the danger is great in both. The case of the lady from Chatellerault, in which excision was performed, presented some peculiarities worthy of notice. Her medical attendant, and other physicians, who were consulted, diagnosticated polypus uteri, and I was requested to operate; and though, on examination, I was not convinced that such was the case, still I proceeded to remove the tumour, and it was only from the pain experienced by the patient, that I felt certain that it was a case of inversion of the uterus, and not a polypus. The operation was followed by *very* violent nervous accidents, which, however, yielded gradually, and the lady recovered without being aware of the operation she had undergone; so much so, that she was quite astonished at the absence of the catamenial flux.—Another woman, operated on at the hospital, died from metrorrhagia. In the present instance, I purpose operating as follows:—The uterus, seized with double hooks, shall be drawn downwards gradually, during which time an assistant will be requested to press on the hypogastrium. As soon as the tumour is beyond the os externum, two strong threads must be passed through it: this needs to be done with excessive care and prudence, on account of the approximation of the rectum and bladder. In order to avoid wounding these two organs, after examining if they are in the normal position, you must seize, forcibly, the tumour, so as to be certain that you are about operating on a dense, thick organ, like the uterus, and not on thin, membranous organs; you must not pierce the tumour too high. These two threads are destined to counteract the hæmorrhage, as, after the operation, ligatures cannot be had recourse to, for the arteries and veins being enclosed in the parietes of the uterus, they cannot be obliterated as in ordinary cases. The only mode that can be employed, is the mediate ligature, or cauterization. But, ought we to make use of the latter in this case? I do not think so; because the eschar, which results, might be productive of serious accidents in the abdominal viscera, and, on its sloughing, it may cause an effusion of pus in the peritoneal cavity: and, for these reasons, I consider the ligature preferable. It was my intention, at first, to tie the ends of the threads on the sides of the uterus; but, on reflection, I gave up this idea, especially when I called to mind the case operated on three months ago, in which the patient died from hæmorrhage, from the ligature, applied circularly, having slipped off when the parts were returned into the pelvis. This may easily be explained. When the ligature is applied, the swelling is drawn forcibly downwards, and, when the parts are returned, the inverted uterus tends to take its normal form, and the dragging, thus produced, causes the tissues to slip out of the ligature. This is the reason why I determined to apply two or three ligatures, beside each other, which would act in a somewhat similar manner to the twisted suture in hare-lip.

There is also another character, by which inversio uteri may be distinguished from polypus. When the hooks are implanted in the tumour, if it be the former, there is a severe and acute pain; on the contrary, in the latter, this does not exist; nor is it to be expected, since it is an abnormal tissue, incapable of transmitting any sensation to the nervous centres. The other signs, such as, difference of colour, presence of a circular swelling where the polypus enters the uterus, &c., are susceptible of leading us astray. The best, is the empty space felt between the bladder and the rectum, ascertained by introducing a catheter into the former, and a finger in the latter, and which proves that the uterus is not in its natural position; but even this may cause a mistake, since the polypus may have dragged the uterus down, and of which the following fact is a proof. About a year ago, I operated on a woman, and at first was undecided as to whether I had removed a polypus or the uterus; on examination, however, I ascertained that it was the former. Intense peritonitis came on, and, in spite of the most active treatment, terminated fatally; at the autopsy, the uterus was found to have been inverted by the dragging exercised on it by the polypus. It may, therefore, be concluded, that the sensibility of the tumour is the best means of establishing the diagnosis.

These precepts laid down, the professor excised the fundus and a part of the body of the uterus, and the vagina having been plugged, the patient was removed to her bed. Two days afterwards, peritonitis declared itself and carried off the woman.

Nomination of Hospital Physicians.—After a brilliant and disputed *concours*, Drs. Vernois, Vigla, and Behier, were named.

Academy of Sciences.—Sitting of the 9th September.—Dr. Serres in the chair.—M. Arago informed the Academy that M. Miller was present at the sitting; he, then, presented the "Transactions of the Cambridge Philosophical Society," vol. 8, parts 1 and 2; and dwelt on the loss the Academy had sustained in the death of M. F. Baily, one of its most active and distinguished corresponding members.

M. E. Peligot writes to state that the method, proposed in his memoir, was described in his lectures at the *Ecole Centrale des Arts et Metiers*, 1841, 1842, and, consequently, was anterior to the publication of M. Baudremont's treatise.

On the Distillation of the Resin of the Calamus Rotang. Memoir by MM. A. Glenard, *preparateur du Cours de Chimie à l'Ecole de Medicine de Lyon*, and Ch. Boudault; read by the former.—The principal products obtained by the distillation of this substance are: water; carbonic acid; oxide of carbon; two compounds of hydrogen and carbon (*draeyle* and *draeonyle*); benzoic acid; *acetone;* and an oxygenated oil, which is converted into benzoic acid by potass. *Draeyle* is a carburet of hydrogen, C^{14} H^{8}, which, with fuming nitric acid, forms a compound whose formula is: C^{14} H^{7} Az. O^{4}, and nitro-dracylic acid C^{14} H^{6} O^{4} Az. O^{4}. *Draeonyle* is a species of artificial caoutchouc, and forms, with the same acid, the first-named compound only.

On the Fibrous System and its Nerves: by Professor Pappenheim, of Breslau.—Struck with the fact, that the diseases of the fibrous system were accompanied with such acute pain, the author submitted the organs, in which this tissue enters, to a microscopical observation. The result was: 1° that there are two kinds of periosteum, one applied immediately on the bones, and the other situated between the muscles and bones; the former containing nerves, the latter none. 2° that the nerves are abundant in the upper and lower maxillary bone, the anterior and posterior surfaces of the femur, in the scapula, and bones of the cranium, in the tibia and patella; in small quantity, in the bones of the fingers and toes, the pelvis, and the extremity of the fibula: none at all, in the parts where the muscles are inserted. 3° they exist in the tendons, in the bursæ mucosæ, testicle and vas deferens, vesicula seminalis, cornea, dura mater, and pia mater.

On the Oxide of Zinc: by Dr. Mathieu. According to the author, this substance, mixed with colours, does not take aught from their qualities; on the contrary, it renders their consistency greater; it does not produce any of the accidents so frequent among workmen, who manipulate saturnine compounds. He likewise sent samples of two kinds of the oxide, the one to be employed in painting, the other as a medicinal agent.

On a Race of Men, called Cagots: by M. Guyon, chief surgeon of the army in Africa. The author drew the attention of the Academy to a fact, mentioned in a memoir presented in 1842,—that the Cagots were descendants of the Goths, and differed from the aborigines of the Pyrenées by the shape of the ear, which was round, and had no lobula;—that *bronchocele* and *cretinismus* are not owing to the race, but to the locality;—that the only defect they present, is the loss of their teeth, which is common to all the inhabitants of the Pyrenées.

Anæsthesia of the left side of the Body, without Paralysis of Movement. Case communicated by T. Pirel, M.D.—The patient, a woman, aged 35, when placed on her back, could move with equal facility her legs and her arms; all her motions were free and easy; no deviation in the features, nor in the motion of the tongue. The sensibility presented a curious anomaly: on one side it was abolished, while it was perfect on the other; the line of separation, however, did not correspond with the median line, extending, more or less, on to the sound side. The right pupil was sensible, when exposed to the light; the left, on the contrary, was insensible, for a candle might be placed near the cornea without the pupil contracting, and the conjunctiva could be touched without the patient being aware of it. A drop of vinegar, placed on the left side of the tongue, was not perceived, whereas, on the right, it produced the normal sensation: hearing dull on the left side, perfect on the right. A straw might be introduced into the left nostril, without causing a disagreeable sensation: on the contrary, this took place in the right; left ala nasi might be pinched with impunity: not so the right.

On the Rapport between the Direction of the Electric Currents, and the Muscular Contractions produced thereby: by Messrs. Longet and Matteucci; read by the former. (This Memoir, through the kindness of the authors, will shortly be published in the *Medical Times.*)

Dr. Cornay (of Rochefort) writes to request that a sealed packet, deposited by him on the 27th May, 1844, be opened. The memoir contained the opinion of the author on the preference which ought to be given to pulvis cinchonæ, rather than to quinina, in intermittent fevers, and on the identity of typhus and typhoid fever; and, on these two points, he claims a priority to Drs. Gourand, senior, and Gaultier de Claubry.

Academy of Medicine. Sitting of the 10th Sept.—Dr. Ferrus in the Chair.—The Minister of Commerce and Agriculture, having been solicited to authorize the establishment of sulphurous baths at the mineral spring, discovered in the Rue Vendôme, desires an analysis of the water to be performed, and a report to be made. The Ministerial letter is to be sent to the Committee for the mineral waters.

The President informed the Academy that, in the next Sitting, a Committee of five members would be named for the Argenteuil prize.—On the proposition of Dr. Villeneuve, the number of the members of the Committee was increased to nine.

M. Boullay made the following remarks on the discussion which took place, in the preceding Sitting. I coincide entirely with Dr. Segalas, that the lesions of the spinal marrow do not modify the urinary secretion, having had repeated opportunities of observing this fact; it must, however, be added, that the lesions were not traumatic, but spontaneous. Formerly, it was an opinion, generally received, that traumatic lesions alone were capable of producing paraplegia. I proved, in a memoir on this subject, that paraplegia might be the result of a congestion of the dorso-lumbar portion of the medulla or its envelopes; and that paralysis of movement always preceded that of sensation. As to the composition of the urine, all that I can say is, that the colour, odour, and consistency, seemed to have undergone some alteration.—M. Barthelemy: Paraplegia in animals may depend upon a concussion of the spinal marrow. The two following facts are proofs: during the

Russian campaign, a soldier, pursuing a pig, gave it a smart blow on the back; paralysis of the posterior extremities appeared instantaneously, but did not last long, for the animal soon after ran away as well as ever.—A horse, having fallen, was taken with paralysis of the same extremities, which soon yielded to frictions on the spine.—M. Dupuy mentioned, that he had extirpated, conjointly with Dupuytren, in 1806, the superior cervical ganglions of the sympathetic, and that it seemed to have no effect on the animals.—Dr. Segalas asked M. Boullay if, when paralysis of movement preceded that of sensation, the lesions of the medulla were more marked anteriorly than posteriorly.—M. Boullay: Paralysis began, it is true, by the movement, but was soon followed by that of the feeling, so that, at the autopsy, no conclusion could be drawn from the lesions found. In one case only, the inferior portion, which is anterior in man, appeared to be more seriously affected.—Dr. Castel: The fact of the paralysis of movement preceding that of feeling, is not at all astonishing, a greater nervous power being requisite to accomplish the former than the latter. Instead of seeking for the cause in the pathological alterations, it ought to be searched for physiologieally.—Dr. Dubois (d'Amiens) proposed closing this discussion, and proceeding with the business of the day.—Dr. Naequart did not think that the poor little pig (laughter) of which M. Barthelemy spoke, was affected with paraplegia.—Dr. Dubois (d'Amiens) asked Dr. Nacquart, what he understoed by paralysis?—Dr. Nacquart: "On another occasion, I will tell you."—Dr. Rochoux: "If it be true that paralysis of movement precedes that of sensation, examples of the contrary are not uncommon; the celebrated La Condamine was in the latter category."—After a few remarks from Professor Velpeau, who was of the same opinion, the discussion ceased.

On the Chemical Composition of the Parenchyma Pulmonaris and Tubercles.—M. Bussy read a report on a memoir of M. Felix Boudet, on this subject. From his researches, the author concludes: that there is very little difference between the analyses performed by Berzelius on the muscles, and by him on the parenchyma pulmonaris, the only one being the presence of a fatty substance in the latter; that the liver very often contains this fatty matter in phthisical patients; that cascine exists in the tubercles; that the concretions, into which the tubercles are sometimes converted, contain neither carbonates nor phosphates, but chiefly chlorurets of soda and potass, which accounts for the saltish taste presented, in these cases, by the sputa. *Conclusions:* to send the memoir to the *Comité de publication*; thanks to the author.—Dr. Delens: As to the difference, pointed out, of the presence of fatty matter, in the parenchyma pulmonaris, and not in the muscles, is it not, perhaps, because the analysis of the latter was performed a long time ago, and the latter very recently? In all probability this is the case, since it had been found in the blood.—M. Bussy said, that so long as the analysis of the muscular tissue was not proved erroneous, it ought to be considered as correct.—Dr. Desportes: The Academy, by its vote on a recent occasion, showed that it feared entering into any important discussion, where it is impossible to do more than to glance over the subject. On the present occasion, I regret being unable to examine more than one or two of the facts mentioned in the report just read. But the Academy will, doubtless, be indulgent in considering that—setting aside my own insufficiency—it is natural that a person cannot, on the mere reading of a report, recal, on a sudden, his ideas, and draw therefrom arguments sufficiently conclusive to render them of some value in a scientific point of view. Notwithstanding, if any report were worthy of some remarks, which, however incomplete they may be, are still preferable to none, surely it is that which you have just heard on the memoir of M. Boudet. Several branches of the healing art are there discussed: anatomy, physiology, medical chemistry, pathology, &c., and from the chemical analysis of several important viscera, the lungs for instance, conclusions have been drawn, and that without considering whether they are consonant with other scientific facts. Now, such ought not to be the case. In the first place, ought a chemical analysis of the lungs to be performed, in the manner adopted by the author? The lungs were analysed *in toto*, and from this, it was supposed that useful conclusions may be drawn. Is it not as if one were to take a portion of a limb, the hand or the foot for instance, and establish their constituent parts from a general analysis? But it may be said, there is no comparison between the two. Taking each part separately, that may be; yet, though the lungs do not offer an assemblage of muscles, bones, tendons, skin, &c., still they contain almost all the tissues to be found in the human body: cellular, muscular, cartilaginous, fibrous, as well as various liquids; and, therefore, it is not extraordinary that fat, fibrine, albumen, &c., should exist there, as in the hand. Besides, what conclusions can be drawn from a chemical analysis, performed on so many different tissues, which, when brought together, must necessarily counteract the isolating actions of the different tests? What can be considered to belong exclusively to the lungs, from an experiment performed on so many tissues and humours, the more so as these tissues and humours are likewise to be met with in other parts of the body? Great stress has been laid on the presence of two sorts of fat, and especially of cholesterine: I admit that the existence of the latter is remarkable, but as to the two former, are they peculiar to the lungs? Does not fat deposit itself in all our organs, as well as in the cellular tissue of the parenchyma pulmonaris? And, in what respect does the fat of the lungs differ from that of other parts? These questions are certainly worthy of our attention. Secondly, you have just heard the learned reporter, occupied with the chemical theory alone, state that it is not astonishing to find, in tuberculous affections of the lungs, fatty matter deposited in certain parenchymatous organs; because, in these cases, the respiratory function being imperfectly performed, a sufficient quantity of the component parts of the fat is not burnt, and, consequently, it is collected in different organs: and, in this respect, the liver is that in which it takes place the most frequently. Without examining to what extent the affection of the lungs, in phthisis, modifies respiration, and how far it is but the most apparent symptom, and which has its cause and its commencement elsewhere, I will simply state, that fat accumulates in greater quantities in the different organs, according as the respiration or digestion is more or less perfect. Thus, in children, the former is frequent and rapid, and, in them, the proportion of fat is considerable, when compared to the muscular tissue. May it not, therefore, be concluded, that chemical theories need revising, in order to be in accordance with the facts revealed by physiology and pathology? But there is a third question, to which I wish to draw the attention of the Academy: I mean the transformation of the tubercles into a calcareous substance, and which may be considered as a sort of perverted ossification. The commencement of the tubercle was mentioned, but the reporter omitted stating that, very often, very small tubercles exist, which have an appearance, a colour, the asperities, and firmness of a cartilage, and, as to the phenomena they will present in a later stage, all depends on the activity of their morbific cause. Again, would it not have been useful to examine, whether they appear, are composed, or develop themselves, in the same way as certain small bodies, or morbid productions, to be met with between the membranes which form the walls of the arteries. These little bodies, which are round, slightly flattened, of a yellow colour, and formed of whitish yellow fibres, contain a fatty substance, and produce, under the influence of a morbid cause, either cavities containing pus, and even blood, or are partially cartilaginous, or converted into a phosphated or carbonated calcareous compound. These little bodies may become the cause of ulceration of the arterial parietes, and, subsequently, of aneurism. It is, therefore, useful and instructive to examine, while speaking of pulmonary tubercles, whether the ideas, adopted on their development, are the same as those of this analogous morbid production, which may be considered as a species of tubercular phthisis of the arterial parietes.—After a reply from the reporter, who stated that it was impossible to analyse a portion of the human body, otherwise than in the mode employed by the author, the conclusions were adopted.

On Aneurism of the Heart.—Memoir read by Professor Forget, of Strasburgh. In order to form an idea of the mechanism and the symptoms of this disease, the circulatory apparatus must be considered as a single canal, which differs in capacity, resistance, and structure, according to the parts examined. This canal is formed of: the left ventricle, the aorta, and other arteries, the capillaries, the venous system, the right auricle and ventricle, the pulmonary arteries and veins, and the left auricle. Now, whenever an obstacle exists in any part of this canal, dilatation will inevitably take place behind it; dilatation is, consequently, the fundamental sign of aneurism. Again, according to the structure of the dilated portion, other accessory symptoms may appear, such as, hypertrophy, which is almost exclusive to the left ventricle, for, when the obstacle is behind this cavity, the dilatation of the others generally takes place without any considerable thickening. Therefore, when dilatation is complicated with hypertrophy, or active aneurism, the left ventricle is always affected; whilst the passive form includes the dilatation of the three other cavities only. Indeed, I have never observed passive aneurism of the left side of the heart. Thus, when active aneurism exists, the obstacle is at the aortic orifice; and when passive, at the mitral valve or the lungs. Organic alterations of the orifices of the right side are very uncommon; I have never seen one of the pulmonary orifice, and once only I observed an alteration of the tricuspid valve, with ossification at the aortic orifice. It is, therefore, almost impossible, unless theoretically, and quite useless in a practical point of view, to establish the signs which distinguish the lesions of the orifices of the right side of the heart from those of the left. The chief difficulty is, to pronounce whether the seat of the obstacle is in the left side of the heart, or in the lungs; and, from a number of *post-mortem* examinations, I have been led to conclude: 1° that the diminution of the aortic orifice alone is as uncommon as that of the mitral valves; 2° that the two combined are as frequent, as they are rare when separated; 3° that the obstacle never exists in the orifices of the right side of the heart; 4° that this obstacle is to be met with most frequently in the lungs; 5° that aneurism of the right side always takes place when this affection exists on the left. As to the characteristic symptoms, founded on the modification of the normal sounds, the basis on which they are established is essentially erroneous, inasmuch as:—abnormal sounds exist without diminution in the size of the orifices;—they do not always accompany these lesions;—the *bruit* peculiar to each may be so mingled, that it is impossible to distinguish between them; consequently, though useful, they can be considered only as an accessory means of diagnosis. To resume: it may be asserted:—1° the principal proof of diminution of the aortic orifice, is the dilatation of the left ventricle, complicated almost always with hypertrophy, as revealed by a bulging out of the thorax in the precordial region, increased force of impulsion, &c., and very often by a bellows'-sound extending down the aorta. Aneurism of the left ventricle indicates passive dilatation of the other cavities; here, there is a considerable matity, owing to the development of the organ (*cor bovinum*)—2° The absence of dilatation of the left ventricle, with dilatation of the other cavities, is owing to an obstacle situated in the mitral valves; here, the abnormal sounds are limited to the points corresponding to the orifices; the precordial arch is slight or null; the impulsion given is feeble; by percussion, the matity is found to extend more across, than from above downwards: constituting what is called a heart-like pouch (*cœur en gibecière*)—a characteristic sign of mitral stricture. 3° When both exist at the same time, the symptoms, observed, are those of the disease which most predominates. 4° The opinion generally received, that aneurism of the heart exists, only, when there is a diminu-

on of the size of the orifices, is the reason why hose of the right side, when uncomplicated, are o frequently overlooked; and yet this species is ery common, and is produced by chronic pulonary *engorgement*. In aneurism of the right ide of the heart, the pulmonary symptoms precede hose of the circulation; on the contrary, the everse exists in that of the left side. The cause s, insufficiency of the tricuspid valve for its office; nd the symptoms are: little or no arching; pulse ccelerated, but not so hard as when the orifices re contracted; heart developed transversely, ost on the right side: constituting a second peeies of *cœur en gibeciére*. 5° The symptoms of he concentric hypertrophy were enumerated by Bertin and Professor Bouillaud, but the causes were neglected. Now, autopsies have shewn: hat this lesion is peculiar to the left ventricle;— hat it is caused by an affection of the mitral valve, r from pulmonary engorgement. 6° The ancients, s well as Corvisart, and numerous modern uthors, attach great importance to the general ymptoms, to distinguish active from passive neurism; this opinion is evidently erroneous, as hese signs are the same in all kinds of aneurism; hus, anasarca, dyspnœa, venous reflux, cyanosis, &c., are to be met with when the obstacle exsts at the aortic or mitral valves, in active or assive dilatation, aneurism of the right heart lone, and even in concentric hypertrophy. 7° These facts tend to elucidate and fix the reatment; thus, when the obstacle is situated t the aortic orifice, and complicated with active neurism or dilatation of the left ventricle, with ypertrophy of its walls, debilitating and sedative measures may be had recourse to; on the conrary, they must be employed with moderation, when the obstacle exists in the mitral valve, or in neurism of the right side of the heart.

Lepra vulgaris.——Dr. Tavernier presented two children: one three years, the other six months, old, both affected with a general congenital lepra. A third child, of the same parents, now two years old, offers no signs of this disgusting affection. The parents are also free from it, and enjoy good health.

GARLAND DE BEAUMONT, D.M.P., B.L., & S., &c.
Honorary Physician to the Spanish Embassy.

REPORTS ON UTERINE DISEASES.*

By EDWARD RIGBY, M.D., Fellow of the Royal College of Physicians, Senior Physician to the General Lying-in Hospital, Lecturer on Midwifery to St. Bartholomew's Hospital, Medical School, Examiner on Midwifery to the University of London, &c.

In a great metropolis like London, where the general health of the population is necessarily more or less below the proper standard in point of tone and strength, a great number of causes must ever be in existence to produce defective assimilation, irregular distribution of the circulation, and local congestion; and, thus, menorrhagia, whether in its active or passive form, may be directly or indirectly the result. The active form of menorrhagia is, perhaps, of all others, that which is least frequently observed in London, from the reason just mentioned, whereas the varieties of passive menorrhagia are numerous.

The active species of menorrhagia is usually seen in stout, plethoric, young women, and, in its simplest form, must be looked upon as a natural means for relieving the engorged vessels of the uterine system; just as we occasionally see congestion of the head relieved by epistaxis, but aggravated and kept up by various causes which increase the local congestion, and of which I will speak more fully when I come to the consideration of the passive form of menorrhagia.

The attack is usually preceded by symptoms of much congestion about the pelvic organs, viz.: heat, pain, weight, and stiffness about the back and loins; sense of weight and distension in the pelvis; with throbbing about the rectum and vagina; in fact, all the precursory symptoms of a menstrual period, only in very aggravated form. The pulse is usually hard, with much congestive (occipital) headache, sometimes even with vertigo; the face is flushed; there is thirst, &c.

The discharge generally appears suddenly and profusely, coming on in gushes, and more or less mixed with coagula; sometimes abating for a while, or even stopping entirely, and again returning with increased violence, until the power of the circulation is reduced, and the gorged vessels of the uterine system unloaded: the various symptoms, just enumerated, diminish or subside, and the patient feels lighter, cooler, and more comfortable. More frequently, however, from some cause of local congestion, or from no very assignable reason, the discharge returns, and does not quit the patient until she is left seriously exhausted from the severity of the loss. In this way it is, that active menorrhagia so frequently passes, at length, into the passive form, from the powers of the system becoming gradually impaired by the frequent repetition of its attacks.

The following is a tolerably fair specimen of active menorrhagia, shewing a slight disposition to verge into the passive form.

M. S. ætat. 22.—August 30.—A stout, robust, powerful, young woman, living as kitchen-maid in the house of a nobleman, where she has plenty to eat and drink; states, that, for the last year, the catamenia have appeared at very short intervals (2 weeks), and lasted beyond the usual period (10 days, and more), preceded by severe pain of back and hips, with sense of throbbing, heat, and weight. These symptoms are relieved by the discharge, which is very profuse, and attended with coagula. Much headache, especially at the occiput, with heat, and throbbing of the head. Her feet and ankles swell towards evening, and pit upon pressure. Bowels stated to be regular; has a slightly bad taste in the mouth in the morning; little appetite; complains of pain in right hypochondrium; pulse weak and oppressed.

℞ Pil. hydrarg. chloridi comp., ext. hyoscyami, āā gr. v. o. n.

℞ Magnes. sulph. ℥ss, magnes. carb. gr. xv. ex. aquâ menthæ pip. o. n.—Let her sponge the back and loins with cold water, every morning and night.

Sept. 3rd.—Bowels have been regularly opened, two or three times a-day; motions dark; much heat and pain of head. The regular return of the catamenia would be upon the 10th, but she fears it will come on sooner, as the breasts are painful and knotty, although she has no pain of the back and loins. Appetite, and taste in the mouth, are better; pains of limbs, but no pain of right side; pulse weak; has sponged the loins, every night and morning, with cold water: and states that the surface of this part is very hot.

Pt. pil. et mist. magnes. sulph. et carb.

℞. Potassæ nitrat. ℈iv., sp. ætheris nitr. ℥ss., tr. hyoscyami ʒij., syrupi aurant. ℥i.

Aq. menth. pip. ad implend ℥viij., sumat cochl. magn. ij. bis die.

13th.—Did not take the mixture until the 7th, and left it off again on the 11th, under the notion that it confined her bowels; on the following day (12th), the menses appeared, and, for three or four days previously, she suffered little or no pain of the back, and much less of the head, and what there is, is now at the vertex; she has also less heat and throbbing of the pelvis. The discharge hitherto is much as before; the pulse is soft and weak; the appetite moderate; the taste in her mouth improved; the bowels are opened by the sulphate and carbonate of magnesia.

℞. Ferri sulph. gr. ij., ext. hyoscyami, ext. gentianæ āā gr. iv., M. ft. pil. ij. o. n. sumendæ.

℞. Aq. menthæ viridis, aquæ distill. āā ʒvss., acidi sulph. dil. m. x. syrupi rhæados ʒss, magnesiæ sulph. ʒj.—M. Ft. haustus sextis horis sumend.

20th.—Much better; the period scarcely lasted a week.—Pt.

27th.—Better.—Pt.

October 4th.—Pulse weak; face pale; the medicine has been purging her too much; in other respects, she seems well.—Omitt. mist. pt. pilulæ.

The habit of the individual, and her mode of life, pretty clearly indicate the predisposing causes in this case. It was also, to a considerable extent, attended with hepatic and intestinal derangement, as indicated by the pain of the right side, and unhealthy appearance of the evacuations, although the bowels were stated to be regular in the first report. These circumstances, of themselves, are quite sufficient to produce a disposition to menorrhagia (as I shall afterwards have frequent occasion to show), by the obstruction they produce to the free return of blood from the lower parts of the abdomen and pelvis. Abstraction of blood was not indicated here. The loss had already been very considerable, and finding the presence of more or less gastro-enteric derangement, I felt justified in trusting to other means, the more so, as it is well-known that the system, under such circumstances, does not bear the loss of blood well; reaction becomes defective, and prostration more easily induced than at first sight would be supposed. In these cases, I have frequently found much benefit in giving the nitrate of potass for the purpose of lowering the power of the circulation: it is used in Germany, for this purpose, much more extensively than in England, and I can bear witness to its good effects in attaining the abovementioned object. In the present instance, the patient scarcely gave it a fair trial. The character of the symptoms had, however, undergone a striking change by the 13th of September; they were assuming those of passive menorrhagia; the power of the circulation had greatly abated, and the situation of the head-ache (vertex) showed it to be now of an anæmic character. I, therefore, put her at once on the use of sulphate of iron, which, I think, is *by far* the best chalybeate preparation in all passive or atonic discharges, and guarded its use by mild doses of sulphate of magnesia, in the well known mist. menthæ sulphuricæ of St. Bartholomew's Hospital.

Passive menorrhagia may occur in a considerable variety of forms, depending, in great measure, on the peculiarity of the case. I have already stated, that it is a frequent termination of active menorrhagia; the active gradually assuming the passive form, as the powers of the system become more and more exhausted. Thus, in many cases, we shall see that there is a period when the disease partakes more or less of both forms; the constitutional symptoms have become those of the passive, but the local ones are still those of active, menorrhagia. This is more particularly seen in certain cases, where some cause exists to keep up the local congestion, although the general circulation has already suffered severely. Any source of pressure upon the circulation of the abdominal and pelvic viscera, by obstructing the free return of blood from these parts, will tend to engorge the uterine vessels, and bring on a discharge of blood. The hæmorrhage, therefore, is not strictly passive; for, although the general circulation has been considerably weakened, the extreme vessels of the part are still capable of retaining their contents, if not unduly congested, as above-mentioned—which is proved by their ceasing to pour forth these profuse discharges, as soon as the cause is removed.

Thus it is, that congested liver, constipated bowels, an enlarged ovary, tumours in the uterus, &c., are capable of obstructing the return of blood from the pelvic viscera, sufficiently to induce a state of menorrhagia. This condition is very different to what we may call genuine passive menorrhagia, where the extreme vessels partake in the passive, powerless, state of the general circulation; there is local congestion, it is true, but it is entirely of the passive character, and the discharge itself depends on the inability of these vessels to retain their contents.

The menorrhagia, consequent upon abortion, is

---

* Dr. Rigby has prefaced his important communication by the following note, containing a promise which our scientific readers will know how to appreciate:—

"SIR,—From the kind and flattering notice with which you have honoured my recent publication on certain uterine affections in connection with mal-assimilation, I venture to send you the accompanying observations on Menorrhagia, in the hope that you will deem them worthy a place in your valuable pages. I intend them as the commencement of a series of papers on uterine diseases, and shall illustrate them pretty freely by cases.

"Yours, &c.
"E. RIGBY."

New-street, Spring-gardens, Sept. 17.

by no means an uncommon species of the passive form. It not only depends on general anæmia and prostration of strength, but, also, on a relaxed condition of the uterus itself, which, therefore, does not exert a sufficient degree of contractile power to close the vessels which open upon its internal surface. It is the same state which we occasionally see in feeble, atonic habits, after labour, where attacks of hæmorrhage, or serous discharge, occur from time to time, at considerable intervals, after labour, and where the uterus is found large, soft, and flabby, and the system requiring tonics for a relief of these symptoms.

As far as my own experience enables me to offer an opinion upon the subject of passive menorrhagia, attended with local congestion, I should say that by far the most frequent form is, where it is associated with a state of enlarged or congested liver; at any rate, if not more frequent than where it is the result of previous abortion, the cases, depending on hepatic congestion, are more severe, and generally of longer duration. The chief peculiarity, here, is, that the disease is attended with pain, tenderness, and sense of fullness in one of the hypochondriac regions, with the corresponding pain of shoulder and difficult decubitus, except on the affected side. It is a state which is frequently associated with loaded bowels, a condition of itself sufficient to produce the disease in predisposed habits.—The following cases may be given, as illustrating the form of menorrhagia to which I have just alluded.

Miss H. H., æt. 22, short, sallow, delicate looking.

March 2nd, 1841.—Has been suffering for the last year and a half from a gradually increasing profuseness of the catamenia, which, latterly, have been brought on by the slightest exertion of body, or mental excitement. There is slight constipation and furred tongue, but no particular derangement of the stomach or bowels; the circulation is weak, but by no means anæmic; complains of pain of left hypochondrium, increased on pressure, and also pain of left shoulder; can only lie on her left side; catamenia are present; had a very severe attack of hepatitis, especiallly of the left side, last autumn.

℞ Pil. hydrarg. chlorid. comp., extr. lupuli aa gr. v.—M. Ft. Pil. ij. om. nocte sumend.

℞ Ferri sulph. gr. ij., extr. lupuli gr. vj.—M. Ft. pil. ij. bis die sumendæ. Confect. sennæ, om. mane.

5th.—Much improved; the pain of the left side and shoulder nearly gone; the discharge has ceased. Tongue more healthy; bowels regular; the evacuations were at first very dark, but have gradually improved. Complains of pain at epigastrium; much want of appetite.

Pt. pil. hydrarg. chlorid. co. p. r. n. Pt. pil. ferri sulph. m. & n.

℞ Acid. nitrici dil., tr. hyoscyami, aa ʒij.; syrupi aurantii, ℥ss.; infus. gentianæ comp. ℥vij.—M. Ft. mist. cujus sumat cochl. magn. ij. bis die. Applic. sinapism. epigastr.

9th.—Much improved since last visit; is looking younger, clearer in complexion, and with a nice colour; no sanguineous discharge; slight leucorrhœa; appetite better; has walked out, but it induced fatigue; has still slight pain of left hypochondrium, and, on pressing below the ribs of this side, she feels a sensation of pressure in the opposite direction, probably from the liver being harder and larger than natural. Was much relieved by the sinapism; feels better than she has done for a long time, but, on walking about, she still complains of weight in the pelvis, with bearing down pain of loins and sense of dragging in the inguinal regions. Bowels regular, but motions of a dark green colour. Cont. Medicam. Let her sponge the loins and hips every morning with cold water.

16th.—The catamenia have again returned, but whether in consequence of over-exertion, does not appear very distinctly; feels weak.

Pt. pil. ferri sulph. ℞ Hydr. c. cretâ, extr. anthemidis aa. gr. v. o. n.

23d.—The discharge of catamenia lasted only for a day, and then subsided; but on the 20th it returned very profusely, and, as it has done, for the last year and half, with coagula; feels weak; pulse feeble; but looks tolerably well, and has a somewhat better appetite. There is still uneasiness of the left side; the evacuations are of a dark green; urine turbid.

℞ Pil. hydrarg. chlorid. co., extr. anthemidis aa. gr. v. o. n.—contin. pil. ferri sulph.

30th.—The catamenia lasted exactly a week, as is her ordinary habit. Pulse good; appetite better; bowels rather confined; motions dark; urine clear; has had much pain of left hypochondrium and shoulder, increased by coughing, &c.; she has also pain in the back, apparently from debility.

℞ Pil. hydrarg. chlorid. co., extr. taraxaci aa. gr. v. o. n.

℞ Acidi hydrochlorici dil., acidi nitrici dil. aa. ʒj. tinct. lupuli ʒij., syrupi aurant. ʒss., infus. gentianæ co. ℥vij. M. ft. mist. cujus sumat cochl. magn. ij. ter die.

℞ Ung. potassii-iod. ʒj. infricet. paululum hypochond. sinistro. o. n.

April 6th. Better in every respect. Contin. omnia.

14th.—Has continued to improve. The menses have not yet appeared, so that the interval this time has been considerably longer. She can now lie on her right side without pain of the left; bowels open; appetite and spirits better; gums slightly affected.

℞ Pil. hydrarg. chlorid. co., extr. coloc. co. aa. gr. v. o. n. Pt. mistura acidi nitro-mur., et unguent. potassii-iod.

℞ Pulv. rhæi., potassæ sulph. aa gr. xv. mannæ opt. ʒiss., sp. myrist. ʒss., aquæ carui ℥iss.—M. ft. haust om. mane.

21st—Catamenia appeared on the 18th, which was just four weeks from the beginning of the last period, and three weeks from the cessation of it. There were no coagula, and the discharge was by no means profuse. No pain in the left side; gums distinctly touched.

Pt. Pil. hydrarg. chlorid. co. tertiâ quâque nocte.

Pt. Mixt. acidi nitro-muriat.

May 5th—Catamenia returned on the 29th, in the evening, she having injudiciously been at the opera the night before, and at the theatre the following evening; anything of the sort excites her considerably; it was followed by much pain and tenderness on pressure of the side, and pain of shoulder, which lasted till yesterday; the discharge was scanty; there were no coagula, and it lasted only for two days; has had occasional attacks of vomiting, bringing up much frothy saliva and even bile; pulse weak.

Pt. Pil. et Mist.—℞ Bismuthi trisnitr., ext. lupuli aa gr. v. M ft. pil. ij. o. m. sumend.

12th—Much better; considers herself well, and returns to Dorsetshire on the 14th.

The previous history of this case, and her present symptoms, distinctly indicate the existence of considerable affection of the liver; and this, taken in conjunction with the absence of any other cause, to which the long standing, and gradually increasing, menorrhagia could be attributed, fully justifies the conclusion of its being essentially dependent upon this condition. Although the state of the general circulation was evidently below par, there were no symptoms of that degree of prostration and debility which would entitle us to call it genuine passive menorrhagia. The case distinctly belongs to that intermediate form, between active and passive menorrhagia, to which I have already alluded, and which, partaking more or less of each, assumes the passive character, as far as regards the state of the general circulation, and the active form, as regards the local congestion. The treatment, therefore, partook, to a certain extent, of that adapted to these two forms, viz.: laxative, alterative, and local applications on the one hand, and gentle doses of sulphate of iron on the other. As the pain of the left hypochondrium and shoulder diminished, and her general health improved and allowed me to direct my attention to the slight degree of stomach derangement, which (as is usually the case after the action of alteratives and laxatives) now began to show itself more distinctly, I put her on the use of nitric acid and gentian with good effect. The liver and stomach are so closely linked together by sympathetic connection, as to act and re-act upon each other in all their various derangements; and it is well to bear in mind that, in treating an affection of the one, we shall greatly assist its cure by relieving any derangement of the other, however sympathetic may have been its character and origin. The long continuance of the hepatic affection, in this case, showed that enlargement, as well as hardness, of the liver existed to a considerable extent; and although her appearance rapidly improved after a few doses of Plummer's pill, the further progress of the case showed me, that it would be necessary to bring the system more decidedly under the action of mercury. This was done cautiously, as I felt unwilling to carry it to any considerable extent in a feeble, irritable, system. For this reason, I did not direct the liniment. hydrarg. to be rubbed in upon the left side, which I should otherwise have done, but used the ung. potassii-iod., and apparently with good effect.

I have had the opportunity of seeing this patient, occasionally, since. She has had one slight return of menorrhagia since, which she quickly relieved by the Plummer's pill. She has spent some time upon the continent, and, with the above exception, has been enjoying good health.

(To be continued.)

ON THE INFLUENCE EXERCISED BY TRAUMATIC LESIONS OF THE SPINAL MARROW ON THE FUNCTIONS OF THE GENITO-URINARY ORGANS, WITH THE ANALYSES OF THE DIFFERENT SECRETIONS.

By —— SEGALAS, M D., Member of the Academy of Medicine.

(Continued from page 436.)

Second question: *What is the influence exercised by traumatic lesions of the spinal marrow on the composition of the urine?*

Krimer asserts that:—after the division of the spinal marrow, opposite the dorsal and lumbar vertebræ,—after the destruction of the same, from the last cervical downwards,—the urine becomes as limpid as water, and contains a considerable quantity of salts and acids, but little extractive matter. I do not well understand what Krimer means by *extractive matter*, but if, as it seems probable, the expression is to be considered as synonymous with the residue of the urine, when evaporated at a moderate heat, the German physiologist must have remarked that the urea constantly decreased after the experiments performed on the spinal marrow. Now, this is not what I have been led, from my experiments, to conclude; in fact, Dr. Favre, *preparateur de Chimie au Conservatoire Royal des Arts et Metiers*, analysed, at my request, with great care, the urine which I had drawn off, by means of the catheter, from dogs whose spinal marrow had been divided in various parts, and the following is the result obtained:—

In one dog, whose urine was examined at three different periods, with twenty-four hours' interval between each, it was found to contain 6·09, 3·52, per cent., of urea, and, finally, 5·40. The medulla was then divided in the lumbar region, and the quantity of urea was found to be, per cent., immediately after the operation, 7·53: forty-eight hours after, 7·05: and seventy-two hours after, 7·59. Thus, the quantity of urea, on the three days which followed the division of the spinal marrow, compared with the three which preceded it, was as 22·17: 15·01; or, it had increased about one-third. The same result was obtained on a second and a third dog, operated on, as with the first, in the lumbar region. On the contrary, on a fourth, whose spinal marrow was likewise divided in the same spot, the quantity of urea, was, per cent.: the first day, 6·26; the second day, 6·58; and the fifth day, 4·76; whilst the normal urine of the same animal gave, at first, 7·17, and twenty-four hours later, 5·79. Here, as may be perceived, the urea decreased after the division of the medulla.

But it must be remarked that, in the second analysis, before the operation, the proportion of urea was less than in the first: that, the fifth day

after, the urine became alcaline, in all probability from its sojourning some time in the bladder, the animal having remained forty-eight hours without being catheterized; and that, in this case, the quantity of urea may have been diminished somewhat by the ammoniacal fermentation. As to the sulphates, phosphates, uric acid, and mucus, they were constantly in greater quantities after the division of the spinal marrow, though the proportions differed in every case; and, in this respect, the result of my experiments is similar to that obtained by Krimer. Again, the urine presented the ordinary appearance, and remained constantly acid, except in the case just mentioned, and in another of the same kind, in which that liquid, drawn off one hundred and twenty hours after the division of the spinal marrow (the animal having remained forty-eight hours, without urinating), was found neutral, doubtless on account of a commencement of *catarrhus vesicalis*, caused by the length of time the urine was retained in the bladder.

On seven dogs, whose spinal marrow was divided at the lower part of the cervical region, and whose urine was always acid, the urea was sometimes less, sometimes more, than in the normal condition. Thus, the urine of one, which, before the operation, contained 8·89 of urea, offered, twenty-four hours after the division of the spinal marrow, 7·29; after forty-eight hours, 5·95; and, after seventy-two hours, 4.19; that is to say, the quantity of urea had decreased more than one-half in seventy-two hours. In another, in the normal state, there was 4·55 of urea; twenty-four hours after the operation, 5·35; forty-eight hours after, 5·37; and seventy-two hours after, 6·95; or, the quantity of urea had increased one-half. The phosphates and sulphates, the uric acid and the mucus, in both, diminished, but very slightly. That of two other dogs was also tested, seventy-two, and twenty-four, hours after the operation; in the former, the quantity of urea was 5·64; in the latter, 8·79; or, above and beneath the mean quantity of urea, in the normal state. Finally, in that of three others, the urea was more abundant before, than twenty-four or seventy-two hours after, the operation. To resume: in these seven animals, in which the spinal marrow was divided in the cervical region, the quantity of urea decreased in two, and increased in five; whilst, on the contrary, in the first series, in which the same operation was performed in the lumbar region, the urea had increased in three, and decreased in one only, and, in this case, the urine was alcaline, which accounts for the disappearance of a certain proportion, probably very minute, of the urea. It may be added that, on a dog whose spinal marrow was destroyed from the neck downwards, the urine, withdrawn twenty-four hours after, gave 5·78 of urea, and, on another, in which the lumbar portion only was destroyed, this constituent was 6·74, after twenty-four hours, and 6·02, after forty-eight hours.

What conclusion can be drawn from these facts? That the division of the spinal marrow, in the cervical or lumbar regions, has not a constant action on the quantity of urea contained in the urine, any more than on that of the phosphates, or sulphates, the uric acid or the mucus, and that, if that secretion is modified by this operation, which is extremely doubtful, it is in very different ways. I, therefore, do not think it possible to admit, that the modifications, which Krimer indicates as existing in the urine, are constant phenomena.

Unable to procure Krimer's work, published at Leipsick, in 1820,* I was ignorant as to the species of animals, on which he performed his experiments; but I presumed that it was on guinea-pigs, inasmuch as these animals are the most appropriate for researches on the nervous system, and their urine, naturally white and turbid, becomes limpid when the animal is quiet; therefore, after the division of the spinal marrow in the lumbar, and still more so in the cervical, region, this liquid is submitted, in the bladder, to the same changes that it would undergo in an inert vase. On this hypothesis, Krimer might have attributed to the lesions of the spinal marrow, and considered as a vital, what in reality was but a physical, phenomenon, produced by the immobility to which the bladder was condemned in consequence of the lesion of the spine: I mean, the limpidity of the urine. Such, however, was not the case; all his researches consisted in the experiments he performed on *one* poor shepherd's dog, of which the history has already been given, and in which he divided the spinal marrow in three different places: opposite the last cervical vertebra, between the 5th and 6th dorsal, and in the lumbar region; secondly, he destroyed the whole, from the neck downwards; thirdly, he opened the abdomen, to squeeze out all the urine contained in the bladder; and, finally, he destroyed the remaining portion of the spinal marrow, performing, at the same time, artificial respiration; this last, however, did not prevent death taking place thirteen minutes after (10th experiment). In France, especially in the present state of medical knowledge, no one would dare to draw general conclusions from such an experiment; the German physiologist, however, laid down the two following, the one almost as true as the other, viz.: that the lesion of the spinal marrow, at the inferior portion of the cervical, at the dorsal, and at the lumbar regions, produces a notable modification in the urine;—and that the secretion itself is suppressed, by the destruction of the totality of the cervical portion of the same marrow.

As to the observation, made by Dupuytren, that of all the diseases to which the human frame is subject, paraplegia is that, in which a catheter, when constantly kept in the bladder, is soonest covered with saline incrustations :* this has been confirmed by subsequent experience, but the explanation of this phenomenon seems to me very different from that given by the above celebrated surgeon, and by those who have adopted his opinion. The tendency that the urine presents, to form a deposit around the catheter, is produced, not by an alteration in the urine, caused by the lesion of the medulla spinalis, but by the catarrhal inflammation of the bladder, which sooner or later complicates this lesion. What led me to this conclusion, was the fact, that the urine of the patient, in my second case, remained limpid and normal all the time I was in attendance on him,—upwards of six weeks,—offering no alcalinity, nor disposition to form a phosphatic deposit; and this, probably, was *on account of the appropriate hygienic rules* to which he was submitted, and which prevented the development of the catarrhal inflammation of the bladder, caused by the long retention of the urine in that organ, and by the continued presence of the catheter when kept motionless in a paralysed part, surrounded by others in a similar condition. What confirmed me in this opinion, was the normal aspect of the urine for four months, and the subsequent alcaline character, which developed itself under the pernicious influence of the catheter, followed by the formation of a phosphatic calculus, which necessitated the operation of lithotrity.

If we admit, that this opinion is correct, the following practical consequences may be deduced: that the bladder must be emptied at regular intervals, more or less frequently, according to the quantity of the urine; that the catheter should never be kept constantly in the bladder; and that this secretion ought to be rendered as liquid as possible, by means of baths, emollient tisannes, and other appropriate hygienic precautions.

The remarks here presented, on the fact pointed out by Dupuytren, are equally applicable to those recorded by Sir B. Brodie, Home, Hankel, and Stanley, in which the urine, after traumatic lesions of the spinal marrow, contained ammonia in an uncombined state; and this took place, always, several days after the accident. Thus, Stanley has recorded two cases; in the first, the patient was affected with fracture and displacement of the 5th and 6th dorsal vertebræ, complicated with laceration of the medulla spinalis at this spot; the urine was abundant, and became ammoniacal on the fifth day, which character it retained until the death of the sufferer, an event which took place on the 26th day; in the second case, there was fracture and displacement of the 8th and 9th dorsal vertebræ, complicated with paralysis; the urine had a strong ammoniacal odour, and, from this epoch, the analysis showed that a considerable quantity of uncombined ammonia was present. In these cases, the urine became alcaline, just as where retention of urine exists, complicated with catarrh of the bladder; the organ being here considerably distended, and more or less inflamed, secretes a certain quantity of mucus, which, by the length of time it sojourns in the bladder, undergoes the putrid fermentation. According to Burdach,* Neveau found a very acid urine, in dogs and rabbits, after the division of the medulla in the dorsal and lumbar regions; and the author of a recent and learned work on the nervous system of man and animals—Dr. Longet, informed me that, in the few experiments which he performed on this subject, the urine, though not very acid, in the dogs whose medulla spinalis had been divided by him, was still sufficiently so to indicate this character. These conclusions, as may be perceived, are similar to those I have myself obtained.

(To be continued.)

* *Recherches Physiologiques*, Leipsick, 1820.

* *Leçons Orales*, 1822.

* *Burdach, physiol. en France.* V. 8, p. 205. *Experimenta quædam circa urinæ sécretionem.*

TREATMENT OF CONVULSIONS IN CHILDREN.

By A. W. CLOSE, Esq., Manchester.

THE highly-developed, or predominant, state of the nervous system, in children, renders them liable to convulsions—a disease, distressing in its character, peculiarly afflictive to the parents of the child, and calling for prompt treatment on the part of the medical practitioner. To point out a mode of treatment, which I have found particularly serviceable, is the object of this communication.

On Thursday, the 21st of March, 1844, I was called to see Master L——, of Brook-street, a child of eight years old, labouring under violent convulsions. I found him stretched on the bed, with the head firmly thrown backwards; the jaws, eyelids, muscles of the neck, of the arm and the leg, of the right side of the body, were agitated with violent and convulsive movements; pulse 140; pupils contracted and undilatable; the eyes distorted from their axes; the face drawn into horrible forms; the mouth filled with foam. I immediately opened the jugular vein, and allowed about ℥xij. of blood to flow. This was followed by the warm bath, in which he was held upwards of twenty minutes. Yet the convulsions persisted, neither abating in severity nor frequency. At this moment, remembering the connection of the disease with the excito-motory division of the nervous system, I resolved to try the application of the oleum terebinthinæ (sometimes erroneously called *spirits of turpentine*), to the whole of the spinal column: this I did by means of a long strip of flannel, soaked in it, and applied from the occiput to the sacrum. Immediately on its application, the child sighed several times, the breathing became easier, sensibility returned, the pulse fell, and, in five minutes, the convulsions had entirely ceased.

The second case, in which I had the opportunity of trying the same application, was that of a child, aged 4, of Mr. N——, of Stretford-road, to whom I was called on Thursday, the 11th of April, 1844.—I had him placed in a warm bath, which produced no amendment. Immediately on taking him out of it, he was laid in bed, and the ol. terebinth. applied in the manner before related, and with the same favourable result. The convulsions did not so speedily subside, as in the former case, but, in ten or twelve minutes, they had completely ceased. I noticed that the spasmodic state of the larynx was almost instantaneously removed; and had venesection been premised, the clonic action of the other muscles would have been, I have no doubt, more speedily overcome. To combat the symptoms of irritation of the brain, which did, and of effusion, which might, ensue, leeches were applied to the head, and calomel was administered. I may remark, that, in a case not here referred to, where the turpentine had been applied, with the same pleasing effect, in the paroxysm of convulsion, but where symptoms of effusion followed, and I had tried the usual remedies unsuccessfully, I gave the *potassii iodidum* with decided success. One grain was administered to the child, two years old, every two hours. The

first two or three doses produced vomiting, but the medicine was continued, and produced considerable diuresis, with an amendment in all the symptoms, followed by complete recovery.

A case, still more conclusive as to the efficacy of the ol. terebinth., occurred in my practice on the 27th of July last. During a short absence from home, I was hastily summoned to the child of Mr. M——, Mansell-street. My pupil, Mr. Moore, attended. He found the child suffering from violent convulsions, and at once, and without the trial of any other remedy, he applied the ol. terebinth. A few minutes found me with the patient, but the convulsions had ceased.—I am aware, in many cases, we are indebted to the *vis medicatrix naturæ*—but the relief, afforded in this case, was instantaneous, remarkable, and decided.

I must confess myself unable to explain its *modus operandi*. The nervous system is, both physiologically and pathologically, enveloped in much mystery. Are its actions dependant on the arrangement of its molecules?—or, on a *nervous fluid*? the belief in the existence of which is favoured by the analogy between the structure of the brain and some secreting organs, and for the conveyance of which, tubes and canals are evidently no more requisite, than they are requisite in bibulous paper, or any other filtering matter? Does abnormal action depend on the deficiency, or abundance, or consistency, of the nervous fluid?—or, on a congested or ruptured condition of one or more of the vessels circulating in the neurilema? If, as physiologists affirm, "the nerves are possessed of their own powers, and do not depend solely on the brain, and that these powers are probably supported by the vascular cortex of those parts," then the doctrines of determination and revulsion are sufficient to account for the peculiar action of the ol. terebinth., and other counter-irritative or sedative applications. Cuticular determination is excited, and determination to the spinal centre removed. Dr. Parry, in his "*Exposition of the Principles of Pathology*," presumes that most diseases consist in local determination of blood; and that it is a law of the human constitution, that excessive morbid determination, to two parts, shall not exist in the same person, at the same time.

MR. JACKSON'S VIEWS ON THE SPLEEN.

By JONAS KING, Esq., Tonbridge-Wells.

"When once men are determined to believe, the ABSURDITY of the doctrine only confirms them in their faith."
Mr. Jackson's Letters in Medical Times, No. 258.

Mr. Jackson commenced his paper, published August 31, by reasoning from what he calls analogy. He compares the spleen to the heart (a distinctly muscular organ, endued with a large supply of ganglionic nerves), and says, that as "into it nothing but blood goes, and out of it nothing besides blood comes," so "it must be blood which the spleen influences in some way or other, for there is nothing else for it to influence." Had not Mr. J. preserved a most consistent singularity from the beginning to the end of his letter, I should have concluded that he was trying to make fun of the organ of ill humour. The whole gist of his discovery appears to be that, as there is only one thing the spleen can influence, therefore, it must influence that. Now, it would have appeared to me more in accordance with logical reasoning to prove, first of all, that the spleen *does* possess some active influence. I consider it a merely passive organ, capable of great distention, having considerable elasticity, and acting as a sort of safety valve to the portal circulation, in the same way that the tricuspid valve, being made to allow of regurgitation in cases of distension, acts as a safety valve to the pulmonary circulation (as explained and most elaborately exemplified by analogies, in almost every class of animals, by Mr. T. Wilkinson King). It would appear but reasonable to conclude, that, after a meal, when it sometimes happens that the stomach is *loaded* with large quantities of solids and fluids—the veins of the stomach absorbing fluids very rapidly, and the stomach itself being in a constant state of activity—the portal circulation must be, at times, enormously distended; and what more probable supposition can be formed, respecting the spleen, than that it is intended to rectify this variable state of distension; every other probable evil in the human body is guarded against, and why should not this of distension, which would be *most mischievous*; and, again (although Mr. Jackson asserts quite the contrary), there is *no one* fact connected with the spleen, that tends to prove it an active organ.

[We have taken the liberty of abbreviating this letter considerably. We have received several communications on the same subject, all of an unconscionable length, and of merciless bitterness, and which we cannot further notice. What is there in the spleen, that people can't be brief, or in a good humour with it?]

SELECTIONS FROM GERMAN JOURNALS.

By SIGISMUND SUTRO, M.D.

On Delirium Tremens.—Dr. Scharn considers this disease as the highest degree of drunkenness: as a reflex action, emanating from the greatly-depressed nervous vitality, in consequence of the excessive irritation caused by spirituous liquors. He recommends ammonia, in the form of liq. ammon. pyro-oleos. or liq. ammon. succin., as a remedy capable of regulating the existing excitation, of raising the nervous system, and thus restoring the patient's health. Dr. Scharn states his having always employed this remedy with such success, that the most violent patient, who could scarcely be subdued by four powerful men, was restored to calmness and health *within a few hours.—Casper's Wochenschrift.*

On the Treatment of Pneumonia in Old People, without Abstraction of Blood.—Dr. Roderer, of Weissenburg, ascribes the great mortality of old people, affected with inflammation of the lungs, to the energetic antiphlogistic treatment, hitherto adopted, and recommends tartar-emetic as the best substitute. He generally administers, in the first and second stages of pure inflammation of the lungs, from four to seven grains of tartar-emetic, with a similar proportion of opium, in four or six powders. The remedy is rarely continued longer than four or five days, and generally, on the third or fourth, the attack declines, when the dose is to be reduced to two-thirds, and one-third, and eventually discontinued on the seventh or eighth day. Of forty-two patients, treated in the manner described, thirteen only died. Expectoration was easy; stools appeared; and the breathing became calm.—*Schmidt's Jahrbucher der Gesammten Medicin.*

Sulphate of Copper in Croup.—Dr. Schwabe has brought more than fifty cases to a happy termination, by the above remedy. After having first applied from four to twelve leeches, according to the age of the child, he administers, at intervals of half an hour or an hour, one grain and a half, three, and as many as four, grains of sulphate of copper, combined with some sugar. This treatment he continues, till the tenacious and membranous formations are discharged by vomiting. Then, the patient receives half a grain of sulphate of copper, per hour, till several dark-green stools ensue. From eight to twelve doses are generally sufficient to effect a cure. By the common treatment, with leeches, cupping, mercury, &c., the author often lost his little patients; while, by this new mode of treatment, almost every child recovered. Whether this powerful effect of the sulphate of copper is to be attributed to its certain and rapid emetic action, or to the antispasmodic property inherent in it, as well as its power of promoting the activity of the lymphatic vessels and arresting exuberant vitality, the author will not attempt to determine. In conclusion, he assures us, that he never observed ill consequences result from the use of the copper.—*Casper's Wochenschrift.*

Croup terminating fatally, without the Formation of False Membranes.—A man, of scrophulous constitution, and of melancholic temperament, was married to a woman of similar habit. She soon became pregnant, and was delivered of a well-formed child, which, in spite of remonstrances, she would herself suckle. During dentition, the child died of *tabes meseraica*. The woman bore a second child, a girl, perfectly similar in constitution to her parents, and again suckled by the mother. When she was six years of age, she caught cold, became hoarse, but medical advice was not sought for till twenty-four hours after, as the child continued to play about, and seemed to experience no particular inconvenience,—symptoms, which the author regards as indicative of a very malignant and fatal form of disease. All reputed remedies were used in vain, even pouring cold water on the larynx, while the child was in a warm bath; and, on the sixth day, the little patient died. The dissection of the trachea and larynx was alone permitted; they were found reddened by the inflammation, but without any pseudo-membranous formation.—*Dr. Adler, in Schmidt's Jahrbucher der Medicin.*

[It is evident, from the above *post-mortem* examination, that the case was not one of croup, without pseudo-membranous formation, but a simple *angina laryngea*; and I cannot help remarking, that the fatal issue seems to be partly due to wrong treatment, to a mistaken diagnosis: though, perhaps, acute quinsy may be imagined to be sometimes capable of resisting the most active treatment, in a scrophulous child. Was the original diagnosis, in the above case, one of *non*-pseudo-membranous croup? Such does not appear in the above report. On the contrary, it seems that the complaint was treated as common croup; that is to say, leeches, mercury, emetics, &c., were employed, for the purpose of removing the pseudo-membranous inflammation; and, since the child died without displaying any tendency to occlusion of the air-passages, nay, even, without any exudation of plastic lymph within the larynx, it must be evident, that that part of the treatment directed exclusively against pseudo-membranous inflammation, was, undoubtedly, misplaced; whilst, of course, antiphlogistic measures are applicable to croup as well as to quinsy. But, suppose quinsy had been diagnosticated at first, might not leeches, mustard-poultices, blisters, and other external and internal derivatives, have been able to subdue a simple inflammation of a mucous membrane, within six days? It may seem invidious, on my part, to raise objections, derogatory, perhaps, to the skill of a fellow-countryman; but *humanum est errare*; and, besides, I think it is a duty every medical man owes to his profession, to express any doubts which published cases may raise in his mind; for, by that means, his objections will either be justified or removed, and, thus, he will either bring conviction to the mind of his neighbour, or be himself convinced of his own wrong judgment.—*Note of Dr. Sutro.*]

On the Proximate Cause of Enlargement of the Spleen, in Intermittents, and Fevers in general.—In the chilling stage of fever, the *vasa majora* and the heart are overfilled with blood, from the contraction of the capillary vessels. Rokitanski confirms the view, that the disturbances of the circulation, which follow diseases of the heart, occasion swellings of the spleen; and why should not the same causes, in ague, have the same effect?—Bouger, of Marennes, never saw a commencement of enlargement of the spleen, before the early paroxysms of fever; but he found the spleen considerably swollen in the first paroxysm of ague, whilst the patients complained of sensibility to pressure on the left hypochondriac region. These symptoms disappeared, as soon as perspiration ensued; but they were again increased in the second and third paroxysms. The swelling of the spleen, so considerable, both in intermittent and suppurative fevers, is easily accounted for by the frequent attacks of chilling, in both. The character of the fever, and, also, the tone of the organ, influence the local affection of the spleen. For the weaker the spleen, the less will be the power of that organ to resist the impetus of the blood, during the chilling stage, and to expel the accumulated blood after this stage; and, thus, in inflammatory fevers, there will be comparatively little swelling of the spleen. In *typhus abdominalis*, the enlargement of the spleen is caused, partly by the chilling paroxysms, partly by the atony of the structures, and, also, partly by the bad condition of the blood. The objection, that temporary *hyperæmia*,—but not the frequent remarkable changes of structure,—could be explained by this theory, is met by the author's assertion (acceded to by Rokitanski), that *hypertrophia*, both of the fibrous structure and of the pulpy substance, can be developed from this *hyperæmic turgor* of the spleen. These structural changes appear, according to the quality of the blood, either as indurations or as softenings.—*Dr. Eisenmann, in Haeser's Archiv. fur die Gesammten Medicin*

LITHOTRITY, LITHOTOMY, AND THE DISEASES OF THE URINARY ORGANS.

By W. B. COSTELLO, M.D.
Surgeon-lithotritist to the Royal Free Hospital.

(Continued from page 482.)

If, since the year 1832, much mischief has arisen from the temerity and hardihood of persons attempting to operate, without possessing the requisite qualifieations to do so with success, there are collateral benefits attached to the operation as a discovery for which we cannot be too grateful.

In the year 1830, I was requested by Mr. S. Smith to see one of his patients in Leeds. The gentleman was beyond 70, very corpulent, and was suffering from occasional attacks of symptoms of stone in the bladder. On sounding him the stone was felt and heard distinctly. In this exploration, it is very probable that the stone was displaced from the neck of the bladder. Being under an engagement in a more distant part of the country, I left Leeds, the next day. I did not see this gentleman for a month after. He had experienced no symptom of the stone during the interval. He, however, had a rigor after the introduction of the catheter at my first visit; but the disturbance soon subsided. The intended operation was deferred till his visit to the metropolis in the following spring. He continued perfectly free from his former symptoms, and as he was making use of the alkaline water, he attributed the comfort he experienced to that remedy. The operation stood adjourned, and for the same reason, the absence of any symptoms of the stone to the day of his death, which took place but a short time since. I have been informed that the stone had become pouched in a cavity appertaining to the bladder, a circumstance that would fully account for the after history of the case.

About four years ago, I was called to see a gentleman of the name of Hemming, residing in the neighbourhood of Leominster. He had been sounded by an eminent surgeon in Birmingham, who, on two occasions, distinctly felt a stone; but on a third exploration, he was unable to detect it. These examinations had been followed by considerable disturbance of the general health, and it was deemed advisable that he should return home. I saw him after his recovery, and made an examination. I could procure a single tie of contact with a foreign body, but nothing more. Under these circumstances, I advised him to put aside all idea of operation for six months, or more, and if we then found reasons for undertaking it, it should be performed. The symptoms of stone made no further progress. He died about twelve months ago, from disease of the kidneys, in which there were calculi. The bladder contained a very small stone, all but completely sacculated.

There are cases, though they be rare, in which there is stone in the bladder without presenting any of the phenomena usually indicative of a morbid state of the urinary organs. It happens, however, much more frequently when there is a stone in the bladder, and the symptoms are obscure, there are, nevertheless, some signs of irritation, which is attributed to other causes. Of this we have two remarkable instances in contemporary sovereigns. In the autopsy of George IV. a stone was found in the bladder, fixed to its fundus, and immoveable. According to M. Hércau's account, a small stone was also discovered in the bladder of Napoleon. In such cases the stone being generally small and the symptoms mild, no one now thinks of having recourse to the operation of lithotomy, for the reason that lithotrity offers a precious resource free from risk of any kind. It is through means of this resource, that we have of late years been spared the pain of hearing of persons being subjected to the cutting operation in whom no stone could be discovered. No surgeon, however ardent his temper for operating may be, will subject a patient to the frightful pain and risk of his incisions in a case where the stone furnishes but uncertain evidence of its presence, with but little pain or erethism of the urinary organs; and still less in a case of mere roughness or uneveness of the vesical surface, or indeed in any case where a doubt of the existence of the stone can be entertained. If, therefore, we have now no victims of our precipitation, we owe it to lithrotity, which has furnished a more perfect means of exploration, and a safe resource in doubtful cases. These secondary benefits of the new method seem small in comparison with the great and beneficial changes it has introduced in the treatment of stone in the bladder, but they are nevertheless by no means unimportant in themselves.

The benefits here referred to are universally acknowledged, and may serve as a set-off to the evils that have resulted from the temerity of inexperienced operators. In fact the very boldness of these surgeons in such enterprizes, argued perfect confidence in the safety of the instrument and the efficacy of the process. They shut their eyes to the necessity of any special qualifications in themselves, and against the possibility of bungling, but their belief that the application of the remedy was within their power, was perfect and entire. It would indeed be preposterous to suppose that they could have subjected persons to the risk attached to their own unskilfulness, if they had at the same time no confidence in the process. But its value is now admitted on all hands, and hence it is that we no longer hear, as we used to do before 1832, some surgeons express their preference of a "clean cut, and then being done with it." This used to be in times past a favourite apopthegm with the partisans of lithotomy. It was however rather verging on the imaginative to assume that the "clean cut," was all that was necessary for solving the problem of the patient's deliverance.

The great activity kept up till 1832, in suggesting alterations and modifications of Civiale's apparatus became at that period diverted into a new channel. Those who sought for fame by the exercise of ingenuity in this line, seemed all at once to have arrived at the term of their labours. The instrument-makers now had their turn, and such was the enthusiasm of the would be inventors, swelled by the crowd of the would be operators, that instruments after the new type could not be made fast enough to meet their demands. Upwards of £5,000 worth of these instruments were manufactured in a single year. Surgeons had become *stone-mad*; stone-patients were at a premium, and for the first time in the history of surgery, it was almost a privilege to be so afflicted. Out of a laudable anxiety for the relief of suffering humanity, some were induced by bribes to permit the application of a method so gentle; others were enticed into hospitals where as the French phrase has it, they were *Aussitot pris, Aussitot pendus.* In short, the sufferers were coaxed, lionised, and allured with sweet promises much in the strain of "pretty, pretty, little dickeys, come and be killed." The bitter disappointments of this blind enthusiasm inculcate a severe lesson! Let us hope for better things in future.

The classification of the cases, in regard to the applicability of lithotrity while Civiale's instruments continued to be employed, was based on the following divisions:—1. Simple cases, in which the urinary organs were sound, the stone small and of recent formation; 2. Cases in which the urinary organs had already begun to be organically altered, the nervous susceptibility was morbidly exalted, and the stone had attained some size; 3. Cases in which there were one or more calculi of considerable size, the organic alterations of the urinary organs had made considerable progress, and the general health was seriously affected, In the first series the operation was almost always applicable—it might be said that these were the cases of election. In the second series the application of the method was still possible, though less eligible, and might be contra-indicated by a great variety of circumstances. In the third series lithotrity, if applicable, was rarely eligible, and when resorted to, in compliance with the urgent prayer of the patient, it not unfrequently became necessary to renounce it.

The extent of the applicability of the lithotrity as then practised might be reduced to a formula something after the following manner:—

1° It might be employed when the diameter of the stone did not exceed an inch and a half.

2° When the calculi were few in number, or when very numerous, if they were very small.

3° When the bladder had suffered but slightly, and then only from the irritation of the stone.

4° When the prostate was healthy; or, if enlarged, only in a slight degree.

5° When the urethra had sufficient calibre to allow of the introduction of the instrument, and its sensitivenesss was not excessive, or incapable of being blunted by appropriate treatment.

6° When the kidneys and ureters were healthy, and the bladder had not suffered so much from irritation, that a fear might be entertained lest any augmentation of it might be attended with fatal consequences.

It was true that persons had been operated on with complete success, in whom these favourable conditions did not exist, but the limitations indicated above, may nevertheless be taken as sufficiently close to the rules of practice that then prevailed. Stones exceeding two inches in diameter were beyond the pale of application of the method as then practised. I would not, however, be understood to depreciate lithotrity, as applicable within those limits. They are extensive enough to include a considerable number of the patients, who used to perish from the knife, when lithotomy was their only resource.

The change introduced by the double slide instrument in 1832, entirely altered this condition of circumstances. The applicability of the operation now became so enlarged that lithotrity became the general method instead of an exceptional one, as it might be said to have been up to that time, and lithotomy till then the rule became the exceptional method. The character of the cases that are to follow, will fully show the importance of the altered aspect, under which lithotrity has now to be considered. The controversy as to value and importance, and the superiority of the old and the new methods, might have been maintained hitherto with doubtful success on either side. But this is the case no longer, the superiority of one over the other becomes so apparent, as no longer to be a point in dispute. The basis of this comparison is changed altogether; the advantages of the new method are brought into more conspicuous light, as attested by successes so numerous and extraordinary, that no example of it can be found in the whole history of surgery. There have been drawbacks no doubt, but the source of them is well accounted for, when we consider how many inexperienced persons, seduced by the apparent facility of the process as performed in capable hands, undertook to perform an operation without possessing any of the qualifications on which success depends.

In regard to the duration of the operation the improvement was obvious. The sittings in the very ablest hands—and I am now speaking of Civiale's own operations—lasted from five to ten minutes. With the new apparatus, the process whereby the same amount of destruction might be accomplished, needed not to extend beyond one minute, and indeed even greater destruction of the foreign body might be effected in less time by hands habituated to a quick succession of the steps of the operation. Much of the mischief caused by tyros in lithotrity arose from the great length of time consumed in the search for, and seizure of, the stone, and the dilatoriness of the process from want of practice. Of this we may give a few examples.

A financier, aged 74, habituated to the labours of his banking-house, had for some time experienced difficulty and pain in the excretion of the urine. His calls to avoid it were becoming more frequent, and the inconvenience of remaining long in the sitting posture began to be more and more complained of. Puzzled at these symptoms, he one morning, on his way to his place of business, called on a very eminent surgeon. On examination, the material cause of his suffering was detected. He had a stone in the bladder. He was informed at the time that he need be under no feeling of alarm, modern surgery furnished a mild and efficacious remedy, the pain of which, so different from the old cutting operation, did not amount to more than what he had just had experience of in sounding. The gentleman went away quite re-assured, and arriving at the banking house, informed his partner that he was to undergo the new operation on the day but one after. The operation took place on the day appointed. The search for the stone was, perhaps, not so success-

ful as was anticipated ; at all events, the manipulation was persevered in for more than half an hour. The same consequences that are observed to follow, where in the cutting operation the search for the stone is similarly protracted, might have been foreseen. No second application took place. He died after suffering severely for a few days.

Protracted attempts to seize and withdraw the stone after cutting may be unavoidable ; but in lithotrity the case is different, the manœuvre ought on no account to be prolonged beyoud a minute or two ; and the reason for ceasing from the efforts is much stronger, when it is based only on the surgeon's want of success within the safe limit of time indicated. But though attended with severe suffering in the case of either operation, and always exposing the patient to great risk, we would not be understood to represent it as necessarily involving fatal consequences. I subjoin the details of a case in which the patient was more fortunate.

Mr. E. G. of Bond Street, aged 54 years, of sanguineous temperament, well known as an eminent professor of music, had the misfortune to be afflicted with the stone. About two years previously, he began to be disturbed night and day by frequent calls to make water. In satisfying these calls he was much distressed by tenesmus, and a sense of burning in the rectum. The expulsion of the urine was sometimes so sudden as not to allow him time to reach a place of convenience and retirement. In attending to his professional business through town, he was under the necessity of making himself acquainted with the places of convenience in the line he had to take. He could seldom, without enduring much anguish, especially when his pupils were of the other sex, sit out an entire lesson. Under such restraints there was always some little oozing, by which his clothes becoming impregnated, an offensive smell of urine was exhaled from his person. He felt this evil so acutely that he was obliged to renounce his professional labours, except to pupils coming to his own house. The urine was sometimes clean, sometimes turbid, and on any attempt at exercise became bloody. He could no longer ride in any conveyance. His flesh was falling away, and he was evidently bending under the pains, moral and physical, produced by his disease. He consulted a neighbouring surgeon, an officer of one of our hospitals, who spoke to him of the new method, and represented its benefits in a very favourable light. After this interview, he felt his courage revive, and he entered heartily on the course of widening the uretha, which was represented to him as a necessary preliminary of the operation. In the meantime, his surgeon provided himself with an instrument, and on a day named, he proceeded to try his hand. If all was not absolutely new to the surgeon, it was so to the patient. In entire faith and strong hope he submitted. The searching was begun, and carried on with a perseverance worthy of a better success ; but the stone proved intractable, and kept continually eluding the instrument. The surgeon laboured ; the patient, stout of heart, bore the instrumentation with much fortitude. He was told, from time to time, that the calculus was just now in the most favourable place to be laid hold of—that it was in the very jaws of the instrument—that it was going to be crushed ; but he could not hear the welcome sound of its reduction. Another effort, and it must be secured—one more trial of patience, and triumph was certain. But the poor man's patience had been most severely tasked. The surgeon nerved himself again and again for fresh efforts, but the patient, giving way to the imperative force of torture, began to utter cries of despair, anguish, and prayers to desist. During the struggle, the surgeon assured him he had caught and crushed the stone. He was at last released ; and his operator, in real or pretended ignorance of his own failure, assured him that he had effected as much destruction of the stone as was usual or possible in a first setting.

He was taken to bed in a state of suffering and exhaustion ; there was considerable hœmorrhage for some days, with the general symptoms of cystitis, but not the slightest particle of the stone was voided. The manipulation was persevered in for forty minutes exactly. He gradually recovered from the position of peril to which he had been thus reduced, quite resolved to let his days end when they might without having recourse to any operation whatsoever. He reasoned after this manner—" If the mild operation for reducing the stone by crushing be so terrible, what must be the agony of the cutting ?" While holding this language, and almost reduced to despair from the persistance of sufferings now become more severe, he was informed by a friend that the description of what he suffered bore no resemblance to the recorded descriptions of the process.

After an interval of two months a friend of his called on me and gave me an affecting account of the state of discouragement in which he was. He was introduced to me himself soon after, and I told him the best way to remove his fears at once was for him to be present at one of my operations. He was too much terrified to stand this ; but he learned with great satisfaction that the process he had been subjected to, bore no similarity to the operation for crushing the stone in the bladder, and was simply a series of pinchings of the viscus, protracted through unskilfulness.

I held a first sitting on this gentleman in January, 1842. On injecting, the bladder was found to be spacious—the prostate tender, from the irritation of the stone—the vessels of the urethra and neck of the bladder spongy and disposed to bleed. There was also an accelerated pulse, with wheezing, and a sense of fulness in the chest, not amounting quite to dyspnea. In spite of these circumstances, which, in conformity with strict prudence, might have required a temporary adjournment of the operation, it was thought advisable, in order to relieve a depressed morale, not to delay. The injection having been thrown up, the lithotrite was introduced, and before he was aware that the instrument had reached the bladder, it was announced to him that the stone was firmly grasped, and he might listen to the noise produced by its destruction. The crash of the crumbling stone followed in an instant. When told that the operation had terminated his joy knew no bounds ; his eyes were filled with tears, and he fell to hugging and embracing me. The sitting had lasted 25 seconds ; not a drop of blood was shed, and some fragments of stone were voided a few minutes afterwards, with the water of injection perfectly limped. He could not believe his eyes or ears when he saw them and felt them rattle into the chamber pot.

There were several calculi in the bladder. There being being no fever, or re-action, the sittings were continued at intervals regulated by the patients own convenience. On several occasions he left his lesson, or dismissed the pupil to place himself on the sofa for a half minutes manipulation. The only treatment observed was the use of diluents, and the warm hip bath at night. Dr. Grimm, Physician to the King of Prussia, Dr. Willis, and Mr. Rutherford Alcock, were present at the operation. Mr. G. is in the most perfect health and seems to have grown young again.

THE LEICESTER CASE OF MESMERISM.

MR. TOSSWILL'S REPLY TO DR. SHAW AND MR. PAGET.*

SIR—As you have given insertion to the communications of Dr. Shaw and Mr. Paget, may I beg that the same courtesy be extended to myself, lest I should be supposed to agree in the expressed opinion of either of those gentlemen ?

The post assigned to Dr. Shaw previous to, during, and after the operation, was that of noting every incident which might occur, by committing it immediately to writing, and this arrangement was the more satisfactory, as Mr. Paget—having, at my solicitation, taken charge of the tourniquet and upper part of the diseased limb, and having consequently his back to the patient—was unable to see what was going on. I was, therefore, desirous of securing the assistance of a gentleman so disinterested and strictly honourable as Dr. Shaw.

To every circumstance mentioned in the notes taken by him, I yield my willing assent; and all present (at the time) acknowledged their correctness. It is to these notes, taken on the spot, and during the occurence of the facts they substantiate, that I wish reference to be made, and from which I desire inferences to be drawn, and not from any subsequent reflections. During the act of amputation I was too much occupied to mark what might be occurring elsewhere ; but I distinctly assert that the diseased limb never moved or winced, but remained perfectly motionless.

Admitting the facts mentioned by Dr. Shaw, I arrive at a different conclusion respecting the evidences in favour of mesmerism, than does either that gentleman or Mr. Paget ; and I do so on admitted and recognised physiological grounds.

The day on which the operation took place was intensely hot ; the room small and crowded : it is not, therefore, surprising to find it stated in Notes 4, 5, 9, and 15, that the patient's countenance was flushed, and that large drops of perspiration stood on her face—circumstances which I believe were participated in by every one present; at least, I can answer for myself.

In Note 13 the patient is represented as having " moaned," a fact which all present will allow ; but this occurrence is common in diseases where effusion on the brain exists, and where, from the amount of pressure, perfect insensibility to pain is admitted. Moaning occurs, likewise, in simple congestion of that organ, as is witnessed in cases of intoxication. Since, then, mesmerism has been represented to operate by inducing a congested state of the vessels of the brain, the moaning may be inferred as an evidence of the mesmerised condition, and not of pain.

Secondly, Note 6 represents the respirations to have been frequent and " deep—thirty in the minute" ; nor should this excite surprise when we remark, at Note 8, that the pulse was at that time beating " 130 in the minute." By this rapid contractile action of the heart, the blood was sent in increased quantity and accelerated activity to the lungs, which could only relieve their congested condition by the involuntary act of frequent and deep inspiration.

Thirdly, It has been asserted that there was " considerable groaning, writhing, and an approach to screaming" during the operation. On referring to Note 6, the number of respirations under the mesmeric condition are stated to be thirty in the minute, and deep—a number nearly double that which is usual : the reason of which I have previously explained. Now, if the notes are correct, which I do not doubt, " groaning" was impossible, for this phenomenon can only be produced by prolonging the act of expiration. No, " moaning" should have been the expression ; and

* The editor of the *Leicester Journal* makes the following remarks in reference to these communications :—" There is nothing like a little controversy sometimes in bringing out the truth. The letter of Mr. Paget, in last week's *Chronicle*, has served as a kind of a fillip to draw from the pen of Mr. Hollings one of the most gentlemanly, masterly, and scholar-like productions we have read for a long time ; and from Mr. Tosswill a clear, skilful, and effective vindication of the recent experiment from the doubt, and something worse than doubt, that has been cast thereupon. We feel certain the great majority of the public will have their faith in the truth and efficacy of mesmerism, as an important agent in surgical operations, strengthened by the two letters and Dr. Shaw's notes. Not a word of comment could add to the force of either or any of the communications : they deserve a careful and candid perusal from every one. Not a person breathing, who has a spark of humanity or kind feeling in his breast, can fail to feel interested in the subject. If any confirmation were wanting as to the beneficial operation of mesmerism in the case of Mary Ann Lakin, we could add our own humble testimony to it, from personal observation of her appearance since the loss of her limb and of the genuine character of the mesmeric sleep, and could also proffer our full conviction of the honesty of the whole proceeding ; but such additional evidence is not needed, although it affords us pleasure to offer it, by way of spare subsidiary testimony."

moaning is the word mentioned in the 13th Note, a term of very different signification from "groaning," which, I again assert, could not have occurred with a respiration "thirty in the minute." I find no mention made in Dr. Shaw's notes of "an approach to screaming," and, in my opinion, it would be as difficult to conceive as to define the exact condition inferred by the word "approach," as applied to a sudden exclamation.

Fourthly, the patient is said to have writhed considerably during the operation.—Dr. Shaw has merely observed in Note 12, "That there was slight movement of the sound leg and toes; leg once contracted;" and in Note 14, "grasping of the hand tightly when touched" is remarked. Neither the notes nor the accompanying circumstances can reconcile the belief of any "writhing." The table on which the patient reclined during the operation, was only fifteen inches wide; her arms were elevated and supported loosely over her chest by one roll of bandages, to prevent their hanging like those of a lifeless person over the sides; so that, having no support from her elbows, nor from any individual present, being neither tied down to the table nor held down, the slightest struggle must inevitably have thrown her over.

Fifthly, I admit the contraction of the sound leg and clasping of the hands when "touched"—sensibility to the compression of the tourniquet and frequent deglutition, mentioned in Notes 11, 12, 14 and 16; but it is singular that these facts should be presented as examples unfavourable to the veracity of the patient. Dr. Marshall Hall, perhaps the greatest living authority on the functions of the nervous system, withdrew his allegiance to mesmerism on a former occasion, and at a similar operation, because such movements did NOT occur; "because the man's sound leg did not start or contract when the diseased one was cut." I quote his own words: the case, he said, "proved too much," for, continued he, even in a decapitated animal, when all volition and sensation has been destroyed, irritation applied to one leg will invariably induce contraction in the other: a phenomenon he terms "reflex motion," and which he discovered to have its seat in the spinal column, and to be entirely independent of sensation or volition. So it was with this suffering girl, rendered insensible to pain and incapable of voluntary effort by mesmerism: she still enacted the reflex motions of the spinal cord. The same cause which produced contraction of the sound leg under the irritation of amputation in the diseased limb, induced frequent deglutition from the presence of saliva in the pharynx, and produced contraction and grasping of the hands when "touched," and apparent sensibility to the compression of the tourniquet; the highly-excited state of the nervous system produced by the previous apprehension, by an accelerated pulse, and by increased respiration (see notes 6 and 8), causing such "touch" to be a powerful irritant—precisely as, in the case of an individual suffering the agonies of hydrophobia, violent spasm of the whole body (the result of reflex action of the spinal cord) is produced by the irritation of the slightest breath of air, imperceptible to others in a state of health.

No; this poor girl, who has been represented as deceiving, and as having refrained from crying out by a voluntary effort, could also (had she been conscious), by a voluntary effort, have restrained these motions, and "proved too much;" but being in an unconscious condition, dead to sensibility and volition, like the decapitated animal, she obeyed the laws of physiology.

Such are my reasons for considering this operation satisfactory as regards the truth of mesmerism, and its application to the relief of human suffering—and certainly satisfactory as regards the patient—who, with the exception of the two hours immediately following the operation, when she suffered intense pain, and gave utterance to her feelings by cries (not being then under the influence of mesmerism), has since undergone no suffering whatever, has had no fever, has slept soundly the nights through, and has hitherto progressed rapidly and favourably toward recovery without the aid or necessity of a single dose of medicine. Most fortunate has it proved for her that the amputation was not deferred, for, on a subsequent examination at the infirmary, the tumour was found to be near the point of bursting, when certain death must have been the result, and that result would have taken place probably ere this.

I am, Sir, your obedient Servant,
J. H. TOSSWILL.

Halford-street, 9th September.

Notes taken by Dr. Shaw, during the amputation upon Mary Ann Lakin.

1. Pulse before mesmerism, 94, small.
2. Mesmerised; time, 9 minutes.
3. Pulse under mesmerism, 120.
4. Countenance flushed.
5. Perspiration.
6. Respiration, 30 under mesmerism, and deep; operation (commenced).
7. Time of, half-past 1, first cut; limb off, 2½ minutes.
8. Pulse under 130, small.
9. Countenance flushed.
10. Blood lost moderate, for the great size of the tumor, though a large quantity—venous.
11. Sensible to the compression of the tourniquet.
12. More or less appearance of sensibility; slight movement of the sound leg and toes; leg once contracted; movement of limb and eyelids (quivering).
13. Expression of pain; moaning; eyes closed all the time.
14. Grasping the hand tightly when touched; expression of pain in the contraction of the eyebrows.
15. Large drops of perspiration.
16. Frequent efforts at deglutition.
17. The patient put to bed exactly at 2 o'clock, apparently in a profound sleep; pulse, 96, feeble, calm.
18. Awoke out of sleep at 2¼ p.m., gradually and naturally.
19. Says she felt no pain during the operation—no suffering during the last half hour.
20. Now feels pain in her left foot; feels faint; says she dreamt some one was tying a string round the right leg.
21. When awoke up, pulse 108; complains of faintness.
22. Says she feels no pain now in the stump.

MR. HOLLINGS' ACCOUNT OF THE OPERATION.

To the Editor of the "Leicester Chronicle."

SIR,—As it appears to be generally and not unreasonably expected, that I should furnish some account of the late operation performed in Leicester during mesmeric sleep—an operation at which I myself assisted, in addition to having been in the habit of visiting the patient daily for some weeks previously, I beg to request the favour of your allowing a place in your columns to the following particulars. The statement with which I take the liberty of troubling you, is perhaps rendered the more necessary, by some apparent differences between the accounts already briefly given by two medical gentlemen, who kindly undertook to be present,—I might add, by a slight discrepancy which seems to me to exist in the case of one of which the reports referred to, between the former and concluding portions of the same letter.

On the 13th of July last, I was informed by my friend Mr. Tosswill, with whom I had frequently, on previous occasions, conversed upon the subject of mesmerism, and the possibility of its beneficial application as a therapeutic agent, that he had been for some time in attendance upon a young person labouring under a malignant disease of the knee-joint, of so serious a character as to render an early amputation of the limb affected the only remaining chance of preserving her life. He, at the same time, expressed a wish that mesmerism should in this instance be tried, with a view to mitigating, if not of wholly counteracting, the pain and apprehension necessarily attendant upon so formidable an operation. To his further request, that I would lend my assistance personally towards ensuring this desirable result, I very readily acceded. I had long been convinced, both by observation and numerous experiments, conducted privately, and under circumstances in which neither motive nor opportunity for deception could exist, that the phenomena classed under the conventional title of Animal Magnetism were real; and although I had for some time ceased to give particular attention to the subject, I felt that I could not, on this occasion, consistently with common humanity, withhold any effort on my part which might be conducive, in whatever degree, to the relief of acute and unavoidable suffering. Accordingly, on the following day, I accompanied him to the house at which his patient, a girl of the name of Mary Ann Lakin, about 23 years of age, was at the time residing with her parents. I found her seated upon the sofa, from which, on account of the enormous size and weight of her diseased leg, she scarcely ever arose during the day,—evidently much reduced in strength, as well as wasted in person, and with a pale and emaciated countenance, wearing the peculiar expression of distress and anxiety attendant upon severe and long-continued disease. Upon entering into conversation with her, she appeared to me of quiet and unobtrusive manners, and possessed of a degree of intelligence which showed that she had not been without the advantages of somewhat better than ordinary education. She stated that she had, for the last four years, been subject to paroxysms of the most intense agony from a rapidly increasing tumour, which had by this time attained such a size as to measure at least thirty-three inches in circumference (the swelling extending a considerable distance both above and below the knee), and for which she had some time since been received as a patient into the Leicester Infirmary, although without receiving any permanent benefit from the treatment pursued in her case at that Institution. She had been made aware by Mr. Tosswill of the object of my visit, and, as I afterwards found, had expressed considerable unwillingness to submit to the new method of treatment proposed, since she had received, some years before, so severe a shock from a Leyden Jar, at the Leicester Exhibition, as to render her hand useless for several days; and having heard only some general and indefinite accounts of Animal Magnetism, in which she had never witnessed a single experiment, she had conceived the idea that it would be necessary to make use of some kind of electrical or galvanic apparatus for the purpose of producing its effects. She now, however, expressed herself willing to submit to any plan that might be proposed by her medical attendant for her benefit; and her parents having, at the same time, given their full and unqualified assent, I proceeded to adopt the usual means for inducing the Mesmeric coma, according to the method recommened by De Leuze. For about three quarters of an hour no effect was visible; but at the end of that time, after the usual precursive signs of quickened respiration and quivering of the eyelids, she seemed reduced to a state of complete insensibility. While in this condition, we found that her arms continued motionless, in whatever position they might be placed, and that they could be easily rendered rigid, or relaxed at will, by the ordinary direct and transverse passes. There was, at the same time, to all appearance, a suspension of the natural power of acknowledging or appreciating pain. The condition of insensibility was suffered to continue about twenty minutes, after which it was easily and gradually dissipated by the common method of manipulation. The patient then declared herself free from any kind of uneasiness, but stated that she had for some time been wholly unaware of what was passing about her. Encouraged by this promise of success, I now mentioned my intention of visiting her regularly until the time of the operation, of the absolute necessity of which she was well aware, and took my leave, after making an appointment to return at the same hour the following day.

On my next visit I was agreeable surprised to find that she had passed a comparatively tranquil night. She had not experienced, her mother assured me, so much relief from suffering during the last two years. Her knee was now totally without pain. The mesmeric sleep was this day induced in twenty-five minutes, and I also ascertained, that, even in a state of consciousness, either arm might be made rigidly cataleptic by longitudinal

passes; after which, the patient positively asserted that all feeling seemed to be lost in the stiffened and extended limb, although it was several times very severely pinched by Mr. Tosswill. At the suggestion of this gentleman, I took the opportunity of desiring her, while under the Mesmeric influence, to sleep for a given time during the ensuing night. This was done simply as an experiment, from which I myself scarcely ventured to anticipate any favourable result; yet it was one which, for the space of more than four weeks, never failed of the desired effect, although the times of sleeping and waking were often varied at the request of the patient, whose business (that of a dress-maker) not unfrequently compelled her, notwithstanding her ill health, to remain employed at her needle until considerably past midnight. As the appointed hour drew near, its approach was accompanied with a feeling of somnolency, which, strengthening by degrees, became at length wholly irresistible. Nor was the slumber which ensued, less remarkable for its soundness than for its correspondence in duration with the exact period assigned for its continuance. For many nights successively, the subject of this singular influence slept, as far as could be judged by appearances, without once turning in her bed, although for several months previously the troubled rest, she was able to obtain, had been so constantly interrupted by the return of pain to her knee, that her mother had removed the window-curtains from her room, in order that she might derive some slight amusement and relief from the weariness and monotony attendant upon continual wakefulness, by observing the changes passing over the sky, or the gradual breaking of the morning.

The phenomena which presented themselves to my notice, on subsequent occasions, varied in no material degree from those which I had observed before in at least a hundred different instances—or, in other words, from what might be called the normal condition of mesmerism. The eye-lids of the patient, after she had been confronted with me for a few minutes, gradually appeared to become turgid, stiff, and heavy, and the eyes, as they more or less rapidly closed, evidently changing from their ordinary expression, to assume a dull and unmeaning character. Her pulse almost invariably rose as soon as she had been rendered insensible. Her respiration, for the most part tranquil, was yet from time to time, and more especially when she had previously complained of slight indisposition, interrupted by heavy sighs. The countenance was often flushed, and although generally calm and placid, not unfrequently impressed with a character of anxiety, attended with a very marked and distinct corrugation of the eyebrows. Deglutition was constantly, and, as it appeared, mechanically performed. A perfect insensibility to pain continued to be at all times manifested, notwithstanding that it was subjected to the severest tests that could be devised; among which I may particularly mention, that the diseased foot—swollen to at least twice its ordinary dimensions, and so exquisitely sensitive that the careless approach of any person was viewed with the greatest apprehension, while the accidental fall of the most trifling article upon it produced a sense of suffering almost amounting to fainting,—might now be suddenly and forcibly compressed without producing the slightest alteration in the features or attitude of the sleeper.

I may further state, as an additional evidence that the mesmeric insensibility was not in this instance simulated, that the head, which continued rigidly erect during the induced slumber, a space of time often amounting to a full hour, invariably drooped and fell forward upon the chest as soon as the demesmerising passes had been commenced. Mr. Tosswill also frequently pointed out to me the peculiar character of the pronation of the hand, when caused to descend slowly from its catalepsized condition by transverse passes, as fully evincing to his mind that the limb was in no respect under the influence of volition. But the best and most satisfactory proof that the state in question was both real and beneficial, was to be found in the rapid improvement in the patient's health, which speedily became evident to her medical attendants. The uninterrupted sleep she experienced nightly, and the total cessation of pain in the diseased knee, over which I never failed to make frequent passes at each attendance, were followed by a return of its natural complexion to her countenance, and an improvement both in her appetite and spirits. Although she had for some weeks been subject to nightly perspirations, and harassed by a distressing cough, she was before long almost entirely relieved from these causes of uneasiness. Mr. Tosswill, indeed, expressed it as his conviction, that she had actually gained considerably in flesh, after a fortnight's mesmeric treatment. Still, however, the disease was of too formidable a nature to allow of any deviation from his original resolution of having recourse to amputation, as soon as such a proceeding appeared warranted by the improved condition of his patient.

As the time which has been provisionally determined for this decisive step approached I expressed to Mr. Tosswill a wish that the plan upon which it was intended to proceed should be submitted to the approbation of Dr. Shaw and Mr. Thomas Paget, conceiving that without the sanction of additional and high medical authority it would be unadvisable to incur the serious responsibility of taking an almost entirely new course in the conduct of an operation, which, under the most favourable circumstances, could not be considered wholly free from hazard, and might, in the present instance, be attended with peculiar and unexpected difficulties. To this proposal he at once assented, stating that his opinion upon the subject was strictly in accordance with my own, and that I had only just anticipated him in the expression of a similar wish. I accordingly waited upon both the gentlemen above mentioned, who, with their usual courtesy, at once acceded to our request, and in the course of a day or two visited the patient separately at her own residence. In their presence additional means were used for ascertaining her insusceptibility of suffering while in mesmeric sleep. Mr. Tosswill, in the presence of Mr. Paget, after placing the edge of his thumb nail upon the origin of one of the finger nails of her right hand, compressed it with the full force of both hands united for the space of more than two minutes, but without exciting a movement indicative of even transient inconvenience. During the visit of Dr. Shay a ligature was tied round one of her fore-fingers, and pulled as tightly as his strength would allow, but with no difference whatever in the result. Both of these gentlemen gave it as their opinion that mesmerism, if inefficacious, would at least be productive of no injury in the case upon which they had been consulted, and further consented to be present at the operation, which it was definitively determined should take place on Thursday, the 29th of August.

At about one o'clock on the day in question, I met by appointment, at the house of Mr. Lakin, Mr. Tosswill and the gentlemen who had undertaken to assist him. I had, however, previously mesmerised his patient at eight o'clock on the same morning, in the hope of increasing her susceptibility. After the usual preparations had been completed, I requested all present to leave the room, previous to the introduction of the patient, with the exception of Mr. Downey, assistant to Mr. Tosswill, and the mother of the sufferer, who remained behind for the purpose of assisting to place her on the operation table, and of adjusting the pillows laid beneath her head. The latter, after she had completed this painful task, withdrew in natural and visible emotion, and I proceeded, without further delay, to use the means I had hitherto found successful in inducing the comatose condition of mesmerism. At this time, I was in a state of much greater agitation than the individual I was endeavouring to compose to rest. A few minutes previously, she had undressed herself in the adjoining room for the operation with an unfaltering hand, and had shown no perceptible sign of emotion upon being lifted on the table. Her pulse was now evenly beating at the rate of about 94 in the minute, while my own I had shortly before ascertained to be nearly 120. Nor was this to be wondered at under the circumstances. I had never in the course of my life witnessed, nor desired to witness, a surgical operation; and the horror, felt to a greater or less degree by all who are present for the first time on such an occasion, was, in this instance, united with a painfully oppressive sense of my own responsibility—since I was well aware, that had any untoward accident happened, I should have had my full share of obloquy—blended with a natural feeling of sympathy with the sufferer, and a distressing degree of uncertainty as to the entire efficacy of the means used for the temporary suspension of her consciousness. Under these difficulties, it was nearly ten minutes before the patient's eyelids, becoming more and more rigid, were at length slowly closed (the average time for producing this effect having for some days been about four minutes and a half), or the usual deep inspirations gave me reason to believe that the stage of insensibility had been attained. Although she had sunk into this condition quietly, and without any signs of perturbation, I remarked, that as the mesmeric coma appeared to deepen, she seemed proportionally to sympathise with the emotion under which I was at the time labouring—a circumstance not difficult of explanation, if, as it has been often asserted, and in my opinion to a certain extent proved, the subject of mesmerism partakes to a greater or less degree of the sensations of the operator. Her respirations became sensibly more deep and rapid, and her fingers, when accidentally touched, closed spasmodically upon my own. This state of partial agitation I endeavoured to calm by placing my left hand across her forehead, and having ascertained that her right arm, when extended from her body, might be rendered cataleptic, I desired the medical gentlemen who were waiting without, consisting of Dr. Shaw, Mr. Paget, Mr. Tosswill, and Mr. William Seddon (of the Leicester Infirmary), to enter. Of the operation which followed, which was performed by Mr. Tosswill, within five inches of the hip, by the circular method, I saw nothing, my eyes being, during the whole time, intently fixed upon the countenance of the patient. As it proceeded, the respirations were rendered still more frequent, and appeared to be attended with greater effort, as well as with moaning, and an occasional movement of the head from side to side. Her fingers also continued tightly to grasp my hand; but beyond this I observed no indications of suffering—nothing, in short, at any given moment, inconsistent with the character of deep, but very troubled, slumber. Her eyelids, which were constantly quivering, as had been more or less the case whenever the same condition was induced, remained, without the slightest alteration, in the same relative position as at first; and it was remarked by Dr. Shaw, that they were at no time absolutely shut, but separated by an interval of about the tenth of an inch. Her lips also continued partially open, and were wholly uncompressed (this, too, was at the time noticed by Dr. Shaw as a most curious feature in the case), nor did a single exclamation escape them, from the commencement to the end of the operation. In no instance was there either starting, or an attempt to raise her head from the pillow on which it reclined. Further particulars will be found in the notes furnished by Dr. Shaw. It may be as well, however, to add, that while Mr. Tosswill was engaged in removing the deceased leg, Mr. Paget undertook to support the limb, and attended to the tourniquet, in addition to assisting in the after-tying of the arteries. The right foot was lightly sustained by Mr. Downey, whose notes, taken four hours afterwards, I am, by the kindness of that gentleman, enabled to subjoin to those of Dr. Shaw. The left foot was held, and the dressings and bandages afterwards supplied, by Mr. William Seddon, while Dr. Shaw, with his watch and note-book in hand, closely observed and commented upon the proceedings. I, myself, was therefore the only person stationed constantly at the upper part of the body, and I can most unreservedly assert, that with the exception of the mere weight of my left hand upon her forehead, no force whatever was used to keep her in a recumbent position. The amputation of the limb was effected in about two minutes and a half; the tying of the arteries, and of the femoral vein, which it was also thought necessary to secure with a ligature, together with the subsequent dressings, occupied nearly twenty-five minutes more. The patient was then lifted from the table by Mr. Paget and myself, and placed in her bed. After the instruments and materials used during

the operation had been removed, and the room restored to its usual state of order, I poured a small quantity of wine and water from the spout of a teapot into her mouth, which she swallowed mechanically—an action considered, as I believe by physiologists, to be perfectly compatible with a state of unconsciousness. She was then, by the direction of the medical gentlemen present, awakened quietly and gradually, by passes along the eyelids, and gently blowing upon her forehead. On being questioned as to her present feelings, and what she had experienced during the last half hour, she replied, that she was exceedingly faint, and now felt pain in the left foot; but that, during the time mentioned in the inquiry, she had been conscious of no pain, nor suffering of any description, except that she had dreamed some one was tying a string tightly round her right leg.* I should observe, that the latter circumstance was mentioned, not of her own accord, but in answer to a question put by myself, for the purpose of ascertaining whether she had imagined anything in particular while in the state from which she had just been aroused. She afterwards added to this account, that she had thought in her dream that she had felt irritated with the person who was tying the string, and had given him a severe kick. On attending the same evening, by Mr. Tosswill's desire, for the purpose of ensuring her, if possible, a tranquil repose during the night, she again solemnly assured me, in answer to my renewed inquiries, that she had been perfectly unconscious of the whole operation, asserting further, that had she the same trial to experience on following morning, it would not give her the least uneasiness, providing she could be certain of passing through it with as little sensibility. She had suffered more, she added, in very many dreams.

This latter conversation occurred about six hours after the operation, when the patient appeared composed and cheerful, and was, moreover, exempt, as she affirmed, from all distressing sensation. During the afternoon, however, she had given, by her movements, as well as by her exclamation, unequivocal signs of intense anguish, the result, as it was supposed, of a spasmodic action of the muscles of the back and loins, and to which an anodyne of forty drops of the tincture of opium, administered shortly after the operation, appeared to afford no relief. Mr. Downey, who had been left in attendance with her, having sent intelligence of this state of things to Mr. Tosswill, that gentleman lost no time in returning to the patient's bedside, and having in vain attempted to mitigate her sufferings by several times shifting her posture, was at length moved by her earnest and repeated entreaties, and the expressions indicative of excruciating suffering which were constantly escaping her, to have once more recourse to the aid of mesmerism. In a minute and a half he had succeeded in inducing the comatose state; and it was remarkable that, for the space of half an hour afterwards, the moanings of the sufferer were louder, the respirations deeper, and the clutching of her hands much more violent than during any period of the late operation. By degrees, however, all these appearances subsided, and were succeeded by a sound slumber of two hours' duration, from which she awoke naturally, and entirely relieved from the torturing pain she had recently felt. Since that time the stump of the amputated limb has given her no annoyance. Her rest has each succeeding night been sound and uninterrupted, although it has not yet been thought advisable to discontinue the usual mesmeric sleep daily. She has suffered neither from thirst nor fever, has been allowed a generous diet, and is, I trust, rapidly progressing to a perfect recovery, about four-fifths of the incipient cicatrix of the stump being already formed by the first intention. By Mr. Tosswill's express wish, I was present for the purpose of inducing mesmeric insensibility during the first dressing. On this occasion, in consequence of Mr. Paget's note, which had just appeared in the *Journal*, I was most particularly attentive to all that was passing; and I unhesitatingly affirm, that while the bandages and dressings, necessarily stiff and requiring no slight force for their removal, were being withdrawn from the wound, the amputated thigh being at the same time not unfrequently handled,—not a single muscle of the face or body of the patient, with the exception of those concerned in respiration, varied to the extent of the eighth of an inch; while the left hand, which lay within a short distance of the mutilated limb, in what I conceived to be a very cramped and constrained position, continued, from beginning to end of the painful process in question, absolutely motionless.

These are the principal circumstances, so far as they have come under my own observation, of a case which I cannot but consider as one not only deserving, but demanding, in no ordinary degree, the most serious and unprejudiced attention. I regret to find that, in some respects, the impressions made upon my own mind appear to have been different from those conveyed to that of a gentleman whose friendship I very highly value, and to whose sound judgment I am most willing, on all points connected, however remotely, with the honourable profession he follows, unreservedly to submit my own. Yet, on deliberately revising my statement, I see nothing which I can conscientiously alter, a circumstance which I the less regret, as I am well aware that the ancient dogma of the schools, "that all things received according to the quality of the recipient," is as true of appeals to the senses as of those made more directly to the understanding, and that of any number of witnesses to a remarkable event, each according to his peculiar temperament or previously existing opinions, will, although in perfect good faith, and without the slightest wish to mislead those whom he addresses, give an account more or less different of the whole transaction. Under these circumstances, if the testimony of the majority of those present is rejected as inconclusive, I am contented to rest the merits of the case, so far as the operation is concerned, upon the notes of Dr. Shaw, taken during its continuance, and to the correctness of which all parties fully assented before quitting the room in which it had been performed.

Without dwelling further, however, upon the question as to how far my own claims to be received as a witness are admissible,—a point on which my convictions are certainly not altogether in accordance with those of Mr. Paget, for I may safely assert that I was only too painfully alive to every sound and motion presented to my cognizance,—I pass on to call attention to one or two general propositions, contained either directly or by implication, in his letter, against which I must be allowed most respectfully but most unreservedly to protest. The first is the assumption, that an opinion unfavourable to the reality of the mesmeric state is fairly warranted by the circumstance, that for the space of six thousand years its characteristic phenomena have continued unnoticed, and, by consequence, unexamined. The very basis on which such an argument is advanced is, as I conceive,—and I ground my belief on the testimony of more than one ancient authority,—liable to be most seriously assailed; but, allowing the premises from which the objection is deduced to be in themselves correct, what, I would ask, without reference to the comparatively recent existence of experimental science in general, is on this showing to be said of the whole modern school of Physiology? For six thousand years the hearts of men have been pulsating, and the nerves performing their mysterious office in subserviency to sensation and volition. Long before the days of Celsus and Aristotle, laborious anatomists were found in multitudes, intent upon their investigations, not only of the dead, but what is more, of the living subject—with a scientific zeal, and, as it would appear, and indifference to every torture they might inflict, which left but little room for improvement even in the days of Cooper and Magendie. One might have imagined that, in such cases, the design and purpose of the circulatory system, with its exquisitely constructed series of valves and reservoirs, would at once have become palpable to observers, skilled, as we have now every reason to believe, in the most recondite laws and principles of hydraulics; and that the cessation of feeling or motion following the division, whether intentional or accidental, of various nervous chords, would have been as little likely to escape their notice: yet, how long is it since the nerves were gravely maintained to be mere hollow channels for the conveyance of the animal spirits, the chief seat of which was supposed to be in the ventricles of the brain,* and the circulation of the blood syllogistically proved to be impossible, in half the universities of Europe?

The readiness assumed in Mr. Paget's letter to exist on the part of the medical profession as a body, to appreciate the real worth of new agents in the healing art, and to catch at any chance of adding to their means of curing or relieving, is also a position which I fear will hardly be thought tenable, after a moment's reference to existing testimony. Would, indeed, that it were so! The well-known and distinguished professional career of the author of the statement, and the witness of those who have benefited by his skill, will, I know, be readily received as a proof that he at least is not to be cited as illustrating a rule to which there are numerous and most honourable exceptions; but, alas, what are the records of medical science for the last hundred years, but melancholy comments upon the limited existence of that very feeling of which he has inferred the universal prevalence! From the days of Jenner, when vaccination was forced into general adoption, not by a rescript of the College of Physicians, but by express authority of Act of Parliament, to those of Laennec, the discovery of a new remedial agent has encountered nearly the same kind of treatment; and the most strictly empirical of all sciences has incurred, wherever professed, the disgrace of being at the same time the most fiercely and obstinately opposed to every kind of innovation. With respect to this very mesmerism holding out (with what degree of probability it is not now necessary for the merits of the question to consider) a prospect of affording relief from suffering and terror, to an extent which we might presume would induce men

---

* I cannot refrain from calling particular attention to this assertion, on the part of an individual to whom the principles of mental philosophy may be easily conceived to be entirely unknown, as affording a most curious and natural illustration of a law long laid down by psychologists, in connection with the mysterious state of dreaming—I mean that by which the imagination supplies at once a cause, almost always erroneous and frequently extravagant, for existing feelings. Thus Dugald Stewart (Philosophy of the Human Mind, chap. v. part 1)—

"Our dreams are frequently suggested to us by bodily sensations, and with these it is well known from what we experience while awake, that particular ideas are very strongly associated. I have been told by a friend, that having occasion, in consequence of an indisposition, to apply a bottle of hot water to his feet when he went to bed, he dreamed that he was making a journey to Mount Ætna, and that he found the heat of the ground almost insupportable. Another person, having a blister applied to his head, dreamed that he was scalped by a party of Indians. I believe every one, who is in the habit of dreaming, will recollect instances in his own case of a similar nature."

A passage much to the same effect occurs in Sir Walter Scott's Letters on Demonology and Witchcraft—

"The phantom with the crutch was only a species of machinery, such as that with which fancy is found to supply the disorder called Ephialtes, or Nightmare; or indeed, any other external impression upon our organs in sleep, which the patient's morbid imagination may introduce into the dream preceding the swoon. In the Nightmare, an oppression and suffocation is felt, and our fancy instantly conjures up a spectre to lie on our bosom. In like manner, it may be remarked, that any sudden noise which the slumberer hears, without being actually awakened by it, *any casual touch of his person*, occurring in the same manner, becomes instantly adopted in his dream, and accommodated to the tenour of the current train of thought, whatever that may happen to be, &c."—Letter .

* Lord Bacon. *Historia Vitæ et Mortis.* CANON IV.

to err rather on the side of too great credulity, than of immoderate scepticism, in their judgment of its merits, who have been at all times the most forward and prejudiced opponents of its claims to public notice? Before what medical tribunal has it obtained an impartial hearing, or, indeed, a hearing of any description whatever? How great has been the number of those who have condescended to inquire before they have assumed the confidence to condemn? It is but a few years ago that Dr. Elliotson, an eminent physiologist and a man of undoubted integrity of purpose, was, simply in consequence of his public investigations upon the subject, driven from an institution of which he was a distinguished ornament. Not two years from the present time, an account of an operation performed without the consciousness of the patient, presented by Mr. W. Squires Ward, the operating surgeon, and a member of their own body, to the Medico-Chirurgical Society of London, was received with derision and insult— one of the auditors declaring, in the true spirit of philosophical candour, "that he would not believe the particulars stated in the paper, if he had seen them with his own eyes;" while another inquired whether the parties concerned in the transaction had been duly sworn before a magistrate! Lastly, it is not quite fourteen days since—

"So to compare
Great things with small"—

a resolution was moved and seconded in the Medical Society of Leicester, by which the facts narrated in the present letter were characterised as "the late disgraceful and disreputable proceedings of mesmerism," a compliment, for which, whether intended to bear upon the common sense or veracity, or both, of the parties implicated in its censure, I, as an humble individual of the number, willingly take this opportunity of presenting that learned body with my best acknowledgments. The realities, however, of animal magnetism (a term which I use simply for want of a better) are, at this time, by far too numerous and too well attested to be put down by contumely, or even by indifference; nor do I doubt that, to the number of authentic instances of its applicability to the alleviation of disease, or suspension of pain, others continue to be added until an amount of evidence shall have accumulated sufficient to shake the unbelief of the most inveterately sceptical. It is a consolation to those engaged in the investigation of truth, in whatever form, to remember, that the illustrations of its principles are never insulated; and that, however, one manifestation of its presence may be kept from receiving general acceptance by the efforts of prejudice for its suppression, others will continue to present themselves with a constancy which shall at length make their distinctive character as incontrovertible as their real existence. As in the case of the mystical tree of the poet—

"Uno avulso, non deficit alter
Aureus et simili frondescit virga metallo."

I have only, in conclusion, to add, by way of reply to the indirect and not ungentle censure conveyed in Mr. Paget's letter, upon my interference with a subject in which I am in no way professionally concerned; first, that in the present case I have been merely a subordinate agent, acting throughout under express medical direction; and secondly, that I have personally anything but a wish to stand forward as the public champion of mesmerism—far less, to obtain notoriety as a proficient in its mysteries. I fully and very readily concede, that the investigation and application of this singular agent—of the nature, extent, and tendency of which so little is at present known—should be entrusted to students in that department of science of which it appears to form a natural province. But so long as those who ought to take the lead in the investigation, or to be the first to ascertain the truth of the assertions of others who have preceded them in observation or experiment in connection with this specific subject, shall refuse to do either the one or the other, and remain content with denying, where they are under a direct responsibility to examine,—so long will more candid inquirers, however indifferently qualified for the task, endeavour to supply the place thus left unfilled;—for it is neither consistent with reason nor humanity, that the generality of mankind should look on with indifference, while propositions affecting the general welfare are received, in the place of a calm and unprejudiced investigation, with obloquy, ridicule, and contempt; or refrain from employing their own individual exertion, in the event of the inactivity of others, towards promoting the more common adoption of a sanative agency, which, in some cases, if not universally, bids fair to alleviate continual anguish, and frequently to disarm the surgeon's steel of at least one-half its horrors.

I am, Sir, yours very obediently,
JAMES FRANCIS HOLLINGS.

[So far we are indebted to the "Leicester Chronicle." Another article by Mr. Downey, assistant to Mr. Tosswill, is inserted, we see, in the "Leicestershire Mercury." The details of this very singular case are thus fully before our readers.]—ED.

Notes taken by Mr. Downey.

LEICESTER, Sept. 10, 1844.—Mary Ann Lakin, 24, temperament sanguineous, complexion clear, countenance sad, but cheerful when spoken to, pulse 80, and irritable. She states that she is suffering from a large tumour, on looking to which it presented the following appearances, and dimensions.—It engages the knee-joint, upper fourth of the leg, and the inferior two-thirds of the thigh; measuring 33 inches in circumference, 11 inches in length anteriorly, 12 inches internally, and 9 and a half inches externally. It is irregular on its surface, but smooth, on which are a number of distended veins, colour rather paler than natural, except at the inner part below the inner condyle of the tibia which is of a dusky red colour, softer and more undulating than in other parts, as this feeling is evident in all parts of the diseased mass. This discoloured portion is above the size of the palm of the hand, and from the near fluctuation of fluid being conveyed to the fingers at this part, it was apprehended that ulceration would shortly have taken place, and given the patient but little chance from any remedial agents. There is no affection of glands in the neighbourhood, but a slight puffiness for two inches along the saphena vein is manifest.

There is great œdema of the leg and foot: the latter does not reach the ground when she stands erect by the aid of crutches; the toes barely touch it. She complains of loss of appetite, flesh, and sleep, occasioned by pain of a dull aching character, and starting in the tumour. She has partial night sweats, suffers from the weight of the parts, and is in constant apprehension of injury, as the slightest jar causes her intense pain.

Previous History.

About four years ago, she first noticed a lump, about the size of a hazel nut, which was moveable, and situated on the outer side of the knee-joint. It was very painful when she walked; not so when it was touched; particularly painful when she put her heel to the ground, and of a darting character. It gradually increased in size.

On the 15th of September, 1842, she walked to the Leicester Infirmary, and was admitted. The part was cupped, lotions applied; and afterwards a dark coloured ointment. She remained thirteen weeks, and left without any benefit. On the contrary, her general health suffered, and she had lost flesh considerably. Since then the tumour has increased till it attained its present size. When amputation of the thigh was recommended as the only resource to prolong her existence, tonics and occasional anodynes were made use of with slight benefit, when it was resolved to try the effect of mesmerism. She was shortly afterwards mesmerised daily; her health continued to improve. She passed good nights, free from pain, and also during the day. On the 29th of August the thigh was amputated, she being in the mesmeric coma.

AUGUST 29, 1844.—Half-past 4 o'clock, p. m.—Having been present, as assistant to Mr. Tosswill, at the amputation of the thigh of Mary Ann Lakin during a mesmeric coma induced by Mr. Hollings, I noticed the following facts:—On the tourniquet of modern invention being applied, so as to stop the current of blood in the femoral artery, the patient moaned faintly, and took some deep inspirations; the corrugation of the eyebrows were slightly contracted, so as to approximate them, and give to her countenance an expression of sorrow more than present pain. The eyes were closed, and the countenance remained at rest during the operation, which was proceeded with in the manner recommended by the first Mr. Hey, of Leeds. During its continuance she moaned as if in a troubled dream, but remained almost motionless so that there was not any occasion to support her on the table as is usual in operations. After the operation, being placed on the bed, demesmerised by Mr. Hollings, and asked what she felt, she said she "had been dreaming that a person had tied something tightly round her sound leg, and that she felt angry and gave him a kick to make him desist." Having served an apprenticeship to the late Dr. McDowel, one of the surgeons to the Richmond Hospital, Dublin, I had during that time, and have since had many opportunities of seeing surgical operations. I do not recollect any similar case wherein so little evidence of suffering was given. They were all accompanied with more expression of pain in the countenance, and the patients expressed by exclamations how acutely they felt; but Mary Ann Lakin was calm, as her features did not change from the first expression noted, and she repeatedly declared afterwards she had felt no pain. There was comparatively little motion of the body.

I candidly state I believe and feel assured that the girl, by mesmerism, has evaded the horrors of the operation.

P. DOWNEY, M.R.C.S.I.
49, Humberstone-gate.

MEDICAL REFORM.

To the Editor of the "Medical Times."

SIR—Now that the insane ravings of some members of the Protection Assembly in London, which greeted the first appearance of the Medical Bill have in some measure subsided, and that the words of desperation, war to the knife, and no quarter, so freely used at these meetings, have been changed for the more wise and wholesome deliberations exhibited at the meetings of Berkshire, Bedfordshire, Leeds and other of the provinces, I hope you will allow me to say a few words, if not in favour, at least in palliation, of that part of the bill, which has hitherto been somewhat more severely chastised than it seems to me to have merited. I allude more particularly to the clause permitting the unlicensed to practise; the legalizing of quackery as it is more generally denominated.

I have heard it often said, and it can scarcely be doubted by any, the most disinterested, that much praise is due to the Government and Sir James Graham for introducing a measure which has been so long sought for in vain from other Governments; it is, therefore, a matter of great surprise to me that no one has yet been found to attempt an explanation of the motives by which an honest Government might be influenced to introduce this portion of the bill; for certainly it is not likely that Sir James, through sheer wantonness, and from no other cause, should endeavour to crush a learned profession, from whom he has received no sort of injury, and which, if maliciously assaulted, may yet have the power to do him much harm; or, if it be true that the secret authors of this bill are men high in the profession, it is scarcely possible they should wish to degrade it to which they owe aught of honour or emolument that they possess, and who must unavoidably sink with it, and share in its untimely disgrace. Since this would not be the conduct of honest or even of worldly-minded men, we are in justice bound to search for some other reason, by which the omission of legal enactments against the unlicensed should be quite consistent with an honest, wise and deliberate intention of benefitting the Profession.

And first let me state to what the cry for Medical Reform may be attributed. The same cause of distress that in the last few years have given birth to the grumblings of the Chartists, the strike

for wages, and the anti-league unions, have at the same time sowed the seed of dissatisfaction in the medical profession; there was a general glut in the market of the professional, as well as of the commercial world; the supply of medical aid was far greater than the demand; and at once the spirit of competition breathed its pestilence-stirring influence. The quiet, sober surgery of the medical practitioner was at the same time confronted with the glaring blue-and-red bottles of his next-door neighbour. The open prescribing shop again threw these into the shade, which in turn made a desperate struggle with the more extensive assortment of quack medicines, and the more alluring display of tooth-brushes and medicinal soap, contained in the shop of a fellow practitioner of a most respectable, scientific, and honourable profession. These reminiscences, I know, must be disagreeable to a great many agitators and grumblers against the present bill, whose interest it is to oppose any measure of reform, seeing that whatever Reform Bill is carried must necessarily have for its object the extirpating root and branch of evils such as these, and by so doing, restoring the profession to that state, when the being a member of it will be a sufficient passport to polite society. Nor are the evils of competition confined alone to the general practitioners; they only are enabled to practise in the manner above described by the competition at the schools among the lecturers to supply the requisite knowledge at the cheapest possible rate. Thus £30 or £40 paid by instalments may be sufficient to entitle the needy to undergo the required examination. Grinders that engage in three months, &c., pompously paraded in the prospectuses of large hospitals, are sufficiently enticing to the parents of the ill-favoured to place their sons in a profession which appears to be so good a refuge for the destitute, and where so many facilities are offered for ignorance, cunning, and wretchedness to thrive. Again, the honest physician or surgeon, who, publishing nought but that which may be of advantage to his fellowmen, seeks gradual and steady advancement by the soundness of his judgment, is met by those, who, owing their appointments to no particular gifts of mental endowments, seek to maintain their ground by publishing the cases of those wretched creatures whom chance and a hard fate have allotted to their care, and whose maladies are carefully watched and recorded by the industrious student for the advantage of the surgeon. These may appear hard words to use; this may appear strong language to many, who may seek to conceal evils so enormous, and facts so disgraceful and damaging to our profession; but the perils of shipwreck are near, and our best hope is manfully to face them, and save ourselves from destruction, by strenuous and timely exertions, rather than to cover our faces with our mantles, and to fancy that because we cannot see the danger, that therefore it is not imminent.

If this, then, be the true state of the profession, as I believe it is; if that be the real origin of the cry for Medical Reform, as is also manifest, it requires little foresight to perceive that any measure that did not remove these evils, would not be satisfactory to the more reflecting and honest portion of the profession. On the one hand, the demand for medical aid should be made equal to the supply; on the other hand, the shopsellers should be eradicated, or separated from the profession by a distinct boundary. To accomplish the first of these propositions, the supply must be lessened, which, carried to its full extent, would effectually meet the second. Both objects would be fulfilled, by securing that those entering the profession should previously possess a liberal education, by prolonging the attendance at the hospitals, by equalising the fees of education, and by rendering the qualification to practise the same throughout the United Kingdom. By these means the ignorant would be excluded, and needy adventurers be at once repulsed. Under these regulations young men would have the advantage of education in a public school, where not only a thorough classical knowledge would be attained, but the spirit of honourable rivalry be early imbibed, and all petty feelings eradicated in their growth. There, in the little worlds of public schools, contests would be carried on, which would prepare the boys to wage them in the more public paths of professional life with a candour and honesty, which are now looked for in vain; there would then be less of backbiting and slandering, and more of justice and good feeling; in a word, their education of accomplished gentlemen would be the best guarantee that they would practise as such. That these are the principles on which the bill is founded and the Government have acted, may be made manifest, by comparing the bill with the proposed examination for the Fellowship; for it is stated on good authority, that the intention is that all surgeons shall in future be Fellows. Under these rules two or three days' examination in Greek, Latin, mathematics, surgery, anatomy, and therapeutics, will be substituted for one hour; twenty-five years of age for twenty-one years; six years attendance at a hospital for three years. If the examination for the physician and licentiate be raised in proportion, the most dull will easily foresee that the profession will be restricted to men of education, of talent, thorough practical knowledge, and of no mean estate. The principle on which the Bill is founded is therefore restriction—restriction by age, by examination, by fees for education—but here restriction ceases, and the unlicensed may practise. There must have been a motive for framing the bill with such an apparent anomaly. The Government, doubtless, contemplated great opposition to a bill consisting wholly of restriction; not from the profession, who would readily perceive in it increase of gains accompanying decreasing labour, and calm rest substituted for continual watchfulness; but from that class of legislators in the House of Commons, who profess to take the poor under their especial protection, and zealously to defend their interests. They would urge strenuously in opposition to such a bill, that medical advice would thereby be rendered so expensive, that the poor would be effectually deprived of it. Under these specious reasons they would doubtless be assisted by a more interested, ignorant, and tolerably numerous set of legislators, who claim the freedom on the part of the aristocracy to endanger their lives and those of their families by the employment of quacks. To obviate this difficulty, and not entirely to deprive the poor of medical advice, the Government have devised these means, and will not oblige every one to pass an examination, and thereby will leave to the poor a class of men—the chemists, perhaps, who, while they will be as well qualified as many who now attend them, will not be allowed to assume the title of medical practitioners. And here, again, restrictions are manifest. The unlicensed will not be permitted to register as medical men; they will be restricted from giving evidence in Courts of Law; restricted from holding any appointment; and from making any legal demand for advice given. The Government will make the line of demarcation between quacks and others sufficiently simple to the most untutored of her Majesty's subjects, instead of being, as at the present time, a difficult task to the man of education and research to determine the relative value of the various degrees which are so pompously paraded throughout the metropolis; at the same time they will throw the responsibility on the public themselves of selecting unqualified persons for the attendance on those who are near and dear to them. These restrictions would to a great extent protect the legally-qualified practitioner. Those who are not registered would be known to the guardians, and to every busy body in every parish, as men of an inferior grade; as not being allowed to give evidence on medical cases; nor lawfully claim for attendance. There would be no such confusion as at present. The public now believe that no one is allowed to practise who is not qualified, though there are always several imposters in every poor neighbourhood—they now select indiscriminately. Under the new bill it would be known to all that the unlicensed could practise, they would of course receive a name, and perhaps be 'ycleped the "quack doctors"—this could not fail to make a wide gulph between them and the qualified practitioner, and the poor would not be the least ready to see the distinction or to seek the best advice whenever their means would allow. I desire not to be misunderstood. I do not defend the clause; I believe it to be an error to suppose that by limiting the profession to educated men and to gentlemen, you would deprive the poor of advice; on the contrary, under all circumstances, be the laws what they may, I believe there will be sufficient humanity in our profession, and that the poor will never be neglected, till man's nature be sadly changed from what it is. I merely offer these remarks to the serious consideration of the profession, believing they may have greater weight with just and conscientious men than at present seems probable, and to express a hope that if the time should come when we must have the whole bill or none at all, that this clause—which I cannot believe will operate so injuriously as is generally represented—will not lead the profession to forego the advantages and improvements contained in the remaining portion of the bill, which you were the first boldly to place before the public.

I remain, your obedient servant,
September 17th. CHIRURGUS.

To the Editor of "The Medical Times."

SIR,—This being the moment when the medical world is making a move to establish its character as a scientific profession, I cannot but admire the advice you have promulgated, "*That the different societies which are formed to advocate our respectability, should have men of professional character to conduct their affairs.*" If they fail in this precaution, respectable men must decline to be numbered with such nondescripts, for the world never forgets the old adage, "Tell me what company you keep, and I will tell who you are." This circumstance of discreditable associates has been the downfall of the Medical Protection Assembly, and will in a similar way be the ruin of the Marylebone Association, if they persevere in having such a man for its secretary as the person whose grammar you described in your last number. I cannot find the name of this Wm. O'Connor in the list of *any College of Surgeons*. Could not the Marylebone Association find a person in that extensive borough who was professionally qualified, at least, to act as their honorary secretary? To give you a specimen how some of our medical brethren in foreign countries support the respectability of the profession, I enclose an extract from the *Calcutta Star* of the 3rd of July:—

"NOTICE.—A medical gentleman, proceeding to England and returning within a year, begs to offer his services in a professional capacity to any party requiring such, affording a most eligible opportunity to any native gentleman desirous of visiting Europe; he will also be happy to execute commissions of any kind, horses, dogs, &c.; and having an excellent chance of selection at home, he feels confident that parties requiring such, would perhaps be more than satisfied with the result. As to the time of his departure, a month sooner or later would be unimportant. For particulars apply to Messrs. Bathgate & Co."

I am, your obedient,
AN OLD SUBSCRIBER.

STATE OF PROFESSIONAL FEELING.

Since our last number was published we have received accounts of general meetings. One of very great interest, conducted, we are informed, in a philosophic and gentlemanly spirit that reflects the greatest honour on our Leeds brethren, was held at that important borough on Thursday last. The *Leeds Times* (which has been sent to us) gives the details.

Samuel Smith, Esq. occupied the chair.

In opening the business of the meeting, the Chairman, after explaining its object, stated that the reason why the physicians of Leeds, as a body, had not united with the other medical practitioners, in the present proceedings, had arisen from some misunderstanding, connected with the preliminary arrangements. Having given this explanation, he read a series of resolutions, which had been previously drawn up, for the consideration of the meeting, as follows:—

"1. That this meeting observes with pleasure that by the introduction into Parliament of a bill entitled 'A Bill for the better regulation of Me-

dical Practice throughout the United Kingdom,' Her Majesty's Ministers have at length admitted the necessity which has been so long felt by the profession of making some alteration in its government.

"2. That this meeting views with satisfaction the approximation made by this Bill towards the attainment of a high and uniform standard of qualification for all members of the medical profession, and it is earnestly hoped in the progress of the bill through the Houses of Parliament its provisions may be rendered as complete as possible.

"3. That whilst it is admitted that it may be exceedingly difficult entirely to suppress quackery, this meeting is decidedly of opinion that some more stringent measures than are contained in the proposed bill ought to be adopted for the protection of the public and the profession against ignorant and unqualified persons.

"4. That a permanent Committee, consisting of the following gentlemen—Messrs. Braithwaite, Brown, Bulmer, Cass, Chorley, Garlick, Hall, Hey, Land, Macfarlan, Nunneley, Price, Ratcliffe, Smith, and Teale, with power to add to their number—be now appointed for the purpose of communicating with the borough members, of watching the progress of the Bill, and taking such other steps as they may think necessary for carrying out the views of this meeting.

"5. That this meeting desires to express its thanks to *The Times* newspaper for its able advocacy of the cause of medical reform."

Mr. Hey moved the first resolution, with respect to which, he said, he would not detain them with any observations, as it was merely of an introductory character, expressing the desirableness of some measure of medical reform, and their satisfaction that her Majesty's government, had become alive to the subject.

Mr. Cass seconded the resolution, which was unanimously adopted.

Mr. Nunneley moved the next resolution. He strongly urged the desirableness of a high and uniform standard of qualification for the medical profession, and pointed out many of the disadvantages which he conceived to result from the large number of licensing bodies at present existing in this country, all possessing certain privileges, but having no uniformity of qualification, and many of them only conferring the right to practice in limited localities. He conceived that the science of medicine was one and indivisible. He repudiated the existence of artificial distinctions in the profession, considering that no man was qualified to practice in any single division of the science, unless qualified to practice in the whole; and that the only distinction which ought to exist amongst medical men, was that which was the result of superior ability or greater industry. He would have the government fix a high standard of examination, but having done that, he would have it nterfere no further, but leave those who had passed that ordeal to find their own standing in the profession. As to the bill which had been introduced, he thought it good in some respects, and that Sir James Graham was well intentioned in the matter; and referred to the proposed council of health for the regulation of the different licensing bodies, as calculated, in some measure, to produce uniformity of examination. Speaking on the subject of quackery, he urged the necessity of protection, both to the public and the profession, and observed that scores of individuals in this town had lost their lives from improper treatment by unqualified persons. He also instanced, that within the last fortnight, he had seen a person who had lost an eye, and he had no hesitation in saying that it was not put out by the disease, but by the druggist.

Mr. Matthew Hall, seconded the resolution, which was also carried unanimously.

Mr. Price proposed the next resolution, urging the government to adopt more stringent means for the suppression of quackery, against the inroads of which the government measure seemed to him to offer no sufficient protection.

Mr. Pullan having seconded the resolution,

Mr. Sharpe moved as an amendment, "That in the opinion of this meeting, no bill will be beneficial to the public, or satisfactory to the profession, which shall not insist upon summary punishment, by fine and imprisonment, on conviction before one or two magistrates, upon all persons who hereafter shall practice medicine or surgery, without having obtained legal qualification from one of the legally constituted boards of the United Kingdom."

Mr. Wilson seconded the resolution.

Some discussion ensued on the two motions, in which Dr. Thomas Smith, Dr. Pyemont Smith, Mr. Bulmer, Mr. Chorley, Mr. Samuel Hey, Mr. Wilson, Mr. Hall, and others took part, and on a division an equal number appeared for each, but the chairman gave his casting vote in favour of the original resolution, considering that it implied the same thing as the amendment, and was the more dignified, and perhaps less dictatorial of the two.

On the motion of Mr. Braithwaite, a permanent committee, to carry out the views and objects of the meeting, was appointed.

On Tuesday evening last a meeting of members of the medical profession, resident in Reading and its neighbourhood, was held in the Council Chamber. The meeting, though not numerous, was important.

The following members of the profession were present:—Dr. Smith, Dr. Cowan, Dr. Woodhouse, of this town, Dr. Brown (Newbury), Dr. Somerville (Pangbourne), J. Bulley, F. A. Bulley, F. Cox (Aldermaston), — Colburn (Marlow), J. Dunn, A. G. Field, J. Harrinson, R. J. Hale, W. Hewett, S. W. Kidgell, G. May, E. May, T. B. Maurice, — Robson (Henley), R. Smith (Whitchurch), T. Taylor (Wargrave), C. Vines, T. S. Workman, M. Workman, W. Wall (Mortimer), T. L. Walford, and W. B. Young, Esquires.

On the motion of Mr. G. May, Dr. Smith took the chair.

Dr. Cowan, in supporting the first resolution—"That whilst this Meeting hails with satisfaction certain general measures relating to the Education and Government of the Medical Profession, as contemplated in the Bill recently introduced into Parliament by Sir James Graham, they yet feel called upon to protest, in the strongest manner, against those clauses which involve the removal of restrictions upon unqualified practice," said that he did not wish to pronounce indiscriminate condemnation, or to deprecate every part of the bill, as it unquestionably contained many clauses adapted to improve materially both the education and the corporate interests of the medical profession, and he gladly hailed anything calculated to promote that improvement. He would thankfully admit whatever was useful and beneficial in the bill, but he must protest most strongly against that part of it which involved the removal of all restrictions upon unqualified practice. One of the main points of the bill, which was the establishment of a central controlling and governing body, or Council of Health and Education, exercising authority over all existing medical corporations, was, by itself, undoubtedly a most desirable measure, and one which had long been wanted. But as provided for by this measure, it must be regarded as too exclusively ministerial in constitution; the governing body would be composed of a majority of official men, and eventually the profession be represented only by one or two active medical members, thus rendering the council a most inadequate representation of the opinions and interests of the profession, and calculated rather to injure than to benefit them. Still, the proposal was well intentioned on the part of government, and should so far be acknowledged with gratitude. Another point which called for acknowledgment was the proposition for securing one uniform and efficient standard of professional education—compelling all practitioners to give evidence of their qualifications, reducing the number of licensing bodies from nineteen to five, and rejecting all foreign diplomas. This, with an improved system of registration, and the limiting of public medical appointments to regularly educated practitioners, was most decidedly a considerable boon; but notwithstanding these acknowledged advantages, it would be far better that the profession be left as it was, than that the bill should pass in its present form. Dr. Cowan then proceeded to lay great stress on the mischiefs of empiricism—exhibiting in forcible language the claims of the profession to government protection, and insisting that if, as he admitted empiricism could not be wholly destroyed by legislation, it could be placed under restrictions. Dr. Cowan then referred to several clauses in the bill, illustrative of his arguments, and concluded by strenuously urging his brethren to protest decidedly and unanimously against the removal of restrictions on unqualified practice—(Cheers).

Dr. Brown said that some time ago he saw in a druggist's window in Newbury an advertisement of "Anti-Dinnegar pills," and upon inquiry he found that these pills were to be taken two or three before dinner. A few weeks afterwards a poor woman came with her child, suffering from strumous ophthalmia. (Here the Doctor detailed the urgent symptoms of the case). He remonstrated with the woman on her apparent neglect of the child, but she said it was quite a mistake; she had not neglected it, but for six weeks she had been purchasing "Professor ————'s pills," and afterwards finding they did no good, had had washes from the druggist until her money was exhausted, and she came upon the Dispensary. It was precisely this kind of practice that Sir James Graham's bill would encourage.

Dr. Woodhouse said that after the very able speeches of his learned friends who preceded him he would not occupy their time. After reminding them of the necessity for using their influence in their respective neighbourhoods, and for uniting together, he begged to propose the second resolution, proposing petitions to Parliament, in accordance with the preceding resolution.

Mr. Bulley seconded the resolution.

Mr. G. May said he held in his hand a petition which, after the able manner in which the subject had been discussed—he might say exhausted—by Dr. Cowan and other speakers, he would content himself with placing before them, heartily hoping it would meet with their concurrence.

The following is the Petition:—

To the Honourable the Commons of the United Kingdom of Great Britain and Ireland in Parliament assembled.

The Petition of the undersigned Physicians, Surgeons, and Apothecaries of Reading and the surrounding districts,

Humbly sheweth,

That your petitioners are legally qualified Practitioners of Medicine and Surgery resident in Reading and its neighbourhood.

That they deplore the anomalous condition of the Medical Profession, and concur in the expediency of its revision by legislative enactment.

That although they regard with satisfaction some of the provisions contained in the projected Bill of Sir James Graham, yet as a whole they view it with disappointment, disapprobation, and alarm; for, while it professes to protect the medical profession, and the public health, they believe it to be directly and most grievously injurious to both.

That it offers direct encouragement to Empiricism, with its enormous and incalculable evils, tends to degrade the educated and legalized Practitioner, and to discourage and retard medical science.

That it is unjust to Practitioners who have qualified themselves by a prolonged and expensive course of study, to subject them to an open and unrestricted competition with the uneducated, and while protecting the Army and Navy, together with the poorer classes, it fails to provide for the great body of the community, and exposes them to the wrongs and miseries of the ignorant and unprincipled pretender.

That the repeal of the Apothecaries Act, without substituting ample security against empiricism, is both unwise and unjust; and that any bill which does not provide direct and efficient prohibition, will fail to give adequate protection to the Profession and to the community.

Your Petitioners therefore respectfully and humbly appeal to your Honourable House, in confidence that the prayer of their petition will duly receive your serious and mature consideration.

And your petitioners will ever pray.

Mr. Colburn, of Marlow, seconded the resolution, accompanying to the effect that the petition should be entrusted to the Marquis of Downshire, and Mr. C. Russell.

Mr. Maurice moved, and Mr. Cox seconded, the next resolution, that a copy of the Petition should be sent to the *Medical Times*, the *Times*, and two or three other journals.

The fourth resolution (thanks to the Chairman) was moved by Mr. Kidgell, and seconded by Mr. A. G. Field.

On Monday last, a public meeting was held at the General Infirmary, Hereford. The following gentlemen were present:—Drs. Lye, Gilliland, Morris and Glasspoole, of Hereford; Dr. Davis, of Presteign; Dr. Strong, of Ross; and Dr. Turnbull, of Byford; Messrs. Price, Braithwaite, Lingen, Cam, Archibald, Burnard, Morris, Bull, Leake, Wandly, and T. Price, of Hereford; Messrs. Marshall and Blakely, of Kington; Messrs. Wood, Tanner, and Gwillim, of Ledbury; Mr. Watling, of Leominster; Messrs. Burnett, Jones, and Willmott, of Ross; Mr. Whitcombe, of Presteign; Mr. Millard, of Whitchurch; Mr. Lane, of Grosmont; Mr. Giles, of Byford; Mr. Denham, of Canon Pyon; Mr. Woodcock, of Eardisley, &c.

The following resolutions were then proposed, and carried unanimously:—

"That the members of the medical profession present at this meeting, having had under their consideration 'A Bill for the better Regulation of Medical Practice throughout the United Kingdom,' recently introduced to the House of Commons by Sir James Graham, cannot but regard its provisions with feelings of disappointment and alarm; for while they allow that the establishment of a council of health, and an improved system of organization for the entire body of the profession is much to be desired, yet they consider that many of the provisions by which these objects are proposed to be effected, are liable to great objection, and that the repeal of all existing protective enactments, without the substitution of others in their place, more than counterbalances any beneficial effects which such an improved system might be calculated to produce."

"That this meeting deprecates in the strongest manner possible that principle of the bill which, by removing the stigma of illegality from empiricism, throws open the practice of medicine to every unqualified person, as a measure, disastrous to the public welfare, and ruinous to the best interests of the profession; inasmuch as it is the existence of the present penal enactments alone which, by imposing a restraint on irregular practice, enables the public to discriminate more readily between the properly educated man and the empiric, and thus prevents the lower classes in particular, from being the dupes of a false and dangerous confidence in those who are utterly unworthy of it."

"That this meeting recognises with satisfaction the benefit which has accrued to the great body of the profession, and through it of necessity to the public at large, from the improved course of study, and the increased amount of qualification required by the Apothecaries' Company in the candidates for their license; and, therefore, most entirely disapproves of the repeal of the act of 1815, unless some other measures are enacted, not only to insure a still further improvement in the system of medical education, but also a more efficient protection for the interests of those who, at a great expenditure of time and money, have already qualified themselves for the due performance of the responsible and arduous duties which devolve on the practitioner of medicine."

"That this meeting, fully admitting the want of a general Council of Health as well as of a more perfect organization of the medical profession, and equally sensible of the beneficial results likely to follow their introduction, cannot but view with anxiety the manner in which these objects, are proposed to be carried out in the present bill, and more especially the absolute power which it vests in the Government by giving to it the appointment of more than two-thirds of the first council, and the absence of any guarantee that the interests of that great body of the profession—the general practitioners—shall be in any way represented therein."

"That a potition founded upon the above resolutions be prepared, and forwarded to the members for the city and county, for presentation to the House of Commons; and in the event of the bill reaching the House of Lords, that a similar petition be placed in the hands of the Lord Lieutenant of the county, for presentation to that House."

"That the thanks of this meeting be given to the editor of "The Times" newspaper, and the medical press, for the very able manner in which the cause of the profession has been advocated, in several leading articles which have appeared in those publications, on the subject of the New Medical Bill."

"That this meeting do resolve itself into an association of the medical practitioners of the city and county of Hereford, to be called "The Herefordshire Medical Association," for the purpose of watching over and protecting the interests of the profession, until they cease to be threatened in any such manner as they are in the present bill, with the same constitution as at present."

"That the thanks of this meeting be given to the sub-committee and honorary secretary for conducting and preparing so ably the proceedings, resolutions, and petition for our regulation on the present occasion."

"That the thanks of this meeting be given to the chairman for his efficient conduct in the chair."

After the meeting at the invitation of the gentlemen resident in Hereford, their medical brethren from the country dined with them at the City Arms Hotel, and the evening passed off most agreeably to all parties.

On the 9th Sept. a meeting was held in Birmingham to form an Association. The Council was thus formed, on the motion of Dr. Wright, seconded by Dr. Evans. Dr. Eccles; Dr. Evans; Dr. Melsom; Dr. Percy; Dr. Wright; Mr. S. Amphlett; Mr. S. Berry; Mr. A. Brindley; Mr. E. Chesshire; Mr. T. Chavasse; Mr. P. Chavasse; Mr. T. Freer; Mr. T. Green; Dr. Ingleby; Mr. G. B. Knowles; Mr. L. Parker; Dr. Arrowsmith, Coventry; Dr. Thompson, Stratford-on-Avon; Mr. Best, Bilston; Mr. Bird, Tamworth; Mr. Cartwright, Dudley; Mr. Davies, sen., Coleshill; Mr. Fowke, sen, Wolverhampton; Mr. Horton, sen., Bromsgrove; Mr. Moore, Halesowen; Mr. Morgan, Lichfield; Mr. Mason, Nuneaton; Mr. I. P. Oates, Sutton; Mr. F. Proud, Wolverhampton; Mr. Pitt, Walsall; Mr. Power, Atherstone; Mr. D. Rice, Stratford-on-Avon; Mr. Troughton, Coventry; Mr. Underhill, sen., Great Bridge.—Mr. Sands Cox was appointed Provisional Honorary Secretary. Dr. Male; President; and Dr. James Johnstone; Mr. R. Wood; Dr. Birt Davies; Mr. W. Sands Cox; Dr. Bell Fletcher; Mr. G. Elkington; Mr. Edward T. Cox; Mr. Bartleet; and Mr. F. Elkington; Vice-Presidents.

The meeting wisely declined expressing any opinion on the bill till its clauses had been maturely considered by the committee to which they were referred.

At Stourbridge another meeting was held, but we are informed that the great majority of medical men in the neighbourhood did not participate in the proceedings, which, indeed, were limited to a resolution in favour of the Apothecaries' Company.

— At Liverpool the Members of the Medical Institution met on Saturday last, the learned and venerable Dr. Jeffreys in the chair, and Mr. Davies, the surgeon of Great George Street, acting as secretary. A diversity of opinion being expressed, it was resolved to call a General Meeting with a view to deliberate on the bill's provisions, and to take such proceedings as might then be deemed requisite.

NOTICES TO CORRESPONDENTS.

Several communications have reached us on the Medical Bill. We find that in all, the opinion is decided, that while ready to accept the present bill, every energy should be marshalled to force on it further improvements. Several suggestions have been made to us as to points that might be usefully added, or modified; but we must pass them by for the present, to urge the aim that animates all the writers, viz., the formation of societies, first, to deliberate on the clauses of the Bill; secondly, to express the conclusions come to; and thirdly, to take efficient means of giving them force in the proper quarters—the Houses of Lords and Commons. "*There should be no nonsense,*" *says a* Provincial Surgeon, "*about throwing the Bill out of the House, for that is just the way to throw ourselves out of ours. Our profession will not be worth living in, if something be not done speedily for us. I see no mischief in the Bill, but much good: the omissions are neither here nor there. I may take a half loaf, if I cannot get the whole: and if the whole be so much better than half a portion, the half is much better than none. Let Netherby James reform us, and after that we will try and reform the quacks. There is as much sin within as without the walls.*" *Another Correspondent, from Manchester, who urges the mischief of destroying the act of* 1815, *without enacting fresh penalties on quacks, is thus answered by a* "Rural Apothecary,"—"*The protection of the Apothecaries' Company! Are people mad, Mr. Editor? Within a radius of* ten *miles, I have at least as many quacks living about me! Suppose that the average, and what shall we say of the protection from quacks which leaves us a quack per mile? If we have such protection many years more, it is easy to see that two-thirds of us will get to the workhouse. In the country I live in, the Apothecaries' Company never punished a quack since* 1815: *but they did punish somebody—a poor devil of a surgeon. Call ye this backing your friends? Faith I'll have no more of their 'protection,' if I can help myself. I've paid them for a license I'm ashamed to mention; and I honestly believe I've lost the only respectable patient in the neighbourhood, since a malicious rival let it out that that Mr ——, (I being also a surgeon like himself) was only an apothecary. God protect our young men, I say, if we force them to run the same gauntlet, because, forsooth, of the great benefit of protection!*"—*Notices of a number of other correspondents on this interesting subject we must defer till next week.*

A Supporter,—*Our reason for making no proposal for the* Lancet *is simply this: that we reciprocated the very prevalent opinion that it was a doomed publication. A ruinously losing speculation already, every day but adds to its mercantile deterioration, and the public distaste for it is getting so insurmountable, that while every fresh vicissitude in the numberless series is another assurance of peril, and fresh guarantee of speedy destruction, yet if it do* not *undergo a new transformation, and* immediately, *it cannot keep afloat even another three months. We await hourly another despairing change, or the long expected catastrophy. Our Correspondent has our best thanks for the hintnevertheless.*

Dr. H.—*A pencilling will be given next week.*

Medicus.—*Anybody may practice surgery legally, and under that name treat all manner of diseases. The draft of the New Bill does not distinctly lay down what will be the relative positions of parties with one or more diplomas.*

Mr. Hurd *is thanked for the Castlebar case of hydrophobia.*

Guyensis—A Subscriber—Peter Pindar—Mr. R. Brown—Mr. Holmes—Corydon—A Former Member—*under consideration.*

H. A.—*Paper on "Blue Nose" will be shortly given.*

Mr. W. Smith.—*The lectures of Mr. Wharton Jones were concluded in No.* 249. *They complete the Anatomy and Physiology of the Eye.*

A Subscriber *sends us the following illustration of the protection from quackery at present enjoyed:—*

"Having, for some time past, a young gentleman under my care, with 'hæmoptysis,' and the symptoms now yielding to the treatment adopted, he returned to his paternal home, viz., Plaistow, for a few weeks. Recovery was slow: but, from the effects of a fright, the hæmorrhage returned. This was caused thus:—The young gentleman called upon a Mons. L'Amert, of advertising notoriety, who 'asked his name?' And, on hearing, said, 'You must pay me a pound.' It was done. 'Who previously attended you?' Answered. 'Young man, you'll die,—but I can save you: what money have you got about you?' The young man took out the silver he had, viz., 10s.: it was seized, with the remark, 'You must bring me £9. 10s. more, by 3 o'clock,' (this occurred on Monday last, the 9th inst.) 'or 5 o'clock at farthest, without fail.' The young man then left the house, and has been seriously indisposed since.—I have been also informed of a similar case, where the young man allowed £4 to be taken from him by the 'advertising doctor,' through fear alone. With your suggestions and advice

(which the father of my patient is now determined to act up to) he will, if possible, shew this individual to the world in his true character."—

[*We fear nothing can be done with the demoralizing and murderous empiric. Even exposure is no punishment, for a change of name is as easy to such fellows as a change of garment. They will continue doing mischief as long as the law is as it is, and the press opens its columns to their filthy advertisements.*]

A Constant Reader *is thanked for his suggestions, but we* fear *we can do little in the way he suggests.*

The article in the Morning Chronicle *on Medical Reform has not escaped our attention.*

A Poor Man.—*Application should be made at the London Fever Hospital, St. Pancras Road.*

W. H.—*Neither the diagnosis nor prognosis are so put as to allow us to form a correct opinion. Besides, strictures in such cases can never be founded on testimony of so unprofessional a kind.*

Tempus.—*The Meteorological Society meets in Old Broad Street. Mr. White is Secretary.*

A correspondent suggests, that a meeting of medical men should be immediately convened in Bristol. We suggest, that Manchester, Liverpool, Sheffield, Edinburgh, and the large towns generally, should set themselves in motion. We hope, however, to hear of no further meeting committing itself to a premature condemnation of the Bill as a whole. We cannot think it prudent to take any step which will fling us again, without any reasonable expectation of a legislative measure.

D. N.'s *Case of Spermatorrhœa is declined, with communications from several other obliging correspondents. We take this opportunity of adding, that, unless papers have a special interest, we shall be much favoured by their not being sent to us.*

X. Y. *suggests that quacks should be made to pay annually for a license, and "be obliged to put outside their place of practice, 'Licensed Empiric,' in large letters, like publicans, or the dealers in marine stores." It is an old suggestion of our own.* We *think* X. Y.'s *plan, therefore, very admirable.*

Curtius *is personal; and omitting his name, seems anxious that we, instead of he, should leap into the gulph of libel law, which, though amended as it is, need not be unnecessarily tempted. A good action, they say, makes a paper. But what should we get by announcing that our anonymous correspondent's neighbour set a broken leg amiss, and is doing such things* frequently, *i.e., oftener, we suppose, than Curtius likes.*

A Correspondent, from Leeds, *thus describes to us the medical meeting recently held there:*—"The meeting was, altogether, of the most gratifying description. The tone and manner of the speakers were gentlemanly. There was none of that mean spirit of party which, it is to be regretted, has defiled so many recent meetings of the Profession, and exposed them to ridicule. The general feeling seemed to be, that Sir James Graham had brought forward a most important measure of Medical Reform, *based on sound principles*,—and that its tendency, if carried into effect, would be, to elevate the Medical Profession in the public estimation, and give it a higher standing than it now possesses. The only objection advanced against the measure was, that its provisions for the repression of Quackery were not sufficiently stringent—though it was generally admitted that Quackery was one of the things most difficult to be put down by legislation; and, moreover, that it existed to no small extent within the Profession itself.—It would be well, indeed, if other meetings adopted the high ground, and conducted themselves in the gentlemanly manner, in which this of Leeds has done,—a meeting which, it must be added, was countenanced by several names which rank high in the Profession, such as the Heys, Braithwaites, Teales, Nunneleys, and many others."

Large as has been the space we have this week given our readers, we regret to say that several communications and articles of great importance, have been unavoidably excluded till next week. One article we particularly regret—that on the Poor-Law Guardian's treatment of Mr. Deshon.

M. P.—*The notes of Dr. Shaw and Mr. Paget will be found in the last number.*

THE MEDICAL TIMES.

SATURDAY, SEPT. 21, 1844.

I take the measure on the same principle as Paddy put up with his hat in the broken window: not that it lets the light in, but that it keeps the wet out.—O'CONNELL.

THE Council of Health is looked at, we see, with suspicion by some very well-meaning parties. "Unconstitutional," "Centralized evil," "Government tool," and terms of a similar kind, have been applied to it pretty freely; and we have regretted to see that a gentlemen of the acuteness of Dr. Cowan has, in this matter, been seduced from his accustomed allegiance to good sense and sound policy. Let us, therefore, briefly see what this body is—how composed—and what apprehensions it should justly excite.

The Council is to be composed of eighteen members, of whom her Majesty's Home Secretary of State will be one. He will also be President *ex officio*. Six of the eighteen will be nominated by the Government: six will be chosen by the Profession, or, in its name, by the six Colleges of Surgery and Medicine: and five will be the Regius Medical Professors of the Universities (those of London and Aberdeen giving no members). Thus, the Council will consist of eleven medical men against seven who may, or may not, be members of our Profession; and it should be remarked that, of these seven, one cannot be expected to take any part in the active business of the Council—viz.: the Secretary of State.

Now, we confess at once, that if the six members, furnished by the six Royal Colleges, are really furnished by the Colleges, and not by any small section of each, we have no earthly objection to urge against the constitution of this ruling body. Far, very far indeed, from us be the miserable notion, that six laymen—men of education and station—cannot represent the general interests of the public in so very important a council without prejudicing ours. We have no jealousy at the influence, no fear at the concurrence, of an enlightened member of society, because he is not in our own profession. We are not bandits, that other men's interests should be necessarily opposed to ours. It is our proud boast that we do not live by miserable advantages stolen out of the law's unfairness or partiality. On the contrary, show us one claim we advance on the legislature's attention, not supported by motives of *public* policy, and that instant we abandon it. As thus, on our side, there is no distrust or dislike of the enlightened; on the side of the enlightened, there is no groundless jealousy of us. There never yet existed a tribunal of gentlemanly and educated men, from whose hostility medical men had one iota of danger to fear. Our science appeals to their cordiality by a title they cannot resist: their high standing with themselves, and with one another, requires that they should do homage to ours. As taste cannot condemn an Apollo Belvidere—*mind* cannot but press to its heart Medical Science. Indeed, it may be much doubted whether the whole body of the profession will not rather be benefitted than injured by the presence of non-Medical men on the Council. Belonging to no one grade of the Medical Hierarchy, they will be equally unprejudiced to all. They will labour under no prepossession to unfit them to arbitrate between the conflicting interests and pretensions of the different medical sections, and will, in truth, be the standing counsel of aggrieved members of the profession. They may, too, shame a stray medical member—and we do not yet know how much this may be required—into a due respect to his own calling, force him to forget minor *grade* interests in the general weal of his brethren, and, in short, keep alive and ardent that *esprit du corps* which, in some high regions, it must be confessed, wants the application of the blow-pipe. We have somtimes seen that in Medicine are to be found the men least friendly to its cultivators.

The talk we have heard that this composition of members gives the Government a despotic power over us is just simply moonshine. In the first place, we believe that no Governments have an interest in injuring or degrading the medical profession. They have every motive that can influence honourable, nay selfish men, to put it on the most respectable footing. The improvement of medical science is a new step in civilization, an actual increase of the best part of national wealth, a boon of certain and momentous advantage to every man—minister or peasant—and the Government that stops its progress, stands eternally disgraced, as something worse than Vandal. Besides, the Government is not irresponsible. Where there is no party interest in question, it would be a bold ministry which would mis-use its power over the medical profession. It would soon find that medical men, backed as they would be by the press and by Parliament, if not strong enough to secure perfect legislative justice, are far too strong for an essay of Ministerial aggression. It is not in the nineteenth century, and with such a press as we have, that we are to fear administrative acts of outrage from an English Secretary of State.

To the appointment of the Regius Professors of Medicine, we have no objection to urge. The Kidds, the Havilands, the Stokes, the Alisons, and men of the same kind, promise us nothing very formidable in the way of mis-government. We could even wish that the London University was not without its privilege of sending a member, and why Aberdeen is excepted is more than we can divine.

With regard to the six members from the six Colleges, more things than one require consideration. The Medical and Surgical Colleges of Dublin and Edinburgh very properly send a member each. The College of Physicans, London, is similarly favoured. Is our College of Surgeons, which includes more members than the whole of the rest together, to be put off with one also? Sir James Graham intimates some doubt on this matter, by printing the word, one, in *italics*—and specifying it to be a point for alteration in the committee. We may well be pardoned for a similar doubt. When we consider the number of members of the London College—nearly 10,000, we understand; when we reflect that it, in truth, contains the English Profession, it is plain to us that the greatest wrong would be done to it, if its influence were not represented—not indirectly, but directly—by more than a single member. We urge this point strongly on the attention of the Council and Members of the English College: they cannot do their duty without securing a more favourable arrangement.

And here we have opened to us a great *hiatus* in the New Bill, which must be filled up. However little claim the Apothecaries' Company may have to respect or protection, there can be no doubt that its members have the strongest tie on State regard and kindness. They are, strictly speaking, of our General Practitioners, the only men who shew a *legal* title to their calling. The

Company's license being no honour or distinction, these worthy practitioners have spent much time, much money, and proved high attainments, to get it. Why? To conform to law. Let the law, then, now pay them its tribute of gratitude. The *hiatus* in the present Bill is, that it does no such thing. As regards the Apothecaries (who, *en passant* be it said for the general reader, are really not *apothecaries*, but doctors) the Council of Health is as if it were not. The law they have done so much to keep, now ungratefnlly refuses to recognise their existence. Need we say that we *must* have amendment here? But, perhaps, there is an unexpressed intention that the College of Physicians, to which they are to be joined, shall include them as valid and integral members—and will receive their aid in returning the one member of the Council. If this be so, there should not be one member sent to the Council, but *two*—for the numbers thus connected with the Physicians would authorise, as with the London Surgeons, an increase of representatives. We must confess that this does seem to us the proper arrangement: nothing less can be satisfactory, and we regret to see no traces of it in the Bill. There is to be a meeting of the College of Physicians on Wednesday next. We suggest that they take up this subject in a becoming spirit of liberality, and friendly brotherhood. Their corporation has become a miserably degenerate body *for our age*---small in funds, in members, and we must add, in repute—because before 1815, their small jealousies of one another—Fellows and Licentiates—and still more contemptible jealousies of the Surgeon-Apothecary prevented their opening their arms for the reception of the upheaving Medical Profession. Let the error not be repeated in this day of grace when it may be so amply repaired. They have a revolution in Medicine—vastly to their advantage—at this moment in their hands. The leader of a Century may now take his place at the head of a Legion, and the College of Surgeons, outraging its members, may be out-matched in wealth and importance by the now overshaded and fast dimning body in Pall-Mall. The General Practitioner of the present day, is, at least, the equal of the Physician of 1815. Why shall not Dr. Paris and his corulers taking our oft repeated recommendation, extend to them the right hand of fellowship,and offer them admittance to the full rightsand privileges of members? There would be a world of good from forming the present members into Fellows—intra or extra-urban as the case might be—and draughting the whole corps of General Practitioners into the College as its honoured Licentiates. The public would be benefitted, for it would suppress much quackery: the Profession would be benefitted, for the whole practice of the country would be felt to be in the hands of one united body of doctors; and the College would be benefitted, for it would rise into the importance and dignity of a great National institution.

We must next week pursue this important topic, in its reference to the London College of Surgeons.

FELLOWSHIP OF THE COLLEGE OF SURGEONS.

(To the Editor of the Times.)

Sir,—You did me the favour a few days ago of inserting a letter on the above subject, in which I showed how an honorary distinction, introduced for the praiseworthy purpose of encouraging emulation among members of the college, and thus promoting the advancement of surgical science, has been converted by the council into a mere instrument for carrying into effect a project long cherished by some of its members, namely, that of elevating the surgeons of civil hospitals, merely as such, into a distinct class from private practitioners, without the slighest regard to professional excellence or reputation. I also stated my conviction that with regard to some other names to be found in the list, they had been placed there for better reason than because the parties had been forward in promoting the getting up of flattering *cadeaux* for one or other of the four gentlemen whom the council appointed as a committee on this occasion, and that in order to cover this transaction a "statement" had been put forward to the effect that these "much-esteemed" young gentlemen had not been placed in a new position, but only not displaced from one which they formerly occupied, a statement which is utterly untrue in itself, and I must say a very unworthy attempt on the part of the council to mystify the public and bolster up the misconduct of the committee.

I am now induced to trouble you again, as the supplementary list is about to appear in a day or two, and I am anxious, if possible, to rouse my professional brethren to a just view of the subject.

The council have declared that they see no reason to deviate from the course they pursued in the first instance, and rumour states that the only difference they have adopted is, that they have limited the present list to persons whose diplomas bear date previous to the year 1825; whereas the former list extended to 1837, thus placing members of 20 years' standing in an inferior rank to the young gentlemen alluded to. Now, the council were not empowered by the charter to create two new grades in the profession, but only one; yet they have so contrived to administer the charter that they have created two degrees, and I cannot think so meanly of the members of my profession as to suppose that the gentlemen placed on this second list will quietly submit to the degradation of being made, as it were, second-rate fellows; at least, if they do they will well deserve this title. Some, no doubt, will at once fling back the honour in the face of the council with contempt, while others will wait for the possible incorporation of the two lists into one. In the meanwhile what are the great body of members to do? This is the question, and it is one well worth the consideration of those who have sworn to "uphold to the utmost of their power the dignity and welfare of the college." Mr. Guthrie, it seems, has already petitioned the House of Commons not to allow that part of it relating to the fellowship to become part of any law affecting the medical profession till he has been allowed a hearing at the bar of the house. Here we have a member of the council openly protesting against the proceedings of that body. This is a "great fact," and common report states that he is not the only member of the council dissatisfied with the course of late events.

Now, what can this mean, but that there is something to come out, and that very probably Mr. Guthrie was baffled by his colleagues in his honest endeavours to do justice to all parties? The course then for the members to pursue is this,—let them by every means in their power, individually and collectively, urge upon the Legislature the necessity of some inquiry into the mode in which this portion of the charter has been administered, before any legal enactment is based upon it, and I am much mistaken if such an inquiry would not bring to light a specimen of the profligate abuse of power very disgraceful to a public, much more a scientific body.

It is worthy of remark that the fellows themselves, those at least who feel that they are justly entitled to this distinction, can have no objection to such an inquiry. In their case it would tend to vindicate the choice of the council, and make their well earned eminence more conspicuous; so that if an objection arises from any quarter, we are sure it can only come from those who feel uneasy in their new position, as knowing full well that their superiors have been set aside, that they might have a greatness thrust upon them which there was but little chance of their achieving for themselves.

I am, Sir, your most obedient servant,
A PROVINCIAL SURGEON.

THE IRISH APOTHECARIES AND THE NEW BILL.

(The Irish Company have circulated the following statement:)

Apothecaries' Hall of Ireland,
August 30th, 1844.

Dear Sir,—The Governor and Company of the Apothecaries' Hall having carefully examined Sir James Graham's Bill, "For the better Regulation of Medical Practice throughout the United Kingdom," have drawn up the following digest of its contents, with the desire of pointing out to their brethren certain defects in its provisions, and of offering some suggestions thereupon for their consideration.

"The Bill" admits of analysis under the following heads: –

1st. The constitution of the "Council of Health and Medical Education," and the powers vested in it.
2nd. The mode of qualifying Medical Practitioners.
3rd. The privileges and remuneration of Do.
4th. The amount of legal protection afforded to Do.

1st. Clauses Regulating the Council:—

Clauses (2 to 11 inclusive) enact, that the "Council" shall consist of one of Her Majesty's principal Secretaries of State, of Representatives chosen by the several Universities and Colleges of Physicians and Surgeons, one for each respectively, and Six other Persons, chosen by Her Majesty, with the advice of Her Privy Council; and that all acts of said Council be decided by a majority of votes of the Members present, Seven to form a quorum, the said Secretary of State to be President, and to have a second, or casting vote, in all cases of equality of votes.

Clauses 19, 22, 25, require the several Universities and Colleges to submit their plans of education, examination, fees, and bye-laws, to be regulated by said Council, in order that it may, as far as is practicable, ensure uniformity in these.

In the first place here, the Company object that the Medical Profession, is not completely represented by this Council, there being no Member of the Apothecaries' Companies on it. The Apothecary, being an integral part of the Medical Profession, is by right entitled to this privilege, and, as nothing exists in his education, or practice, to disqualify him, his exclusion therefrom, is an act of injustice; besides which, the co-operation of Apothecaries is essential to the efficient discharge of its functions as a "Board of Health," since it belongs to their province more especially to ascertain the purity of articles of food and medicine, to analyse poisons, to construct a Pharmacopœia, to discover new forms of remedies, and to investigate and correct the operation of chemical agencies upon life.

In the next place, the Company conceive that the control to be exercised by the Council over the Medical Institutions is calculated to act injuriously, by suppressing that spirit of honourable rivalry which has contributed so much to advance the interests of Medical Science among us.

2nd. Clauses Regulating the Qualifications:—

Clause 15, enacts, that "Surgeons" shall be examined by one of the Royal Colleges of Surgeons, after five years Surgical Study.

Clause 16, requires, that "Physicians" shall have graduated in Medicine in some University in the United Kingdom,—(i.e., "shall have matriculated therein, and shall have duly attended the Courses of Lectures prescribed by the same University during two years, and shall have been examined by the proper Examiners of such University, and found by them to possess skill and knowledge of Medicine, and of the Sciences connected therewith, and of the English and Latin languages at least,") and shall also have been examined by one of the Royal Colleges of Physicians, after satisfactory proof that he has been engaged in Medical Studies five years.

Clause 17, allows "the same person, if possessed of the necessary Testimonials, to be registered both as Physician and Surgeon," or to become "a Licentiate in Medicine and Surgery," by

undergoing the additional examination provided in such cases.

These regulations do not appear to differ materially from the present mode of qualifying Physicians and Surgeons; but, as it is designed to carry out the distinctions which exist between these two branches, into all the details of education and practice, a considerable change will ensue in respect to the future prospects of each:—for the Surgeon will hereafter be restricted to pure Surgery, and the Physician will have secured to him the practice of Medicine. The Company advise that a person, who is a *graduate in Arts and Medicine*, should be registered as a "Physician," without undergoing any additional examination before the College of Physicians, they conceive this to be a just boon to superior general education, and they recommend, in all cases, that the party once registered as "Physician," or "Surgeon," in any part of the United Kingdom, be admitted to the same privilege without any additional fee, by corresponding Colleges, in case of his removal to other parts of the United Kingdom.

Clauses 14, 17, 24, enact that the "Licentiate in Medicine and Surgery," (the General Practitioner) shall be examined by the Colleges of Physicians, and Surgeons; and, in London, assisted by the Court of Examiners of the Apothecaries Company.

Apprenticeships have been condemned by this Bill as obsolete, and the Education of this Class having been consigned to parties who must be ignorant of its wants, it becomes necessary for the safety of the Public, that the nature and period of study to be required of Candidates for *General Practice* should be definitively laid down.—The Company for similar reasons are also of opinion that it is most important that the examination of this Class should be conducted by competent persons *in all cases*, and that the board for this purpose should be assisted in Dublin as in London, by the Court of Examiners of the Apothecaries' Company.

3rd.—Clauses Regulating the Privileges and Remuneration of Medical Practitioners:—

Clauses 13, 14, 15, 16, 26, 27, 30, order a "Registry" to be kept of all qualified Practitioners, and enact that no "Unregistered" person shall be fit to hold any Medical or Surgical office in the Army or Navy, or be exempted from serving on Juries, &c." or "be entitled to recover any charge in any Court of Law, for any Medical or Surgical Advice, Attendance, Operation, or for any Medicine, prescribed or administered."

Clause 28, preserves in full the legal rights of all existing Medical Practitioners.

The Company do not see any additional advantage to the Profession in the "Registry" proposed here, and for which a rather considerable fee must be paid to that which obtains at present, and which costs the Profession nothing; nor is it at all necessary to make any such special rule to prevent the intrusion of unqualified persons into the public service of the Army or Navy, there being already provided guardians, who are known carefully to watch over the interests of these departments,—and as regards the *recovery of charges*, the Company know, by long experience, the utter inutility of attempting to effect this, without having some legalized medical tribunal, who shall be empowered to determine finally in all disputed cases.

4th.—Clauses regarding the legal protection afforded to medical practitioners.

Clauses 29, 31, provide penalties against "Unqualified Persons" who attempt to practise in any Medical Office, in Public Institutions, or, who "wilfully and falsely pretend to be, or take, or use any name or title, implying that he is Registered."

The former of these provisions would be useful to prevent and punish imposture in the case of Public Institutions, but the Company deem it to be almost unnecessary to remark the total inadequacy of the latter, to protect either the Public or the Profession against the evils of private Quackery—Quacks, do not seek alliance with the Faculty, and can readily dispense with its titles if they are allowed by law to practise Medicine with impunity; but if the case were even otherwise, there is nothing in this Bill to prohibit them from assuming any one or all of the established Titles by which the Profession has been hitherto designated,—such as "Doctor," "Apothecary," "General Practitioner," provided only they keep clear of the forbidden names, "Physician," "Surgeon," or "Licentiate in Medicine and Surgery,"—unless, therefore, this Clause be accompanied with a summary enactment to punish those *who illegally practice Medicine or Surgery with a view to pecuniary gain*, it will inevitably ruin the Medical Profession.

The Company, in conclusion, warn their Members that the effect of this Bill, if passed into Law, even with the amendments suggested by them, will be the Overthrow of the Apothecary Profession—and the transfer of its rights to "Licentiates in Medicine and Surgery," who will hereby become entitled to practise as Apothecaries, and to make up and charge for their Medicines; that the Bill, though a Government measure, will not be passed in opposition to the wishes of the Profession, that the English Apothecaries have unanimously protested against it, and that it remains for those in Ireland, individually and collectively, to shew whether they will tamely submit to be supplanted in their rights, and thus allow their Profession, eminent for its antiquity and usefulness, to be annihilated for ever.

I remain, dear Sir,
Your faithful and obedient servant,
CHARLES HENRY LEET,
Secretary.

To the Editor of the "Medical Times."

Sir,—I send you the above suggestions of the Apothecaries Hall of Ireland upon Sir James Graham's Bill, and, as one of the Directors of that Company, I agree generally in the justness of their remarks, and to which I hope you will also assent. At the same time, I must say, as an individual member of the Profession, I would be very sorry that Sir. James Graham should withdraw his Bill, because, if amended in the way that you advocate, I doubt not but that it would confer great benefit upon every branch of the Profession. And I also think, that if we confine our opposition to the objectionable parts of the bill, we will be more likely to obtain our object, as I am sure that Sir James Graham does not mean to act towards the Profession in any other than an honourable manner, and, as he conceives, for their benefit and the public good.

I am, Sir, your obedient Servant,
JAMES MACDONOUGH.
Surgeon and Apothecary.

Sword's Dispensary, Sept. 14, 1844.

P.S.—I think that the Registry is a great advantage to the Profession.

MEDICAL CLUBS.

(To the Editor of the "Medical Times.")

Sir,—I beg leave to draw your attention to the past and forthcoming meetings of the medical profession in Glasgow, relative to the important subject of medical attendance upon clubs. I say, important subject—because it is becoming of such elephantic size, that it cannot be regarded otherwise than as important, and, indeed, ruinous to the respectable members of the Profession. It may answer the purpose of half-educated men, whose studies have cost them little or nothing, and who have no respectability to compromise,—but these men greatly injure the practice of regularly-educated and respectable surgeons, who are often, with wounded feelings and insulted pride, obliged, in self-defence, to succumb to the degrading terms of a set of ignorant and self-important men. A surgeon has, perhaps the *honour* to be elected medical officer to their noble, grand, or independant order of ————, and he is put into the receipt of the very liberal remuneration of 2*s.* 6*d.*, 3*s.*, or 3*s.* 6*d.* per member, per annum, including medicine!!—and for this recompence he is expected to give as much attention, to each member, when required, as if he received a guinea a visit! I learn that, in most places, these Societies are becoming general. In the locality to which I belong, whole districts and populous villages are absorbed in them, except a few independant families.

I hope, Sir, you will think the subject one which requires your interest; and that you will, by your valuable suggestions, aid the praiseworthy endeavours of the above meeting.

Sir, I have the honour to be,
Your's very respectfully,
MEDICUS.

[We are, indeed, exceedingly interested in the important subject of this letter. We shall give it our best and earliest attention.—Ed.]

THE DANGERS OF LITHOTRITY.

To the Editor of the 'Medical Times.'

Sir,—I have read the very clever papers of Dr. Costello, but cannot agree in his conclusion as to the absence of danger in the operation for which he is so deservedly distinguished. My observations have taught me that lithotrity, formidable as it is, is the safer-operation, and should not be abandoned till some greater proofs of the safety of the rival process be adduced than I have yet seen. One case, deeply impressed on my mind, has given me such a horror of the experiment—for such it is—that willingly I would never have it even essayed again. The surgeon is one of the most rapid and masterly operators in Europe, and if the experiment in his hands was so unsafe, what, I venture to submit, must it be to the great body of surgeons, to whom an operation is the exception rather than (as in his case) the rule. If the details of the operation will interest the readers of your very influential Journal—to which the Profession are so prone to look as a guide on such matters—and will illustrate, I had almost said, the *absurdity* of the lithotritists, I shall feel obliged by your giving them publication. For obvious reasons, I conceal the name of the *locus quo* and the operator: they would, perhaps, both share some of the odium which justly attaches to this *improvement*—but I send you my name to authenticate the narrative.

Your obedient servant,
"A HOSPITAL SURGEON."

In —— last, a patient was admitted into —— Hospital, labouring under all the symptoms of *calculus vesicæ*. On the second day after his admission, no previous treatment having been deemed necessary, he was at once submitted to the operation of lithotrity, Mr. —— considering the case a favourable one for lithotrity. The bladder having been injected with water, the percussor was introduced with a good deal of difficulty, but at length the obstacle was suddenly but completely overcome, some blood escaping from the urethra. One small stone was now crushed with the instrument, and a few of the fragments removed with the scoop. Mr. —— considered it advisable not to proceed farther with the operation at this sitting, a circumstance having occurred which could not be satisfactorily accounted for, which was, that the water injected into the bladder for the purpose of distending it, and facilitating the operation, did not make its exit by the urethra. For a few hours, the patient did not appear to suffer from the operation, but in the evening of the same day, neither water nor urine having escaped by the urethra, and symptoms of retention having supervened, Mr. —— very judiciously ordered the introduction of the catheter, which was done accordingly by the house surgeon, Mr. —— having warned him that he would meet with considerable difficulty. It appeared, however, that there was neither urine nor water contained in the bladder. The symptoms of retention continued unabated during the night, no fluid having been discharged, and on the following day he had the additional symptoms of peritoneal inflammation. This assemblage of symptoms was extremely puzzling, and Dr. ——, who now visited the patient, agreed with Mr. —— in opinion, that the case was one of *suppression*, and not of retention, and an appropriate treatment was thereupon adopted. On the following day, being the second after the operation, Dr. ——

visited the patient, at one o'clock, and finding that the patient had passed no urine, and that all the symptoms had increased to an alarming degree, though he now feared that they arose from the absorption of the urine into the system, more especially from the state of the brain, he still thought it a prudent measure to have the catheter again introduced by the house surgeon, but, much to his regret, his apprehensions were realised, not a single drop of water being found in the bladder. Mr. —— did not see the patient that day till an hour after the introduction of the catheter, when, on finding that the bladder contained no urine, he expressed his dissatisfaction that, under such circumstances, Dr. —— should have ordered the introduction of the instrument. From this hour the patient gradually sunk, and, on the fourth day after the operation, he expired.

At a late hour on the evening of the fifth day, the body was examined privately, the appointed time for public *post-mortem* examinations being between two and three in the afternoon. Instructions were sent to a party from Mr. —— to remove the whole of the genito-urinary organs, and cause them to be sent to his house. No official report of the appearances met with in the dissection was made, but it was understood from those who had examined the parts, that there was an opening through the bladder into the cavity of the abdomen, and that there was general peritoneal inflammation, appearances which satisfactorily accounted for the non-escape of the fluid which was injected into the bladder before the introduction of the lithotrite, the absence of urine in the bladder subsequent to the operation, and the accession of all those symptoms, which Dr. ——, though he recommended the use of the catheter on the possibility that there might be retention of urine, was apprehensive arose from the absorption of that fluid into the system.

In addition to the reserved mode in which the dissection was conducted, all rational precautionary measures were resorted to, to prevent the students of the hospital interfering unnecessarily about the *post-mortem* appearances, and no account of the case was, of course, given, till Mr. ——'s clinical lecture, which he delivered weeks after the operation, and which lecture was the more useful, as it contradicted some statements which had appeared in the periodicals. In this public lecture, subsequently published, Mr. —— frankly accounted for the patient's death by the introduction of the catheter, and shewed that the natural supposition that too much force was used in introducing the percussor, was erroneous. These lithotrity cases are of so anomalous a kind that they explain of themselves any peculiarity, and, therefore, I do not wonder that Mr. —— did not explain what became of the water which had been injected into the bladder, or why no urine was passed from the operation to the time of the patient's death. These were matters, no doubt, thrown into light by the sequestered *post-mortem* examination, which took place after the removal of all the pelvic viscera to his own house, for closer scientific investigation. Mr. ——, however, shewed a preparation at his lecture, with something like an abscess in the bladder, very difficult of detection; and as it was carried away with him immediately after, I have no doubt it still exists, to shew the danger of lithotrity in even first-rate hands.

Mr. ——'s lecture being thus supposed to accuse two of the medical officers of the —— Hospital, of professional incompetence, a committee of the institution instituted an enquiry, which met, and, after examining some witnesses, and getting Mr. —— to produce before them the morbid parts of the unfortunate sufferer, came to the extraordinary and irrelevant conclusion, that no blame was to be attached, either to the suggestion, or to the operation of introducing the catheter, an artificial opening in the bladder being quite manifest, which satisfactorily accounted for no fluid having ever escaped by the urethra, from the time of the operation to the patient's death. The declaration of the witnesses who were examined on this occasion, are faithfully recorded in the "Minutes," access to which is permitted.

THE "LANCET" ON THE APOTHECARIES' COMPANY.

(*From the "Lancet," September* 14, 1839.)

That the Apothecaries' Act was a miserable failure—an abortion—as a legislative measure, was overlooked. That it worked sometimes ludicrously, often injuriously, very rarely with good effect, even under the most 'favourable' interpretation, was partially forgiven and forgotten.

* * *

In our next number, now that we are on the subject, we will enter into a *legal discussion* on the Apothecaries' Act; and we will prove to the satisfaction of every individual who is capable of comprehending the simplest proposition, that the *convictions* which have already taken place under that Act are *illegal*, and that they would not have occurred had the Counsel for the defendants *understood the* LAW *of the cases* in which they were engaged. In fact, we will prove that this Act need no longer disgrace the medical profession, and that, in a pecuniary point of view, it should not be worth to the Old Ladies of Rhubarb Hall a single straw.

* * *

In which way, then, does the Act affect the MEMBERS of the COLLEGE of SURGEONS? *In no way whatsoever.* They have merely to place over their doors 'SURGEON AND CHEMIST' (a much more honourable title than 'apothecary') and then bid defiance to the mercenary old hags of Rhubarb Hall.

REVIEWS.

Lecture on Physical and Intellectual Life. By SAMUEL WRIGHT, M.D., F.R.S., S.A., F.B.S., &c. London: Churchill. Lyon: Birmingham.

We have read this eloquent lecture with pleasure, and we must humbly add, with profit. The most interesting phenomena of animal and vegetable life, are rapidly placed before us in their newest aspects: the world mental, and the world physical, are made to shew their mutual relations, to act as each other's mute, but eloquent, interpreters, and from the whole—treated with cleverness, and illustrated with learning—deductions are drawn, favourable alike to moral and intellectual improvement. In short, the lecture is written in the best of spirits, and we can give it our warm commendations.

A Practical Treatise on Diseases of the Eye. By WILLIAM JEAFFRESON, late Surgeon to the Bombay Eye Infirmary, in the Honourable East India Company's Service, &c. London: Renshaw. 1844.

From the introductory chapter of this work, we learn that, in consequence of the great prevalence of cataract, and other forms of disease of the eye, in our Indian colonies, the East India Directors were induced, in 1822, to establish two new appointments of surgeon-oculists, the one to be stationed at Bombay, the other at Calcutta. Mr. Jeaffreson obtained the Bombay appointment, by the recommendation of Mr. Travers, and was further instructed by the Directors to establish a hospital at Bombay, solely for cases of diseases of the eye. This institution, into which of course only the worst cases were admitted, was conducted on the most liberal system; it was capable of containing one hundred and twenty beds. The result of these opportunities was a vast field for observation, for persons of all ranks soon flocked from the most distant parts of India and Persia to Bombay, to place themselves under our author's care, either as private patients, or else as recipients of the advantages conferred at the hospital. Nor was this all; occasional visits to the more distant military and civil stations, and the use of ophthalmic wards in their general hospitals could not fail to augment the experience and reputation which Mr. Jeaffreson possessed. During the eight years that the appointment of surgeon-oculist was held by him, it appears that the enormous number of fifty thousand cases passed under his notice, of which the following affords a tabular view.

ABSTRACT.

Names of Different Diseases treated in the Bombay Eye Infirmary, from Jan., 1824, to Oct., 1834.	Number of each Disease.	Restored to perfect sight by operation or other treatment.	Restored to an useful degree of sight, or relieved.	Not treated, being incurable.	Died.
Cataract	7334	5517	1817	..	..
Amaurosis (various degrees of)	3615	1432	2183	..	..
Leucoma	918	54	864	..	..
Nebula	2530	2210	320	..	..
Ophthalmia (various degrees of)	12128	12077	51	..	..
Ulcer of the Cornea	3402	2416	986	..	..
Granulous Eye-lids	3372	3308	64	..	..
Fistula Lachrymalis	281	197	84	..	..
Staphyloma	652	82	570	..	..
Fungus Hæmotodes	25	....	18	..	7
Iritis	2023	1963	60	..	..
Hydrophthalmia	71	8	63	..	..
Lippitudo and Tinea	4332	4332	..	..	..
Glaucoma	310	26	284	..	..
Nyctalopia (Day Blindness)	14	8	6	..	..
Hemeralopia (Night Blindness)	470	340	130	..	..
Strabismus, or Squint	23	6	17	..	..
Closed Pupil	820	461	359	..	..
Pterygium	1324	1120	204	..	..
En. and Ectropium	467	439	28	..	..
Tumours (various kinds)	568	568	..	..	..
Totally and Irrecoverably Blind	8680	....	..	..	..
Total	53359	36564	8108	8680	7

Setting aside certain imperfections in this table, which are very excusable, inasmuch as the data for its construction must have been gathered during the fatigues of a most arduous practice, the very large number of cases of cataract at once attracts attention. Seven thousand three hundred and thirty-four cases to be met with by one surgeon, in the course of eight years' hospital and private practice, would appear to be an utter impossibility, and the mere statement would tend to throw discredit on the general character of the work, if the circumstances under which so very large a proportion of cataract-cases accumulated were not taken into consideration—Although ophthalmic diseases are very prevalent in India, it would be out of all reason to suppose that so many cases of one form of disease could occur in so comparatively short a space of time, and that too in Bombay only. The number was made up of cases of very many years' standing, collected from all parts of India, the natives crowding to the Bombay Station, as soon as the report spread among them that the *Coompani* had sent them a surgeon capable of removing their infirmities. To this, and this alone, is Mr. Jeaffreson indebted for the very large practice he has enjoyed in this respect; he has reaped a harvest that has been ripe for the sickle for many long years, and his successors consequently will have left for them only the bare and comparatively unyielding product of later years. The same remarks may apply to the cases of amaurosis, and indeed to all the cases alluded to in the tabular view. The immense field of observation which Mr. Jeaffreson possessed, has been remarkably narrowed for future practitioners by his exertions, but he has sought to make the *amende honorable* in the only fitting way which he could adopt, namely, by placing on record the results of his experience, and thus enabling his professional brethren to obtain the advantages which his extensive practice has placed him in possession of.

Passing over the commencement of the chapter on inflammatory affections of the eye, which does not contain anything capable of arresting our attention, we proceed to the treatment recommended by Mr. Jeaffreson. He observes:—

In all cases of ophthalmia the medical attendant should carefully inquire into the cause of the affection, and the previous condition of his patient's system. The more intimately he finds the local affection to be connected with conditions of general health, the more carefully must he endeavour to set the general health to rights, which will constitute the most important part of his treatment as directed to the eye; for however much it may be in his power, by local applications, to restore the eye to an apparent condition of health, such restoration will indeed be but apparent and temporary; like a smothered volcano, as the internal fire accumulates it will break forth again, if not perhaps in the same, in some other part of the system.

The next point will be carefully to estimate the force and intensity of the local disease, and to contrast this equally carefully with the character of the more general symptoms.

If very active and intense local disease be accompanied by great constitutional vigour and equally powerful general re-action, as shown in the height of the irritative fever and force of the general circulation, the lancet will probably not only be borne, but afford the greatest benefit. But intense local disease, with enfeebled general health, little power of reaction, and originating probably in exciting causes, which have acted upon a previously impaired constitution, will ill bear such a mode of treatment.

The lancet, in Mr. Jeaffreson's opinion, is principally required in those inflammatory affections of the eye, which are most liable to terminate in the deposition of coagulable lymph, and in which such result is most to be dreaded, such as iritis and corneitis.

When, however, the comparative infrequency of these forms of disease is considered, as also the many circumstances above hinted, as precluding the use of the lancet, it will be found, that upon the whole, this instrument is far less frequently required in ophthalmic practice than either the works, the practice, or the general conversational opinions of practitioners would lead the uninitiated to suppose. Nor must it be forgotten, that we possess other means of inducing a powerful sedative effect upon the general circulation, as well as that of the part affected. I allude to the use of emetics, brisk cathartics, and nauseating doses of emetic substances, especially the tartar emetic—remedies, not only powerfully sedative, but often possessing the further advantage of removing from the alimentary canal ingesta or secretions which may have mainly caused or kept up the local disease, whilst they do not diminish the bulk of blood, and permanent powers of the constitution, on whose integrity we are often to depend for the future steps of restoration.

With the exception of very acute inflammation of the iris or cornea, occurring in persons of robust habit and unimpaired health, and with strongly-marked reactive symptoms, it is, perhaps, not too much to say, that no inflammatory affections of the eye, of spontaneous origin, require the use of the lancet. Purgatives, emetics, and the tartar emetic, in doses short of inducing vomiting, are sufficient to subdue or control the other forms of active inflammation.

Mercury, a most valuable agent in the treatment of many inflammations of the eye, when carefully administered, is also noticed by Mr. Jeaffreson with commendation, but its use is directed with caution. There can be no doubt but that it has frequently, very frequently, done much more harm than good, when exhibited incautiously and rashly. Both the organ affected, and the constitution, have suffered from the too frequent exhibition of this potent remedy, as they have done from the enormous abstractions of blood recommended and practised by some surgeons. In iritis, the author advocates the early local application of belladonna during the inflammatory condition, to keep the pupil dilated, and prevent the formation of adhesions, and the consequent irregularity and fixity of the pupil. Another great advantage, he says, resulting from the dilatation of the pupil, is that it affords opportunities of carefully examining the state of the deeper-seated, and more internal structures of the eye.

The following remarks respecting the removal of effused lymph from between the layers of the cornea, after the subsidence of inflammation, are deserving of attention.

The greatest amount of assistance to this process will be afforded by that practitioner who has the best and most extensive knowledge of the laws under which it is performed; inflammation is no longer to be combated, increased force and vigour is required on the part of the whole system, including its great nervous centres, the blood en masse, and the minute capillaries of the part especially, all obstructions to the reparative process, whether local of the part, general of the system, or local of distant parts, as of the stomach, bowels, &c., are to be removed;—and above all, some patience must be exercised on the part of the sufferer and his attendant; for repairs, whether literally of brick and mortar, or of living structures, require time, more or less in great measure dependent upon the skill of the practitioner and the materials on which he has to work. No one medicine or class of medicines has any specific power in directing the process of repair; that of absorption or removal of the opaque deposits resulting from inflammation, is often accelerated by the cautious administration of a mercurial course; but it should be carefully remembered that the powers of the constitution are to be supported; and mercurials will never do good if administered to the detriment of these powers. The doses should be small, and they may often be advantageously combined with tonics. Sir Astley Cooper's old formula of the bichloride of mercury with bark is frequently useful in this state.

With respect to acute conjunctivitis; its treatment:—

Includes the use of the emetic substances, especially tartar emetic, and active purging in the first instance; a dose of calomel, combined or not, as the case may require, with some antimonial preparation, or aperient, followed by the common black draught of senna and salts. If the inflammation be very severe an emetic may be found desirable. After the action of such remedies, our object will be, by rest, abstinence, and determination to the skin, bowels, and kidneys, to keep down the force and frequency of the circulation, and with it the local inflammation. It is not, perhaps, too much to assert that hardly one case in a thousand of conjunctivitis requires the use of the lancet, nor should mercurials be prescribed with the view of affecting the system.

Even the ordinary acute conjunctivitis will frequently be found to be connected with states of general health which demand our attention, rather than the mere local affection; it may be found to be but part of a "common cold," in which case the plan of treatment above suggested will be sufficient; it may be connected with states of the digestive organs, an impoverished condition of the whole system, or scrofulous diathesis: in the former case, care must be taken to prescribe for the deranged condition of these important organs; in the latter, we must be the more careful not to reduce the powers of the system generally; topical applications will hold a proportionately more prominent part as regards the local affection, and alteratives may be required to take the place of brisk cathartics; a nutritious diet, with the use of some mild stimulant drink and tonics, may be administered even in an early stage of the affection.

The topical applications consist principally of collyria, ointments, and instillation. The collyria are either narcotic or astringent; their employment should rather follow, than precede, the use of those measures of general treatment which are resorted to with the view of diminishing general febrile disturbance, and the activity of the local affection. The same may be said of the instillations; the cases best adapted for their use are the forms of conjunctivitis, connected with an enfeebled constitution, lax and flabby habit; under which, congestion of the blood-vessels constitutes the most prominent symptom of the local affection. The more the case seems allied to, or disposed to run into chronic inflammation, the more appropriately may those agents be employed. Of these instillations, Mr. Jeaffreson enumerates the saturnine solution, the solutions of the nitrate of silver, and the vinum opii, but he gives the preference to a very weak solution of the nitrate of silver, half a grain to a grain to the ounce of distilled water, which may be gradually increased each day in strength. Stronger solutions he has found, by their stimulating effects, to oblige the practitioner to abandon their use, and sometimes even to have recourse to local or general bleeding, or other powerful means, to subdue the increased degree of inflammation.

Scarification of the eyelids is sometimes found useful; but cupping or bleeding, Mr. Jeaffreson seems to be much averse to: in fact, to the abstraction of blood, and the employment of debilitating measures, he seems to be strongly opposed. Counter-irritation is more serviceable in the chronic than in the acute form of inflammation.

The natives of India are in the habit of using a liquid which they drop into the ear in cases of ophthalmia, and which appears to owe its beneficial agency to a diametrically opposite mode of action to that of counter-irritation. No pain or inconvenience is experienced to the ear, and yet a soothing influence seems to be propagated to the eye. When first I heard of this practice, I was disposed to consider it as altogether hypothetical; but I must confess, that personal observation of its effects in the hands of the native practitioners, as well as numerous subsequent trials made by myself, have induced me to believe this practice to be, in many cases, highly efficacious. When I explained to one of the native doctors, who employed this remedy, by means of a rough diagram, the nervous connexions between the eye and the ear, he could not conceal his satisfaction. I do not know the exact nature of this substance, but I suspect it to consist of narcotic and sedative ingredients. To the intimate relationship between the eye and the ear, from the distribution of nervous filaments arising from a common trunk, is due, no doubt, the degree of sympathy so often observed to exist between these parts in various forms of disease, and to the same anatomical relationship is probably to be attributed the efficacy of this remedy, acting, no doubt, in the same inexplicable manner as many narcotic substances in ordinary use do, when applied externally for the relief of internal disorders. It may be remarked of this remedy, although deviating from the strict subject of our present investigation, that it is no less highly esteemed by the native doctors in many forms of deafness; and I have myself had ample experience of its efficacy in some cases of this affection, having, during my residence in India, paid considerable attention to diseases of the ear as well as those of the eye.

(To be continued.)

HOSPITAL REPORTS.

ST. BARTHOLOMEW'S HOSPITAL.

Fever with Pneumonia.—John M'Carthy, ætat 19, a well-formed, muscular, young man, of fair complexion, and who had followed the occupation of a bricklayer, was admitted June 1st, 1844, into Luke's ward, under Dr. Roupell.—The countenance was highly flushed and anxious; he complained of great pain in the head, pain in the back and limbs, incessant thirst, heat of skin, and restlessness: the skin was hot and dry; tongue coated with a dry, yellow fur; pulse 130, and rather sharp; bowels constipated; urine free and high coloured. He stated that he had been working hard and drinking freely, on the morning of the day

before admission, and, after eating his dinner, was attacked with vomiting and headache, which was followed by shivering, great thirst, heat of skin, and restlessness. He was ordered: Antim. potass. tart. gr.i., magnes. sulph. ʒiv., to be taken directly; and haust. ammon. ac., three times a-day.

June 2nd.—Feels himself rather better than he did yesterday; has less pain in the head, but complains of its feeling extremely heavy; the countenance is still flushed; skin hot and dry; pulse 120, more soft and compressible; tongue still furred, but moister: the emetic acted freely upon the stomach and bowels:—continue haust. ammon. ac.

3rd.—Not so well this morning: the countenance is highly flushed; respiration hurried and difficult, inspirations being 46 per minute. He complains of intense, sharp, cutting pain in the right side, increased upon deep inspiration, or upon coughing, which is accompanied with slight expectoration of an amber-coloured, tenacious mucus; the pulse is 100, and full; tongue coated with a thick, yellow fur; skin hot and dry; great dulness existed on percussion over the anterior surface of the right lung, and crepitation was heard extending over a considerable part of the lung, chiefly in its lower part:—he was bled immediately to ʒxij., the loss of which occasioned faintness; he was, therefore, ordered to be cupped from the side to ʒxij. more, and the following draught to be taken every four hours, for three times:—

℞. Antim. potass.-tart. gr. i.
Haust. ammon. ac. ʒiss.
Misce; fiat haustus.

4th.—Passed a very restless night, but, upon the whole, appears better this morning than he did yesterday: he complains of his head feeling very giddy; the pain in the side is somewhat relieved, but it is still increased by cough; he is able to lie upon the left side; the countenance is not so highly flushed; respiration easier, but still hurried and difficult: inspirations 40 per minute; the skin is cooler; pulse 108, full and thrilling; tongue still furred, but cleaner; the cough is much increased: expectoration extremely tenacious, of an amber colour, and slightly streaked with blood; crepitation more distinct and extensive than yesterday:—he was again bled, but the loss of ʒviij. occasioned full syncope: to have 12 leeches to the right side.

℞. Hydrarg. chlorid. gr.ij.
Antim. potass.-tart. gr. 1-4th.
Pulv. opii. gr. 1-6th.
Misce: fiat pilula 4tâq. horâ sumenda.

5th.—He slept for several hours last night, but rambled a great deal: he expresses himself as feeling easier this morning; his head is much less painful, but it feels heavy, and he dozes a great deal; respiration not so hurried or difficult, but still heaving and much accelerated; the cough is extremely troublesome: sputa tenacious and amber-coloured; the pulse is 120, rather sharp and jerking, but with less power in it than yesterday; the tongue is furred, but moist; skin hot and dry; urine extremely high-coloured: he still feels pain in his side, which is much increased if he coughs; crepitation still heard, extending over a larger surface of the lung: the blood drawn yesterday is buffed and cupped, but less so than that taken the day before:—to have a blister to the side: continue the pill.

6th.—Passed a very restless night, in consequence of his cough; expectoration is extremely tenacious, and rusty coloured, and raised with great difficulty. He has much less pain in the side, which, upon coughing, is very little increased. He still appears drowsy; the face is not so highly flushed; respiration easier, though still accelerated; the pulse is 110, rather full, but compressible; tongue coated with a yellow fur, but moist; skin cooler; mouth not affected by the mercury: continue.

7th.—Appears much the same as yesterday:—to have cataplasm. sinapis to the chest. Pulv. ipecac. co. gr. x. horâ somni, and to continue the pill.

8th.—Not so well; the countenance is almost livid in appearance; respiration extremely short and hurried, inspirations being 47 per minute; the pulse is 96, rather thrilling, but very compressible; skin warm; tongue furred, but moist; cough still as troublesome; expectoration scanty, but thinner; crepitation is heard, extending over the entire surface of the lung anteriorly, with extreme dulness on percussion, at the lower part; gums slightly affected by the mercury: to be cupped to ʒx, from the right side, and to take the pill every three hours.

9th.—Countenance improved; in other respects, continues much the same; skin hot and dry: to rub in ung. hydrarg. ʒi, every night; to have the effervescing draught three times a-day. Pulv. ipecac. co. gr.viij, every eight hours, and to continue the pill.

10th.—Much better; countenance almost natural in appearance; respiration very little accelerated; pulse 80, soft, and compressible; skin cool; tongue moist, and cleaner; has less pain in the head; expectoration easier; sputa less tenacious; gums very sore: continue the medicines.

11th.—Continues much the same as yesterday, but is more inclined to sleep; tongue coated with a thick yellow fur; to leave off pulv. ipecac. co.: continue the rubbing in, and the effervescing draught.

12th.—Going on favourably, in all respects; hardly any crepitation heard over the anterior surface of the lung; has now a little appetite; discontinue the pill.

13th.—No crepitation heard now in the right lung; to have broth diet.

20th.—Has been going on favourably during the last week; he was ordered to discontinue medicines on the 15th, and to have half meat diet, and to-day he was ordered full diet.

He continued in the hospital till the middle of July, when he was discharged perfectly well.

KING'S COLLEGE HOSPITAL.

Concussion of the Brain.—John Butcher, ætat 11, was admitted into King's College Hospital, under the care of Mr. Partridge, on the 17th of August, about 9 o'clock in the evening. A few minutes before his admission, he fell off the first floor window of a house in the neighbourhood, and was pitched head foremost upon the pavement: he was bleeding from the nostrils; sensation and the power of motion were abolished; pulse slow, compressible, and intermitting, 40; breathing performed with difficulty, but not stertorous, about 10 in a minute: the surface was cold, particularly the lower extremities; both pupils dilated, and acting slowly on the stimulus of candle-light; the integuments about the right eye-brow, and the same side of the face, were much contused; both the eyelids were closed, on account of the ecchymosis; he vomited, three or four times, undigested food; and, some time after his admission, he had several convulsive twitches of the right side of the face, and of the leg of the same side.

He was stripped; placed in a warm bed; a foot-warmer used to the feet; one stomach-warmer applied to the epigastrium, and another to the back; his head was shaved, but no external injuries could be detected, except the contusions and ecchymosis already mentioned. No medicine.—11 o'clock P.M.: Pulse 80, fuller, and not intermitting; respiration 18, more natural; surface of its usual temperature; when the skin is pinched, he is conscious of the injury; answers questions given him, in a peevish, unwilling manner; as soon as he is left to himself, he falls into a dull, stupid state, quite inattentive to external objects.

August 18th, 10 A.M.—Pulse and breathing the same as at the last report: he lies still in a stupid state, but sensible when roused; complains of pain in the head; has passed his urine; bowels have not been open; pupils in the same condition; fancies that he is at home; has taken some beef-tea: ordered: ℞ haust. sennæ co. ʒi. statim.

18th, 10 P.M.—Bowels not open; both the eyelids are very much swollen: he is still in the same drowsy, stupid state; puts out his tongue straight, when desired to do so.

19th.—Pulse 108; breathing 24 in a minute; bowels still confined; is very thirsty; complains of no headache; takes his beef-tea and milk.

20th.—Has been very restless during the night, talking incoherently, and, if not restrained, would have got out of bed; complains of pain across the forehead; pupils a little more contracted; tongue dry and furred; very thirsty; bowels still confined; passes his urine without difficulty; pulse 100: is hard of hearing ever since his admission. Ordered:—

℞ Ammon. Hydrochlor. ʒiij.
Potass. Nitrat. ʒj.
Aquæ Fontanæ lbij. M. fit. lotio.

To be constantly applied to the head.

℞ Hyd. Chloridi gr. iv. statim.
℞ Haust. Sennæ co. ℥j.
Post horas tres, si opus sit, sumend.

21st—The medicines operated freely, yesterday; slept well last night; made no attempt to get out of bed; he lies in the same state still, but not so inattentive; complains of pain across the forehead; tongue furred; takes his milk and beef tea; and, to-day, says that he could eat more. To continue the cold application to the head; put on low diet.

22nd—Pulse 92, full; respiration 24; slept well last night; complains of less pain across the forehead; is still very deaf; answers questions more readily; tongue clean; both pupils equally dilated, but more sensible to light; bowels open three times yesterday; complains of much giddiness when he attempts to sit up in bed; head not so hot; finds some difficulty and pain in the eyes when he attempts to keep them open. Continue the same treatment; to keep quiet in bed.

23rd—Pulse and respiration the same as at the last report; is quite sensible; is not so drowsy as he was; staggers as if he was drunk, when he attempts to walk.

24th—Pulse 78; respiration 20; still complains of pain across the forehead; the deafness is much the same; tongue clean and moist; he cannot walk the length of the bed without assistance, on account of the giddiness in the head. Continue the low diet.—Ordered:

℞ Haust. Sennæ co. ʒi. hac nocte.

25th—Pulse and breathing the same as they were yesterday; bowels freely open; to keep quiet; cold application to the head; to have milk instead of low diet.

September 4th—Since the last report, the patient has been going on well, without a bad symptom; his hearing is now as well as before; he can walk about the ward without any assistance; staggers a little; complains of slight giddiness in the head; he does not recollect how the accident happened, but remembers his mother leaving him at home to take charge of his sister.

Remarks.—The treatment, in this case, consisted in the close watching of the symptoms. The indications, in the first stage, were to endeavour to rally the depressed state of the system, rather by external warmth, than by the internal administration of stimulants.

PERISCOPE OF THE WEEK.

STONE IN THE BLADDER, COMPLICATED WITH EXTENSIVE SCROPHULOUS DISEASE.—Mr. Greenhow has published in the *Provincial Medical Journal*, the case of a man, forty-four years of age, who had suffered from childhood from symptoms of stone in the bladder. Lithotomy was performed a few days after his admission into the Newcastle Infirmary, and a smooth stone, nearly round, weighing ten drachms and twenty-six grains, was extracted. In drawing out the scalpel, after the division of the prostate, the incision of the intermediate parts was found to be insufficient to permit the extraction of the stone, on account of the unyielding character of the diseased tissues, without the repeated use of the knife to overcome the obstruction. The treatment afterwards was much protracted, the patient occasionally appearing to improve, and then as suddenly changing for the worse; a large abscess formed in the right axilla, which was opened and discharged freely; in spite of tonics, wine, &c., he lost flesh; the wound became pale and flabby; diarrhœa set in, and rather more than a month after the operation, he complained of severe pain in the right hip, and a large glandular swelling was discovered the next day in the groin. He sunk two days after, and

the examination of the body shewed that the inguinal tumour consisted of enlarged glands. The liver was of the natural size, dark coloured, softened in structure, and gorged with blood. The colon was attached to it by loose adhesions. The kidneys were large, pale, and flabby; when cut into they presented a bluish mottled appearance, but no disorganization. The ureters were of the natural size. A large tumour occupied the lower part of the pelvis, and was closely attached to the bladder, having the mesentery and some folds of the ileum adhering to its superior and posterior part. It appeared to consist of an agglomerated mass of diseased mesenteric glands. This, with the bladder and rectum, was removed entire from the pelvis. On passing the finger through the incision in the prostate—the extent and direction of which corresponded exactly with the theoretic intentions of this part of the operation,—it entered a deep cavity, which felt very irregular and knotty on its surface. The bladder and this cavity were laid open from the prostatic opening throughout their entire extent. The bladder was small and thickened; the mucous membrane extensively ulcerated, and covered with muco-purulent matter. An opening of considerable extent at the fundus of the bladder communicated with a large glandular abscess. The septum, or wall of separation, was hard, thick, and irregular; the finger would easily pass through the opening of communication. The interior of the abscess had very much the appearance of that of the bladder, but it was very irregular, from the diseased glandular projections which formed its parietes. The incision of the prostate had no appearance of cicatrization. On cutting deeply into the right groin a quantity of reddish pus escaped, and was also felt fluctuating within the pelvis, over the thyroid foramen. The whole of of the ramus pubis, from the acetabulum to the symphysis, had disappeared by absorption, or more properly suppurative dissolution. The pubis on the left side of the symphysis was so softened as to be easily cut with a knife, and was saturated with pus. The prostate gland was free from disease; and the only portion of the mucous membrane of the bladder not ulcerated, lined a sort of pouch on the right side, in which the stone had been situated, and from which it required to be dislodged by the scoop during the operation.

LITHOTOMY.—In the *Provincial Medical Journal* is recorded a case in which Mr. Greenhow extracted a calculus of the mulberry figure, but of a yellow colour, weighing five drachms and a half, from a young sailor, who had been accustomed to drink largely of cider. About three weeks after the operation, the left thigh became affected with a disease resembling phlegmasia dolens, the occurrence of which retarded the cure.

FUNGUS HÆMATODES OF THE EYE.—Mr. Greenhow, in the *Provincial Medical Journal* describes a case of fungus hæmatodes of the eye, with cataract, in treating which he first broke up the diseased lens, and afterwards, as the fungoid disease was making progress, extirpated the eye. The man recovered. The operation was performed last April, and as yet there has not been any return of the malignant fungus. On examining the organ after its removal, the interior was found nearly filled with fungoid disease, which had evidently originated from the upper portion, where the sclerotica was first observed protuberant and discoloured. The capsule of the lens had shrunk into a small opaque membranous mass, and the small portion of vitreous humour contained in the space unoccupied by the morbid growth, had become perfectly liquid. The optic nerve seemed free from disease.

PUERPERAL CONVULSIONS.—In the *Prov. Med. Journ.* are detailed two cases of puerperal convulsions—one by Mr. Faircloth, and the other by Mr. Dayman. In the first case, which was a very severe one, bleeding, leeching the temples, and cupping, together with purgatives exhibited by the mouth and in enema, were employed, and, after a time, a still-born female child was born unconsciously to the mother, without artificial aid. All convulsive symptoms then ceased. In the second case, in which also delivery took place unconsciously, Mr. Dayman, in addition to abstracting about thirty ounces of blood from the arm, exhibited Battley's sedative in rather large doses, and is inclined to attribute much benefit to its influence in allaying nervous irritability.

EFFECTS OF AGUE ON TEE-TOTALLERS.—Mr. Morris in the *Prov. Med. Journ.*, cites cases to confirm his opinion that malaria has a more powerful effect upon persons who abstain totally from stimulants. It has, he says, a very depressing effect upon those who live well, and are of a full habit of body; it is not to be wondered at, therefore, that it should have a more injurious effect upon those who are essentially the reverse. He has found from repeated observation, that tee-totallers are more liable to be affected by malaria, and that the fever is in them more liable to become typhus. This, he adds, is not doubted by persons residing in the fenny districts, who are fully acquainted with malaria in all its forms, and he draws the necessary conclusion that persons who reside in marshy districts should not abstain totally from stimulants, as by so doing they render themselves liable to an attack of fever, and consequently, place their lives in danger. To wish totally to suppress the use of stimulants is, he imagines, bad policy, and in that opinion we fully coincide; it is their abuse, and not their rational use, which is injurious.

CO-EXISTENCE OF VACCINIA AND VARIOLA.—Mr. Pittock narrates in the *Prov. Med. Journ.*, a case of the co-existence of vaccinia and variola, in which the latter disease was not modified. Such examples are not altogether rare.

BILIARY CALCULI.—Dr. Fauconeau Dufresne says, in the *Gazette Medicale*, that a thickened and degenerated state of the bile, with small fatty concretions, in passing through the biliary ducts, may give rise to symptoms analogous to those of calculi; nervous and colicky pains may also cause the same error.

VACCINATION.—M. Weninger, of Vienna, has published a case where vaccination was performed on a child eight months old in July 1839, and did not become developed till July 1842, thus remaining latent for three years. This appears to us somewhat apocryphal; we have, however, known it to remain latent for as many weeks.

ALVEOLAR EXOSTOSIS.—Mr. S. M. Shepherd has published in the *American Journal of Dental Surgery* the case of a gentleman, about 35 years of age, who called on him to have two artificial teeth inserted. Mr. Shepherd thought a central incisor tooth was wanting, but upon examination he found that the space which he had supposed was occasioned by the loss of a tooth, was between the superior central incisors, and that all the front teeth were present, including the bicuspides. This space was square and even, and presented exactly the appearance of the loss of a tooth, with this difference only, that it was in the centre of the mouth. His attention was then directed to the lower teeth, which he found precisely in the same condition. The space in this instance was considerably wider, especially at the points of the teeth, which diverged a little, making it necessary to insert two instead of one. Mr. Shepherd says he has seen many cases in which the teeth have been forced apart by some unhealthy action in the gum, sufficiently wide to admit of another tooth, and when the gum became healthy, the teeth retained the position into which they had been thrown; and in some cases he has inserted teeth where spaces have been thus produced; but he never before saw a case in which the gum had always been healthy, that would at all admit of it. The editor of the *American Journal*, in remarking on this case observes, that alveolar exostosis is by no means unfrequent in its occurrence, and is doubtlessly the result of inflammation of the alveolar periosteum—favoured by some peculiar constitutional idiosyncrasy. It is an affection in which the gums rarely participate. He has frequently known teeth to be thrust nearly out of their sockets by it, and at other times to be forced asunder in the manner described by Mr. Shepherd; the deposition of bone taking place in the one case at the bottom of the alveolus, and in the other only on one of its sides.

ACTION OF THE OIL OF JUNIPER ON THE ANIMAL ECONOMY.—According to M. Simon, the modus operandi of the essential oil of juniper on the animal economy, in small doses, is the same as th of spirit of turpentine. It scarcely increases t appetite or digestion: it only slightly accelerates t circulation, but it increases animal heat, and excit all the secretions, particularly that of the kidney communicating to the urine the odour of the viol If its use be continued for some time, it affects th kidneys in such a manner as to cause strangur dysuria, ischuria, and even hematuria. With r gard to its use in large doses, from experimen which M. Simon has made, he draws the followi conclusions:—1st. In the dose of thirty gramme it is a poison equal in strength to spirit of turpe tine. It is absorbed, as is proved by the odo which the abdominal cavity exhales when it is la open.—2dly. It is eliminated from the syste partly by pulmonary exhalation, and partly by th urinary secretion.—3dly. It does not occasion i flammation of the stomach or of the intestine but it sometimes induces congestion of the vesse of the jejunum, and extravasation of blood in th stomach, and, finally, acts powerfully on the kid neys, which are sometimes gorged with blood, an occasionally on the rectum, in the same manner a spirit of turpentine.

SUBCUTANEOUS REMOVAL OF PART OF TH LOWER JAW FOR OSTEO-SARCOMA.—A case i which this operation was performed, is recorded i the *Bulletina delle Scienze Mediche di Bologna.* Th disease occupied the right half of the horizontal and part of the ascending, portions of the lowe jaw, having commenced in the bony structure, an grown to the size of a man's fist. The tumou was circumscribed, and occupied the lower jaw from the first incisor tooth to near the neck, o narrowing, of the ascending ramus of the affecte side, approximating the condyle. M. Siguorini the operator, did not operate according to an of the previously described methods, but conceive the plan of proceeding without interrupting th continuity of the skin, or making any externa wound, by conducting the whole of the operatio in the interior of the mouth. The great poin towards effecting this object, consisted in th means of dividing the bone in the two places re quired, which was accomplished by means of cut ting-pincers or forceps. This was the second par of the process, the first consisting in the necessary steps for insulating the tumour, and the third i its removal through the mouth, which was not ac complished till the tumour was divided into two equal parts. The case was successful.

POISONING BY ESSENTIAL OIL OF ALMONDS.—Dr. Bull has detailed, in the *Prov. Med. Journ* the case of a woman, forty-nine years of age, and unmarried, who destroyed herself by taking the essential oil of bitter almonds. She had some time before manifested indications of insanity. When he arrived, there was not any smell of the poison in the room, or about the person, although it had been clearly discoverable a short time previously, nor could it again be recognized, until after the use of the stomach pump. The patient was then in a dying state, quite insensible, face extremely livid, lips separated, teeth clenched, and there was much froth about the mouth. The eyes were half shut and glassy; the pupils rather dilated, and directed upwards; both were irregular, the left one particularly so; and the irides were immoveable. The regular respiration had ceased, but at short intervals the chest was expanded by convulsive action. The action of the heart had not entirely ceased, but its pulsation was exceedingly feeble, indeed scarcely perceptible. There was no pulse at the wrist. Efforts at restoration were employed for upwards of an hour, by cold affusion, use of the stomach-pump, injection of brandy, ammonia, &c., friction of the limbs, &c., but unavailingly. The convulsive action of the chest ceased altogether soon after Dr. Bull's arrival, and he could not again detect the least pulsation of the heart. The examination of the body shewed the viscera to be generally very healthy, the only variation from health being the presence of a small cyst of the left kidney, which was rather larger than the right, a few ounces of pure serum in the cavities of the pleura, and some serum effused over the hemispheres of the brain. The almond smell could not be detected in the cavities of the chest, head, or heart, nor yet in the

enous blood, with which the system appeared to e gorged throughout. It was readily pereeptible n the stomaeh, but not very strongly. From the vidence that was colleeted respeeting this ease, t appears that the fatal dose of oil was about eventeen drops, and Dr. Bull eoneludes his comunieation by eondemning the praetice of druggists in selling sueh an artiele in its eoneentrated orm.

Case of gun-shot wound.—Mr. Daniell narates, in the *Prov. Med. Journ.*, a ease in which a an, twenty-five years of age, was shot through the body; the contents of the gun entered about alf an ineh below the navel, on the right side, nd passed out about two inehes above the hip, and three from the vertebral eolumn; the distanee from wound to wound was about six inehes. The ignited wadding or eartridge passed through the wound unextinguished, and set fire to the shirt, opposite the posterior opening. In the belief that the ease was hopeless, Mr. Daniell eontented himself with watehing nature, who did her work so well, that the man ultimately reeovered, portions of elothing, forty shots, and other extraneous matters having eome away from the wound previously. The man, at the date of the report, was in exeellent health.

Effects of malaria evident at a distance from its source.—In the *Provincial Medical Journal*, is published an extract from a letter of Dr. Parker's, eonfirmatory of a statement previously made by Dr. Robertson, with respeet to the distant influenee of the malaria of ague from its origin. He states, from his experience at Woolwieh, that a hot sun, following heavy rain, and aeeompanied by a light air from the eastward, exhibits the first cases of ague, at or about the top of Shooter's Hill, where they are mild and easily eurable. But, as the eause continues, its effeets are gradually traceable down the faee of the hill to Plumstead Common, where the eases are mueh more severe, and the type of the disease modified; and thenee to the village below, which is situated on the verge, and gives name to the Plumstead Marshes, where the character of the disease is purely remittent, and exhibits all the phenomena of the Walcheren epidemie; here is found the habitual sallow complexion, with its usual coneomitant disease of the abdominal viscera, commencing in eongestion, and terminating in dropsieal effusion. Men who have been admitted into the Royal Marine Infirmary, at Woolwieh, and have been plaeed near the windows on the eastern aspeet, have been attaeked by ague, even at the distanee of three miles or more from the souree of the malaria, while patients on the other side of the ward have been unaffected.

Stricture of the colon.—Mr. Jaekson has published, in the *Provincial Medical Journal*, an interesting ease of strieture of the colon, terminating fatally in inflammatory sphaeelus. His patient was a fine, healthy-looking, woman, twenty-six years of age, the mother of three children. On opening the abdomen, nearly the entire eontents of the intestines were found to have eseaped into the peritoneal eavity. The upper part of the ascending portion of the eolon, and the first portion of its areh, were in a sphaeelated state, with numerous small rents or openings in it. The stricture was situated at the upper portion of the sigmoid flexure, and a small bone, apparently one of the phalanges of a small pig, was found in it. There were not any fæces below the stricture. The remaining viseera were healthy.

Fibrous tumour of the uterus.—Mr. Elkington narrates, in the *Provincial Medical Journal*, a case of fibrous tumour of the uterus, which oeeurred in the person of a widow, 46 years of age, and existed for a year and a half before the case terminated fatally. The treatment adopted was merely palliative. On a *post-mortem* examination, the enlarged uterus was found to reach as high as the umbilicus; at the fundus, within the parietes, and projecting upwards, was a small eneysted tumour; and there was, also, a tumour, about the size of a walnut, attaehed to the left round ligament, which presented a fibro-scirrhous appearanee on being cut into. On making a seetion of the uterus and internal tumour, it was found attached to nearly the whole of the fundus and right side of the uterus; two-thirds of the tumour had passed through the os Internally, it was fibrous in its texture, with a number of eells at the lower part. Externally, the surfaee of the tumour, at the most depending part, was eovered by small uleerations. The tumour, with the uterus, &c., weighed *two ounces and threequarters;* at least, it is so stated by Mr. Elkington; but, from the description of the ease, we should be inelined rather to believe the weight to have been pounds instead of ounees. A fibro-seirrhous tumour, attaehed to the fundus and right side of the uterus, and projeeting through the os to the extent of two-thirds, while the uterus itself extended as high as the umbilicus, could hardly be so light as Mr. Elkington has described. Even our own estimate appears to us to be under the mark.

Internal uterine hæmorrhage. — Dr. Waddy narrates in the *Provincial Medical Journal*, a ease of internal hæmorrhage, resulting from the complete separation of the placenta, eaused by violent exertion, and whieh terminated fatally. Cæsarian section was performed, but the ehild was dead.

Rupture of the uterus.—Mr. Elkington has published in the *Provincial Medical Journal*, a case of ruptured uterus, occurring in the person of a woman, 38 years of age, with a large pendulous belly, and who obstinately determined to take her pains, resting on her hands and knees. Rupture of the posterior part of the vagina to the extent of half its eireumference took place, and the ehild reeeded, but was followed by Mr. Elkington, who brought down one foot, and delivered his patient. The placenta was found lying loose and detached in the abdomen. The patient rallied afterwards, and survived the accident a few days. The cause of the laceration Mr. Elkington believes to have been the erampy character of the pains, and the unusually pendulous state of the abdomen, mueh inereased by her remaining so long upon her hands and knees, dragging the uterus forwards, over the pelvis, and stretching the posterior surfaee of the vagina. The mode of prevention, according to this explanation, is very obvious.

Neuralgia of the lower jaw.—In the *New York Journal of Medicine*, is recorded the case of a young lady, who, after the extraction of a tooth, suffered most intensely from intermittent neuralgie pain, so severe, as, from being a full robust girl, to have redueed her to a mere skeleton. Various measures were adopted unavailingly, and, at last, Dr. Green was consulted, who, imagining there was some local eause, examined the jaw, and discovered a small hard tumour, oecupying the plaee where the tooth had been extracted. This he readily removed with a small sealpel, after which the patient had no more return of her neuralgia, and went back into the country.

[The only points of interest to our readers in the last number of the *Medical Gazette* are the following.)

Hæmorrhage from the Liver.—Dr. Abercrombie has published the case of a lady, 35 years of age, of spare habit, and sallow complexion, who during the last two months of pregnancy suffered much from dyspepsia, and who was also very subjeet to gastrodynia. To relieve this latter symptom, she was in the habit of having recourse to pressure, and while labouring under a severe attack, she plaeed a silk handkerchief round her body, and had it pulled very tight. This Dr. Abercrombie eaused to be removed, as he feared it would cause some injury, and he relieved her by sedatives and carminatives. Labour came on soon afterwards, and was completed by the natural proeess, the uterus contracting properly. After the lapse of nearly an hour, Dr. Abercrombie found her with a fluttering pulse, oppression, anxious breathing, and pain in the right hypoehondrium and right side of the heart. Examination shewed the uterus contracted, and no flooding. Symptoms of internal hæmorrhage continued, in spite of the exhibition of stimuli, &c.; and Dr. Flick, and afterwards Mr. Laing were called in consultation. Mr. Laing thought there might be some masked inflammation, whieh was passing into gangrene. The patient died about three days after the attaek, and, on examining the body, the eaput eœeum, and a small portion of the aseending eolon, were observed to be of a dark colour, nearly resembling gangrene, but evidently depending on venous eongestion. On the liver a large sae presented itself, oeeupying the superior and anterior surfaees, whieh burst on an attempt being made to remove the organ, and discharged a very eonsiderable quantity of blood, about two pounds, both in the fluid and eoagulated state; two small laeerated openings about an ineh apart, were discovered in its substanee, through whieh the blood had eseaped from a branch of the vena portæ, and the sac proved to be the peritoneal eovering, which had been detaehed by the blood effused. The organ itself was throughout diseased, of a mottled appearance when eut into, and unusually soft, breaking down under the finger by the slightest pressure; the only part to be considered healthy was the margin. The uterus was in a perfectly sound state, as were all the other viseera, both of the pelvis and abdomen. This lady had resided many years in India. The period when the rupture of the blood-vessel took place, Dr. Abererombie regards as uncertain; but he is apt to believe that it oecurred during labour, and that the effusion was gradual. For our own part, we are more inelined to consider that it was produced prior to delivery, and, perhaps, was caused by the tight pressure used to relieve the attack of gastrodynia.

Retroversion of the uterus.—Mr. Whitehead has detailed an interesting case of retroversion andprolapse of the uterus oecurring in the unimpregnated state, and attended with impaction of fæees in the rectum, displaeement of the bladder, and considerable local and general irritation. The treatment adopted consisted of the local abstraction of blood, repeated catheterism, fomentations, aperients, and the ingestion of slops. Some relief was experienced from this plan, more espeeially from the action of the aperients, but the tenesmus, &e., continued for some time very severe, and it was not till after the lapse of several days that the bowels acted freely, and the seybalæ blocking up the rectum, were discharged, many of the pieces being streaked with blood and mueous pus. The whole course of the colon appears to have been distended with scybalæ, the discharge of which oeeupied several days, and the collection was evidently produeed by the pressure of the retroverted uterus on the rectum, by which its capacity, at the part pressed on, was reduced to a mere fissure. After the bowels had been thus relieved, the prolapsus remained irreducible, but was less painful. On examination per rectum, at a point opposite the junction of the coecyx with the sacrum, the finger was arrested by a hard, oblong tumour lying across the bowel, on attempting to raise whieh, the impulse was communicated to the bladder, and to all the protruded mass, and occasioned great pain about the sacrum, hips, and hypogastrium. A more careful examination, *per vaginam*, enabled the outlines of the displaeed uterus to be clearly traced, and all doubt was removed by the use of a flexible catheter, passed in through the os uteri, by which its retroverted condition was clearly ascertained. The patient gradually improved, and is reported since to have fully recovered, and to be able to walk about with comfort, when the bladder is retained within the pelvis; which is effected by means of a kind of pessary, formed of a small bladder, attached by its mouth to the end of a tube, whose other extremity is provided with a valve, to prevent the escape of air within. This pessary is inflated, while within the vagina (the prolapsus having been previously reduced), by means of a syringe, and a T bandage maintains it in its situation. The retroverted uterus could not be reduced. Its occurrence, from the history of the case, appears to be referable to the period of pregnancy, four years previously; and it seems to have proved the cause of miscarriage on more than one occasion since.

Sloughing of the scrotum.—A case of sloughing of the serotum resulting from injury, is reported from the Westminster Hospital, by Mr. Phillips, under whose care the patient was. The man was a brewer's drayman, and accustomed to

drink largely of beer, the want of which stimulus for forty-eight hours caused the scrotum to slough, and greatly endangered his life. The exhibition of wine and other stimulants roused the powers of life, the sloughing was arrested, the sloughs thrown off, healthy action set up, and the man was ultimately discharged well. The testicle was not injured. It is remarkable that a hydrocele under which he labored was not cured by the accident. The case altogether is instructive and interesting.

Epidemic pseudo-syphilis.—M. Aliés describes in the *Journal de Medecine de Lyons* a disease, which, in 1840 and 1841, affected about eighty individuals near Luxeuil. The principal feature of the malady consisted in an eruption of mucous tubercles in the neighbourhood of the anus and genitals. It was popularly supposed to be of syphilitic origin, and was readily cured by mercury. M. Aliés does not give an opinion as to the true nature of the disease; its appearance and situation, and its curability by mercury, present a resemblance to syphilis, but the order of appearance and succession of the symptoms, their mode of transmission and termination, induced him to doubt its being of a syphilitic nature, together with the fact that a great number of his patients denied having been exposed to any source of infection, and in all there was a complete absence of secondary symptoms.

GOSSIP AND NEWS OF THE WEEK.

Prussic Acid.—A strange dog had been in the habit of visiting the shop of an eminent Bath chemist, and, by repeated barking, annoying his customers. Upon one of these intrusions, he gave the dog a dose of prussic acid, and chucked him into the Avon, which flowed hard by; to his utter horror and amazement, next day Jowler made his appearance, as usual, nothing worse, and by an angry bark, seemed to hurl defiance at the abortive attempts of the druggist for his destruction. The dog had a dose sufficient to carry off twenty dogs.

Promotion.—Assistant Surgeon R. W. Clarke, to the rank of surgeon.

Appointments.—Surgeons: J. Stewart to the Osprey; R. H. Banks, to the Flying Fish; J. Douglas, M.D., to the Waterwitch; W. Robertson, to the Pantaloon; D. J. Coulter, to the Firebrand; O'Neill Fergnson, to the Daring; Dr. M'William, to the Hyderabad convict ship for Van Dieman's Land.—Asssistant Surgeons: D. Russell to the Victory; G. J. Willes (acting), to the Firebrand.

A SELECT PRACTICAL FORMULARY.

TRANSLATED FROM THE FRENCH OF M. FOY, PRINCIPAL PHARMACIEN OF THE HOSPITAL ST. LOUIS, AT PARIS.

(Continued from page 478.)

Pommade, Ophthalmic (Desault): one drachm of red oxide of mercury, one drachm of prepared butter, one drachm of calcined alum, one drachm of crystallized acetate of lead, twelve grains of the proto-chloruret of mercury, two ounces of rose ointment, mixed together on a porphyry slab. Mode of exhibition—twenty, thirty, and forty grains, used in frictions, the same precautions being observed as for the preceding pommade.

Pommade, Ophthalmic (Grandjean): half a drachm of red precipitate, two drachms of cerate without water, mixed together, and employed as the preceding.

Pommade, Ophthalmic (Regent): ten grains of red oxide of mercury, ten grains of crystallized acetate of lead, one grain of camphor, two drachms of fresh butter, washed with cold rose-water, mixed together, and employed as the preceding.

Pommade, Ophthalmic (Dupuytren): ten grains of red precipitate, twenty grains of sulphate of zinc, one ounce of lard, mixed together, and employed as the preceding.

Pommade, Ophthalmic (Sichel); two drachms of Neapolitan ointment, one drachm of extract of belladonna, mixed together. Used in severe ophthalmia, accompanied with intense photophobia. A piece, about as big as a nut, is used in frictions on the forehead, five or six times a-day.

Pommade, Ophthalmic (Sichel): two drachms of Neapolitan ointment. Used in frictious on the forehead, as the preceding, in cases of acute conjunctivitis.

Pommade, Ophthalmic (Sichel): one drachm of Neapolitan ointment, half a drachm of Rousseau's laudanum, mixed together. Used in the same manner as the preceding, in painful ophthalmia, unattended with photophobia.

Pommade, Ophthalmic (Sichel); two drachms of Neapolitan ointment, four to eight grains of crude opium, twelve grains of extract of hyoscyamus, mixed together. Used as the preceding.

Pommade, Ophthalmic (Sichel): fifteen grains of red precipitate, one drachm of lard, mixed together. A piece as large as a pin's head, is used in frictions, two or three times a-day, on the free edge of the eyelids.

Pommade, Ophthalmic (Sichel): one or two grains of the sulphate of cadmium, added to the preceding preparation. Used in the same manner, to diminish the cicatrices of the cornea.

Pommade, Ophthalmic (Sichel): one grain of strychnine, twenty-four grs. of mezereon cerate, twenty-four grains of mezereon pommade, mixed together. This preparation is used in the dose of from six to eight grains, to dress the blisters applied to the forehead, in the treatment of torpid amaurosis.

Pommade, Ophthalmic (Janin): four drachms of lard, two drachms of prepared tutty, two drachms of Armenian bole, one drachm of white precipitate.

Pommade, Ophthalmic (De Lyon): two ounces of red precipitate, one drachm of rose ointment, mixed together. *** This is evidently a mistake: the quantities should be reversed.

Pommade, Ophthalmic (Saint Ives): eighteen grains of red precipitate, eighteen grains of oxide of zinc, six grains of camphor, ninety grains of wax, one ounce of fresh butter. Prepared and employed as the preceding.

Pommade, Ophthalmic (Guthrie): four to ten grains of melted nitrate of silver, five grains of crystallized acetate of lead, one ounce of lard, mixed together on a porphyry slab. Mode of exhibition—a piece as large as a pin's head is introduced every second day into the eye, in cases of chronic ophthalmia, seated either in the palpebral or ocular conjunctiva. *** This is also a very serious error. The black ointment of Mr. Guthrie is prepared with ten grains of the nitrate of silver, reduced to an impalpable powder, one drachm of lard, and fifteen drops of the solution of the acetate of lead. The nitrate of siver is first incorporated with the lard in a glass mortar, and the solution of the acetate of lead is added gradually afterwards, the preparation being continually stirred the while. A small quantity of this ointment is inserted between the eyelids every other, or every third day, in cases of conjunctivitis, acute and chronic, pustular ophthalmia, purulent, muco-purulent, gonorrheal, and Egyptian ophthalmia, and in acute and chronic corneitis. In the acute inflammations, local or general depletion, according to circumstances, may precede the use of the ointment.

Pommade, Ophthalmic, with Soot (Carron du Villards): one ounce of beef marrow, fifty-four grains of extract of wood soot, twelve grains of citrine ointment, forty-eight grains of cod-liver oil, mixed together. Mode of exhibition—a piece the size of a pin's head, used in gentle frictions on the eyelids, when they continue red after variolous ophthalmia.

Pommade, Ophthalmic, (Carron du Villards): one ounce of strong mercurial ointment, eight grains of strychnine, eight drops of the essential oil of bitter almonds, mixed together. Mode of exhibition: one drachm to be used at a time, in friction, in severe ophthalmia.

Pommade, Ophthalmic, (William Adams): twenty grains of powdered nitrate of silver, twenty grains of Prussiau blue, one drachm of lard, twenty grains of black drop, mixed very carefully together. Used in Egyptian ophthalmia. After the excision of the conjunctiva, the inside of the eyelids is smeared over with a very small quantity of this ointment.

Pommade, Ophthalmic, Hydriodated: one to two grains of the hydriodate of potash, one drachm of lard, fresh butter, rose ointment, or cerate without water, carefully mixed together. Mode of exhibition—a piece, the size of a pin's head, in gentle frictions on the free-edge of the eyelids, in cases of purulent ophthalmia, vascular keratitis, and scrophulous specks; a piece as large as a small nut in cancerous ulcerations of the skin.

Pommade, Phosphoretted: one drachm of phosphorus, fifty drachms of lard; the mixture is to be effected in a stoppered glass bottle. Mode of exhibition—in frictions, in the dose of from twenty to thirty grains, two or three times a-day, in certain paralyses, certain dartrous eruptions, varices, gout, rheumatism, &c.

Pommade of Pihorel: three drachms of strong mercurial ointment, one drachm of powdered ammoniacal sulphuret of lime, mixed together. Mode of exhibition—in frictions on the hands and feet, in the dose of from one to two drachms daily, half evening and morning. Anti-syphilitic.

Pommade pour le Toucher (Maison d'Accouchement): one drachm of yellow wax, one drachm of spermaceti, melted in two ounces of olive oil, to which is gradually added, one drachm of caustic soda, the whole being constantly stirred until it is cold.

Pommade for the Lips: two drachms of oil of sweet almonds, one drachm of white wax, coloured with a little alkanet root, and aromatized with a few drops of essence of roses. Used in fissures of the lips, &c.

Pommade, Discutient (Lisfranc): three ounces of Galen's cerate, one ounce of powdered digitalis, mixed together. Mode of exhibition—a piece as large as a nut, used in inunction every morning, on limbs affected with passive swelling, or enlargement. It constitutes a good auxiliary to the method of compression.

Pommade, Discutient (Hotel Dieu): one drachm of powdered calomel, one drachm of powdered squills, four drachms of lard, mixed together, and aromatized with a sufficient quantity of essential oil of roses. Mode of exhibition—used in frictions, in the dose of one or two drachms, twice a-day, in chronic swellings of the joints.

Pommade, Discutient (Dupuytren): five drachms of powdered sal ammoniac, ninety-five drachms of strong mercurial ointment, mixed together. Mode of exhibition—a piece as large as a nut, used in frictions, evening and morning, on scrofulous swellings.

Pommade, Discutient (Dupuytren): ten drachms of sal ammoniac, thirty drachms of strong mercurial ointment. Used in cases of traumatic exostoses, and of the tumours which form on the patellæ of persons who are in the habit of being on their knees for a long time.

Pommade, Rubefacient: eight drachms of lard, one drachm of powdered cantharides, one drachm of powdered camphor, mixed together. Mode of exhibition—from tw to four drachms, in frictions, round the neck, in cases croup.

Pommade, Saturnine (Polish Formula): three ounce of lard, one drachm of crystallized acetate of lead, mixed to gether, and four drachms of distilled water, gradually added the mass being continually stirred the while. Used in the dressings for superficial ulcerations of the skin.

Pommade, Simple Sulphuretted (Hospital St. Louis) one ounce of sublimed sulphur, five ounces of lard, mixe together. Mode of exhibition—one ounce daily, used i frictions, at twice, on all parts of the body affected with th itch vesicle. The medium duration of treatment is fortnight.

Pommade, Stibiated (Form. Paris Hosp.): one ounc of porphyrised tartarised antimony, three ounces of lard accurately mixed together. Employed as a topical re vulsive.

Pommade Sulpho-alcaline; see Pommade of Helmerick.

Pommade Sulpho, Saponaceous: (Hopital St. Louis two ounces of lard, one ounce of scraped white srap, one ounce of sublimed sulphur, mixed together. This pommade is rather less active than that of Helmerick.

Pommade, Sulphuro-Alcaline (Alibert): three ounces of sublimed and washed sulphur, three ounces of subcarbonate of potash, three pounds four ounces of lard, mixed together. Mode of exhibition—used in the same manner as the simple sulphur ointment, in the treatment of itch This pommade is distributed gratuitously to the out-patients Its effects are produced more slowly, but its action is less irritating.

Poppy, Heads of—capsules, fruit: internally, one to three drachms, digested in a quart of water.—Syrup (Diacodium) of White Poppies: half an ounce to an ounce in a potion, julep, &c.; externally, in lavements, lotions, injections, poultices, fomentations, &c., half an ounce to an ounce in a quart of water. It possesses the same properties as opium, but rather less marked.

Potassa Fusa: internally, four to twenty drops of the following solution:—one part of potassa fusa, ten parts of distilled water, in four or five ounces of a mucilaginous vehicle. Externally, a sufficient quantity, used as a caustic A piece as large as a pea will produce an eschar as large as a one-franc piece. The potassa fusa, or potassa cum calce, is one of the causties most frequently used to establish the exutories called issues, to open abscesses, to cauterize poisoned wounds, erectile tumours, &c. Although it is classed among the corrosive poisons, yet when employed by skilful practitioners, its internal use has been followed by good results, in scrofula, lepra, gravel, nephritie colic, and some other affections caused by a superabundance of uric acid in the urine. The application of this caustic is made in the following manner:—the portion of skin which is to be cauterized, is covered with a piece of diachylon plaster, pierced in the centre with an opening of a shape corresponding to the proposed eschar, but of rather less than half the extent. In the centre of this opening, one or more fragments of concrete potash are placed; these are covered with another piece of plaster, without any hole in it, after which, a compass is applied, and over that a bandage. Six or seven hours afterwards, the dressings are removed, the eschar is divided with a bistoury, and afterwards allowed to separate. It is sometimes of service, especially in old people, whose skin is dry, and possesses but little warmth, to moisten the potash slightly, to assist its liquefaction. When it is desirable to apply the potassa fusa to parts of greater or less depth it is run into cylinders. *** The caustic soda, although rarely used, possesses the same properties.

Potassium; Dr. Herberg and M. Graeffe, of Berlin, have taken advantage of the property of potassium of burning on water, to cauterize the punctures of leeches, and thus arrest the bleeding.

Potion, Acid (Biett): two drachms of simple syrup, four ounces of spring water, mixed together, and two drachms of diluted sulphuric acid added. Mode of exhibition—one or two spoonfuls twice a-day, in the treatment of inflammatory fevers.

Metropolitan Mortality for the Week ending Saturday, September 14.

Causes of Death.	Total.	Average of 5 Springs.	Average of 5 Years.
All Causes	843	900	946
Zymotic, or Epidemic, Endemic, and Contagious Diseases	236	191	178
Sporadic Diseases—			
Dropsy, Cancer, and other Diseases of uncertain or variable Seat	84	106	111
Diseases of the Brain, Spinal Marrow, Nerves, and Senses.	132	159	157
Diseases of the Lungs, and of the other Organs of Respiration	197	233	286
Diseases of the Heart, and Blood-vessels	21	19	21
Diseases of the Stomach, Liver, and other Organs of Digestion	63	88	69
Diseases of the Kidneys, &c...	7	5	5
Childbirth, Diseases of the Uterus, &c.	9	9	10
Rheumatism, Diseases of the Bones, Joints, &c.	7	5	6
Diseases of the Skin, Cellular Tissues, &c.	1	1	1
Old Age	56	56	71
Violence, Privation, Cold, and Intemperance	28	25	26

No. 262. **SUMMARY.** SEPT. 28.

THE RULES AND REGULATIONS OF EXAMINING MEDICAL BODIES IN ENGLAND, SCOTLAND, IRELAND, AND FRANCE:—

UNIVERSITY OF LONDON.—Examinations for the degree of Bachelor of Medicine—Examination for Honours—Second Examination—Examination for Honours—Scheme of Medical Examinations, &c., for the degrees of Doctor and Bachelor of Medicine—Institutions and Schools—Regulations relating to Students and Practitioners 527

ROYAL COLLEGE OF PHYSICIANS.—First, Second, and Third Examinations 529

ROYAL COLLEGE OF SURGEONS OF ENGLAND.—Council Regulations respecting the Professional Education of Candidates — Studentships in Anatomy — Jacksonian Prizes for the year 1844—Collegial Triennial Prize 530

APOTHECARIES' HALL.—Regulations—Course of Study—Recognition of Lecturers and Schools—Registration of Testimonials—Preliminary Examination—Examination.. 531

New Regulations for Candidates for the Fellowship of the Royal College of Surgeons of England—Examination of Candidates for the Fellowship 532

UNIVERSITY OF OXFORD.—Regulations—Radclyffe Travelling Fellows 533

UNIVERSITY OF CAMBRIDGE.—Regulations—Proceedings in Physic: M.B.; L.M.; M.D. 533

Army Medical Department.—Regulations—Qualifications . 534

Naval Medical Department.—Qualifications 534

Ordnance Medical Department.—Regulations for the Admission of Candidates—Candidates—Qualifications 535

East India Company's Service.—Regulations—Qualifications in Surgery—Ditto in Physic—General Cautions .. 535

University of Edinburgh (1582).. 536

Royal College of Physicians Edinburgh 536

Ditto ditto of Surgeons Edinburgh 537

University of Glasgow 538

Faculty of Physicians and Surgeons of Glasgow 538

King's College, Aberdeen 538

University of St. Andrew's (1412) 539

Ditto of Dublin. (Trinity College,) 1591.. 539

King's and Queen's College of Physicians in Ireland 539

Royal College of Surgeons in Ireland (1782-1828).. 540

Apothecaries' Hall of Ireland (1791) 540

A SESSIONAL SYNOPSIS FOR LONDON 541

MIDWIFERY 541

TO CORRESPONDENTS .. .. : .. 542

LEADERS:—

Address to the New Classes of Students 542

Council of Health 542

The Best and Worst of Scientific Corporations.. 543

Mr. Deshon and the Poor Law Guardian 544

ON MEDICAL REFORM, BY G. H. WEATHERHEAD, M.D. 545

THE BEDFORD MEDICAL MEETING 54

BEWARE OF WOLVES IN LAMBS' CLOTHING 546

MEETING OF THE MEDICAL PROFESSION AT NORWICH 546

REPORTS ON UTERINE DISEASES, BY E. RIGBY, M.D. 547

ON REFLEX NERVOUS ACTS AND THEIR DISTURBANCES, AND THE MORE PROBABLE PARTS OF THE DOCTRINE OF SYMPATHIES, BY F. WILKINSON KING, F.R.C.S.E.:—

Induction—Old Sympathies—Mayo's Example of the Iris, —Bell—Muller—Each part of a Reflex Arc may err—Proportion needful between Causes and Effects—Arcs only partially over the body, so should the Disease be—Vomiting—Asthma—Real Causes of Convulsions 54

HOSPITAL REPORTS:—

King's College Hospital 551

GOSSIP OF THE WEEK 552

METROPOLITAN MORTALITY TABLE 552

THE RULES AND REGULATIONS OF EXAMINING MEDICAL BODIES IN ENGLAND, SCOTLAND, IRELAND, AND FRANCE.

UNIVERSITY OF LONDON.

Examinations for the Degree of Bachelor of Medicine.—Candidates for the degree of Bachelor of Medicine shall be required, 1. To have been engaged during four years in their professional studies at one or more of the institutions or schools recognised by this university. 2. To have spent one year at least, of the four, in one or more of the recognised institutions or schools in the United Kingdom. 3. To pass two examinations.

The First Examination shall take place once a year, and commence on the first Monday in August. No candidate shall be admitted to this examination unless he have produced certificates to the following effect:—1. Of having completed his nineteenth year. 2. Of having taken a degree in arts in this university, or in a university the degrees granted by which are recognised by the senate of this university; or of having passed the matriculatiou examination. 3. Of having been a student during two years at one or more of the medical institutions or schools recognised by this university, subsequently to having taken a degree in arts, or passed the matriculation examination. 4. Of having attended a course of lectures on each of four of the subjects in the following list :—Descriptive and Surgical Anatomy, General Anatomy and Physiology, Comparative Anatomy, Pathological Anatomy, Chemistry, Botany, Materia Medica and Pharmacy, General Pathology, General Therapeutics, Forensic Medicine, Hygiene, Midwifery and Diseases peculiar to Women and Infants, Surgery, Medicine. 5. Of having dissected during nine months. 6. Of having attended a course of practical Chemistry, comprehending practical exercises in conducting the more important processes of general and pharmaceutical chemistry; in applying tests for discovering the adulteration of articles of the materia medica, and the presenee and nature of poisons; and in the examination of mineral waters, animal secretions, urinary deposits, calculi, &c. 7. Of having attended to practical pharmacy during a sufficient length of time to enable him to acquire a practical knowledge in the preparation of medicines.

These certificates shall be transmitted to the registrar at least fourteen days before the examination begins. The fee for this examination shall be five pounds. No candidate shall be admitted to the examination unless he have previously paid this fee to the registrar; and if he fail to pass the examination, the fee shall be returned to him.

Candidates shall be examined in the following subjects :—Anatomy, Physiology, Chemistry, Structural, and Physiological Botany, Materia Medica and Pharmaey.

The examinations shall be conducted in the following order:—Morning, 10 to 1: Monday, Anatomy and Physiology, by printed papers; Tuesday, Chemistry, by experiment and printed papers. Afternoon, 3 to 6: Monday, Anatomy and Physiology, by printed papers; Tuesday, Botany, Materia Medica, and Pharmacy, by printed papers. To commence on Friday, at 10. Chemistry, Materia Medica, and Pharmacy, by *viva voce*, and demonstration from specimens. To commence on Monday, in the following week, at 10: Anatomy and Physiology, by *viva voce*, demonstration from preparations, and dissection.

On the Wednesday morning in the week following the commencement of the examination, the examiners shall arrange, in two divisions, each in alphabetical order, such of the candidates as have passed; and a pass certificate, signed by the registrar, shall be delivered to each candidate. Such candidates only as in the opinion of the examiners are admissible to the examination for honours, shall be placed in the first division.

Examination for Honours.—Any candidate who has been placed in the first division at the First Examination, and who has produced a certificate shewing that he has not eompleted his twenty-second year, may be examined for honours in any or all of the following subjects :—Anatomy and Physiology, (candidates may illustrate their answers by sketching the parts they describe,) Chemistry, Materia Medica, and Pharmaceutical Chemistry.

The examinations shall take place in the week following the commencement of the First Examination. They shall be conducted by means of printed papers; but the examiners shall not be precluded from putting *viva voce* questions upon the written answers of the candidates when they appear to require explanation. The examinations shall be conducted in the following order :—Morning, 10 to 1 : Thursday, Anatomy and Physiology; Friday, Chemistry. Afternoon, 3 to 6 : Thursday, Anatomy and Physiology; Friday, Materia Medica and Pharmaceutical Chemistry.

In determining the relative position of candidates, the examiners shall have regard to the proficiency evinced by the candidates in the same subjeets at the pass examination. Candidates who pass the examinations, and acquit themselves to the satisfaction of the examiners, shall be arranged according to the several subjects, and according to their proficiency in each; and candidates shall be bracketed together, unless the examiners are of opinion that there is a clear difference between them. If in the opinion of the examiners sufficient merit be evinced, the candidate who shall distinguish himself the most in Anatomy and Physiology, the candidate who shall distinguish himself the most in Chemistry, and the candidate who shall distinguish himself the most in Materia Medica and Pharmaceutical Chemistry, shall each receive an exhibition of thirty pounds per annum for the next two years. Under the same circumstances, the first and second candidates in each subject shall each receive a gold medal of the value of five pounds.

Second Examination.—The Second Examination shall take place once a year, and commence on the first Monday in November. No candidate shall be admitted to this examination within two academical years of the time of his passing the First Examination, nor unless he have produced certificates to the following effect :—1. Of having passed the First Examination. 2. Of having, subsequently to having passed the First Examination, attended a course of lectures on each of two of the subjects comprehended in the foregoing list, and for which the candidate had not presented certificates at the First Examination. 3. Of having, subsequently to having passed the First Examination, dissected during six months. 4. Of having conducted at least six labours. (Certificates on this subject will be received from any legally-qualified practitioner in medieine.) 5. Of having attended the surgical practice of a recognised hospital or hospitals during twelve months, and lectures on clinical surgery. 6. Of having attended the medical practice of a recognised hospital or hospitals during other twelve months, and lectures on clinical medicine. 7. Of having, subsequently to the completion of his attendance on surgical and medical hospital practice, attended to practical medicine in a recognised hospital, infirmary, or dispensary, during six months. (Certificates on this subject will be received from any legally-qualified practitioner having the care of the poor of a parish.) The candidate shall also produce a certificate of moral character from a teacher in the last school or institution at which he has studied, as far as the teacher's opportunity of knowledge has extended.

The certificates shall be transmitted to the registrar at least fourteen days before the examination begins. The fee for this examination shall be five pounds. No candidate shall be admitted to the examination unless he have previously paid this fee to the registrar; and if he fail to pass the examination, the fee shall be returned to him.

Candidates shall be examined in the following subjects :—Physiology, (the papers in Physiology shall include questions in Comparative Anatomy,) General Pathology, General Therapeutics, Hygiene, Surgery, Medicine, Midwifery, Forensic Medicine. The examination shall be conducted in the following order :—First Week. By printed papers. Morning, 10 to 1: Monday, Physiology; Tuesday, Surgery; Wednesday, Midwifery. Afternoon, 3 to 6: Monday, General Pathology, General Therapeutics, and Hygiene; Tuesday, Medicine; Wednesday, Forensic Medicine.—Second Week. By *viva voce* interrogation. To commenee on Monday morning, at 10.

On the Monday morning in the following week, the examiners shall arrange, in two divisions, each in alphabetical order, such of the candidates as have passed; and a certificate under the seal of the university, and signed by the chaneellor, shall be delivered to each candidate. Such candidates only as in the opinion of the examiners are admissible to the examination for honours, shall be placed in the first division.

Examination for Honours.—Any candidate who has been placed in the first division at the Second Examination, and has produced a certificate shewing that he has not completed his twenty-

fifth year, may be examined for honours in any or all of the following subjects :—Physiology and Comparative Anatomy, (candidates may illustrate their answers by sketching the parts they describe) Surgery, Medicine, Midwifery, Structural and Physiological Botany.

The examinations shall take place in the week following the Second Examination. They shall be conducted by means of printed papers; but the examiners shall not be precluded from putting *viva voce* questions upon the written answers of the candidates when they appear to require explanation. The examinations shall be conducted in the following order :—Morning, 10 to 1: Tuesday, Physiology and Comparative Anatomy; Wednesday, Surgery; Thursday, Medicine; Friday, Midwifery. Afternoon, 3 to 6: Tuesday, Physiology and Comparative Anatomy; Wednesday, Surgery; Thursday, Medicine; Friday, Structural and Physiological Botany.

In determining the relative position of candidates, the examiners shall have regard to the proficiency evinced by the candidates in the same subjects at the pass examination. Candidates who pass the examinations, and acquit themselves to the satisfaction of the examiners, shall be arranged according to their proficiency in each; and candidates shall be bracketed together, unless the examiners are of opinion that there is a clear difference between them. If in the opinion of the examiners sufficient merit be evinced, the candidate who shall distinguish himself the most in Physiology and Comparative Anatomy, the candidate who shall distinguish himself the most in Surgery, and the candidate who shall distinguish himself the most in Medicine, shall each receive an exhibition of fifty pounds per annum for the next two years, with the style of University Medical Scholar. Under the same circumstances, the first and second candidates in each of the preceding subjects, shall each receive a gold medal of the value of five pounds. Under the same circumstances, the candidate who shall distinguish himself the most in Midwifery, and the candidate who shall distinguish himself the most in Structural and Physiological Botany, shall each receive a gold medal of the value of five pounds.

Scheme of Medical Examinations, Honours, and Rewards, for the Degree of Bachelor of Medicine.—First Examination. *Pass Examination. Subjects*: Anatomy, Physiology, Chemistry, Structural and Physiological Botany, Materia Medica, and Pharmacy.

Examination for Honours.—Subjects: Anatomy and Physiology, Chemistry, Materia Medica and Pharmaceutical Chemistry.—*Rewards*: An exhibition of thirty pounds per annum for two years, and two gold medals of the value of five pounds, in each subject.

Second Examination. *Pass Examination. Subjects*: Physiology, General Pathology, General Therapeutics, Hygiene, Surgery, Medicine, Midwifery, Forensic Medicine.

Examination for Honours.—Subjects: Physiology and Comparative Anatomy, Surgery, Medicine, Midwifery, Structural and Physiological Botany. *Rewards*: An exhibition of fifty pounds per annum for two years, with the style of University Medical Scholar, and two gold medals of the value of five pounds, in each of the first three subjects; and one gold medal of the value of five pounds in each of the last two subjects.

Examination for the Degree of Doctor of Medicine.—The examination for the Degree of Doctor of Medicine shall take place once a year, and commence on the fourth Monday in November. No candidate shall be admitted to this examination unless he have produced certificates to the following effect:—1. Of having taken the degree of Bachelor of Medicine in this University, or a degree in medicine or in surgery at a university, the degrees granted by which are recognised by the senate of this university. Those candidates who have not taken the degree in this university shall produce a certificate of having completed their twenty-third year. 2. Of having attended, subsequently to having taken one of the above degrees in medicine, (*a.*) to clinical or practical medicine during two years in a hospital or medical institution recognised by this university; (*b.*) or, to clinical or practical medicine during one year in a hospital or medical institution recognised by this university, and of having been engaged during three years in the practice of his profession; (*c.*) or, if he have taken the degree of Bachelor of Medicine in this university, of having been engaged during five years in the practice of his profession. (One year of attendance on clinical or practical medicine, or two years of practice, will be dispensed with in the case of those candidates who, at the second examination, have been placed in the first division.) 3. Of moral character, signed by two persons of respectability.

These certificates shall be transmitted to the registrar at least fourteen days before the examination begins. The fee for the degree of Bachelor of Medicine shall be ten pounds. No candidate shall be admitted to the examination unless he have previously paid this fee to the registrar; and if he fail to pass the examination, the fee shall be returned to him. The examination shall be conducted by means of printed papers and *viva voce* interrogation.

Candidates shall be examined in the following subjects:—Elements of Intellectual Philosophy, Logic, and Moral Philosophy; Medicine. The examinations shall be conducted in the following order:—By printed papers, Morning, 10 to 1. *Monday*, Elements of Intellectual Philosophy, Logic, and Moral Philosophy. (Candidates who have taken a degree in arts in this university, or in a university, the degrees granted by which are recognised by the senate of this university, shall be exempted from this part of the examination. The degrees in arts of all universities in the United Kingdom are recognised by the senate for this purpose.) *Tuesday*, Medicine. Afternoon, 3 to 6. *Monday*. A Commentary on a Case in Medicine, Surgery, or Midwifery, at the option of the candidate. *Tuesday*, Medicine.—By *viva voce* interrogation, *Friday* Morning, at 10. Examination on the answers to the Printed Papers, and on the Commentaries; and the examination for a Certificate of Special Proficiency in Medicine, Surgery, or Midwifery, as determined by the candidate's choice of the case for commentary.

On the Monday morning in the following week, the examiners shall arrange in two divisions, each in alphabetical order, such of the candidates as have passed; and a certificate under the seal of the university, and signed by the chancellor, shall be delivered to each candidate. Such candidate only as, in the opinion of the examiners, are admissible to the examination for honours, shall be placed in the first division. If, in the opinion of the examiners, sufficient merit be evinced, the author of the best Commentary on the Case in Medicine, the author of the best Commentary on the Case in Surgery, and the author of the best Commentary on the case in Midwifery, shall each receive a gold medal of the value of five pounds. Any candidate may present a thesis on a subject of his own choice. If, in the opinion of the examiners, sufficient merit be evinced, a gold medal, of the value of ten pounds, shall be given to the author of the best thesis. The examiners shall not be precluded from examining the author on the subject of his thesis.

Examination for Honours.—Any candidate who has been placed in the first division, may be examined for honours in any or all of the following subjects:—Surgery, Medicine, Midwifery. The examinations shall take place in the week following. They shall be conducted by means of printed papers; but the examiners shall not be precluded from putting *viva voce* questions upon the written answers of the candidates when they appear to require explanation.

The examinations shall be conducted in the following order:—Morning, 10 to 1: Tuesday, Surgery; Wednesday, Medicine; Thursday, Midwifery. Afternoon, 3 to 6: Tuesday, Surgery; Wednesday, Medicine; Thursday, Midwifery.

In determining the relative position of candidates, the examiners shall have regard to the proficiency evinced by the candidates in the same subjects at the Pass Examination. Candidates who pass the examinations, and acquit themselves to the satisfaction of the examiners, shall be arranged according to the several subjects, and according to their proficiency in each; and candidates shall be bracketed together, unless the examiners are of opinion that there is a clear difference between them. If, in the opinion of the examiners, sufficient merit be evinced, the first candidate in each subject shall receive a gold medal of the value of five pounds.

Scheme of Medical Examinations, Honours, and Rewards, for the Degree of Doctor of Medicine. Pass Examination. Subjects: Elements of Intellectual Philosophy, Logic, and Moral Philosophy. A Commentary on a Case in Medicine, Surgery, or Midwifery, at the option of the candidate. Medicine. Examination on the Answers to the Printed Papers, and on the Commentaries; and the Examination for a Certificate of Special Proficiency in Medicine, Surgery, or Midwifery, as determined by the candidate's choice of the case for commentary. Any candidate may present a thesis on a subject of his own choice. *Rewards:* A gold medal of the value of five pounds to the author of the best commentary on a case in Medicine, to the author of the best commentary on a case in Surgery, and to the author of the best commentary on a case in Midwifery. A gold medal of the value of ten pounds to the author of the best thesis.

Examination for Honours. Subjects: Surgery, Medicine, Midwifery. *Rewards:* A gold medal, of the value of five pounds, to the first candidate in each of the three subjects.

Institutions and Schools.—No medical institution or school shall be recognised by the senate of this university, which does not possess ample means of illustrating the instruction given at it. *Forms of Certificates:* The teacher shall certify for—*Lectures*,—That in the year 18 , the pupil attended ..... his course of instruction on ..... which commenced on ..... and terminated at ....., and which consisted of ..... lectures and ..... examinations. *Practical Anatomy*,—That from ..... to ..... the pupil dissected ..... under his superintendence. *Practical Chemistry*,—That the pupil operated ..... during his course of Practical Chemistry, which consisted of ..... lessons. *Practical Pharmacy*,—That the pupil prepared ..... medicines under his superintendence from ..... to ..... *Clinical Instruction in Surgery*,—That the pupil attended ..... the surgical practice of this hospital, and the course of lectures on Clinical Surgery, consisting of ..... lectures, from ..... to ..... *Clinical Instruction in Medicine*,—That the pupil attended ..... the medical practice of this hospital, and the course of lectures on Clinical Medicine, consisting of ..... lectures, from ..... to ..... *Practical Medicine*,—That the pupil attended ..... to Practical Medicine at ..... and was entrusted with the treatment of patients under ..... superintendence, from ..... to ..... (Certificates on this subject will be received from any legally qualified practitioner, having the care of the poor of a parish.) *Practical Midwifery*,—That the pupil conducted ..... labours under his superintendence. Any legally qualified practitioner shall be competent to give this certificate.

Regulations relating to Students who commenced their medical studies in or before January, 1839.

Degree of Bachelor of Medicine.—Candidates who commenced their professional studies in or before Jan. 1839, shall be admitted to the First Examination for the degree of Bachelor of Medicine on producing certificates to the following effect:—1. Of having been engaged during two years in their professional studies. 2. Of having attended a course of lectures on each of four of the subjects comprehended in the former list. 3. Of having dissected during nine months. 4. Of having attended to practical pharmacy during a sufficient length of time to enable them to acquire a practical knowledge in the preparation of medicines.

Candidates who commenced their professional studies in or before January 1839, shall be admitted to the Second Examination for the degree of Bachelor of Medicine on producing certificates to the following effect:—1. Of having been engaged during four years in their professional studies. 2. Of having passed the First Examination. 3. Of having attended a course

of lectures on each of two of the subjects comprehended in the former list. 4. Of having dissected during twelve months. 5. Of having attended to practical pharmacy during a suffieient length of time to enable the pupil to acquire a practical knowledge in the preparation of medicines. 6. Of having eonducted at least six labours. 7. Of having attended the surgical practice of a recognised hospital or hospitals during twelve months. 8. Of having attended the medical practice of a reeognised hospital or hospitals during other twelve months. 9. Of having completed the twenty-second year of their age. 10. Of moral character, from a teaeher in the last school or institution at which they have studied, as far as the teacher's opportunity of knowledge has extended.

Candidates who have not taken a Degree in Arts, or passed the Matrieulation Examination in this university, will be required to translate a portion of CELSUS *de Re Medicâ.*

Regulations relating to practitioners in medicine or surgery desirous of obtaining degrees in medicine.

Degree of Bachelor of Medicine.—Candidates shall be admitted to the two examinations for the degree of Bachelor of Medicine on producing eertificates to the following effect:—1. Of having been admitted, prior to the year 1840, members of one of the legally constituted bodies in the United Kingdom for liecnsing praetitioners in medicine or surgery; or of having served, previously to 1840, as surgeons, or assistant-surgeons, in her Majesty's Army, Ordnanee, or Navy, or in the service of the Honourable the East India Company. 2. Of having received a part of their edueation at a recognised institution or sehool, as required by the charter of the university. 3. Of moral character, signed by two persons of respectability.

Candidates who have not taken a degree in Arts, or passed the Matriculation Examination in this university, will be required to translate a portion of CELSUS *de Re Medicâ.*

Degree of Doctor of Medicine.—Candidates who have been engaged during five years in the practice of their profession, shall be admitted to the examination for this degree on producing eertificates to the following effect:—1. Of having been engaged during five years in the practice of their profession. 2. Of having taken the degree of Bachelor of Medieine in this university.

Candidates who have not taken a degree in Arts, or passed the Matriculation Examination in this university, will be required to translate a portion of CELSUS *de Re Medicâ.*

The regulations respecting the transmission of the eertificates to the registrar, the fees, the periods, and the mode of eonducting the examinations, and the arrangement of the candidates after examination, are the same for all candidates for the same degrees.

ROYAL COLLEGE OF PHYSICIANS, LONDON.

Aeeording to the regulations of this College, no one will be admitted as a candidate for the licenee, unless he shall have attained the age of six and twenty, and shall present a certifieate of good moral eonduet. His medical edueation must eomprise Anatomy, the theory and practice of Medicine, Forensic Medicine, Chemistry, Materia Medica, Natural History, principally Botany, Midwifery, and the prineiples of Surgery, and must extend over the period of five years. Practical Medicine must be studied for three years in a hospital containing at least 100 beds, and having a complete staff of physieians and surgeons. This is demanded in the statutes in the following impressive words :—"*Immo hoc summi esse censemus.*" Those who have studied abroad, in addition to giving proof of five years' medieal education, according to the usual eourse of study, are required to present testimonials of a twelvemonth's medical praetice at any hospital in Great Britain, having the qualifieations as above.

No one will be admitted as a Lieentiate (*Permissus*) who is accustomed to use any seeret medicine or nostrum in the treatment of disease, unless, previously to his first examination, he make known to the president and eensors its eomposition and the manner in whieh it is employed. Every Candidate must undergo three examinations, eaeh eondueted at different times, before the president and censors in *comitia minora.* The first examination eomprises Physiology, the second Pathology, and the third Therapeutics. After the first examination, the president may inquire of the candidate where he studied polite literature and the principles of scienee, and what honours he has obtained, whether in Philosophy, Arts, or Medicine, in order that the answers may be recorded by the registrar. The candidate will also be examined in Greek works on medicine, to wit, Hippocrates, Galen, or Aretæus. Passages from the aphorisms of Hippocrates or Galen will be brought forward during the first examination; and during the second and third, passages from Hippocrates, Galen, or Aretæus, which must be translated into Latin, and illustrated with a brief commentary. If the eandidate be deficient in his knowledge of Greek, he will be required to translate parts of Celsus or Sydenham, or some other Latin work on Medieine into English. The examinations are conducted in Latin or English, at the pleasure of the eensors.

Whenever a candidate has passed the prescribed examinations, and has been approved, he will be proposed at the next *comitium majus* (a meeting of the Fellows at large) to be admitted as a licentiate ; and if the majority present consent, he will be admitted accordingly. If, however, the eandidate is rejected, he cannot present himself for reexamination for a twelvemonth.

Before the licentiate is admitted, he is required to plight his faith to the College aeeording to a formula, pronounced by the President before the Fellows assembled in *comitium majus.*

If any one holding the lieence of the College practise Pharmacy afterwards, or engage in merchandise, he is liable to expulsion ; and any person practising medicine in London, or within seven miles thereof, without having previously obtained the eollegiate licence, is to be admonished by letter to eease his practice, until after he has passed the required examinations, and if he eontinues to practiee despite this admonition, then *legibus regni obnoxuus erit.*

Persons who have attained their fortieth year, seeking to beeome Licentiates of the College, but whose medieal edueation is not altogether in aceordanee with the regulations already stated, must present testimonials of professional knowledge and good moral conduct, and if these are satisfactory, they will be admitted to examination, the same as for licentiates in general.

The following questions, copies of those put during a reeent *comitium minus*, will show the nature of the examinations to whieh candidates are subjeeted:—

First Examination. In Parte Physiologicâ.—1. Give a deseription of the base of the brain. 2. What muscles are employed in respiration? Mention the origin and distribution of the various nerves which govern their movements. 3. State the faets in reference to the office whieh the bile performs in the assimilation of animal matters, and also those which favour the opinion of a relation existing between the funetions of the lungs and liver. 4. Describe the arterial and venous circulation of the brain. 5. Give the origin, distribution, and properties of the par vagum. 6. What is the proper function of muscular tissue, and what varieties are there in their movements? 7. Enumerate the various proximate organie principles, and also the secondary compounds of the human body.

Second Examination. In Parte Pathologicâ.—1. What are the symptoms of croup? State the forms and complications of this disease. 2. What affeetions most frequently appear in the course of hooping-eough? 3. To what causes and eireumstanees is the occurrenee of dropsy after scarlet fever to be attributed; and what are the pathologieal eonditions of dropsy thus supervening? 4. State the diagnostie symptoms, usual eourse, eonsequences, and sequelæ of measles. 5. What are the alterations productive of paraplegia? 6. What are the symptoms and eireumstanees whieh may be eonsidered as unfavourable in small-pox? 7. Enumerate the changes found within the eranium in fatal eases of epilepsy, 8. What is the diagnosis between epilepsy, a fit of hysterics, and simple eonvulsions?

Third Examination. In Parte Therapeuticâ.—1. What circumstances are chiefly to be regarded in determining the treatment of idiopathic erysipelas? 2. If called to a case of croup, of acute kind, what methods of immediate treatment should be resorted to? 3. State the ehemical process for preparing hydrocyanie acid. In what cases may it be beneficially employed? Under what particular preparation of the Pharmacopœia, and in what doses of this? 4. What is the ehemieal eharacter of iodine? Under what form does it exist in nature, and under what preparations is it ehiefly used in medicine? 5. What treatment would you pursue in the disorder called the infantile remitting fever? 6. What would you state as the general principles of treatment in exanthematous fevers? 7. What are the botanical eharacters of ipecaeuanha, and what its several effeets as a medicinal agent? 8. What are the best antidotes to arsenic when taken in a poisonous dose? What are the most unequivocal means of ascertaining its presence in the contents of the stomach?

The old regulation restricting the fellowship, as a matter of right, to the graduates of Oxford, Cambridge, and Trinity College, was repealed in the latter part of 1835 ; and after Easter, 1836, all eandidates were deelared to be admissible as lieentiates only, from whieh elass, when duly qualified, a certain number are to be annually elected fellows in *comitia majora.* The advantages derived by graduates of the English universities, and by the Irish graduate who possesses an *ad eundem* degree from an English university, is, that they are eligible a year after they have obtained the licence ; the Scotch graduate, being M.A. or B.A., five years later. If the latter does not possess any degree in arts, his eligibility for the fellowship does not occur until after the lapse of seven years. The Irish graduates who do not possess an *ad eundem* degree are not eligible for two years after they are lieensed. The president and eensors propose the candidates for the fellowship, but the *comitia majora* may reject the proposition, and ehoose their nominees. The eleetion is by ballot.

The president of the eollege is *ex-officio* president of the vaecine board, a trustee of the British and Hunterian Musea, physieian to the Queen, and an eleetor to the Tanered seholarships. The eollege has the power of reeommending a physieian to Christ Chureh, St. Thomas's, and St. Bartholomew's Hospitals; but if the recommendation succeed, it is then required to pay an annual stipend of £30 or £40 to the physician. The eollege also appoints the professor of botany to the University of Oxford.

The examinations for the licenee are conducted by the president and eensors. The periods at whieh they take place are, Miehaelmas, Christmas, Easter, and in the month of June. The new eensors are elected on the 24th of June, when the Harveian oration is delivered. The lectures are delivered in the early part of the year. There are about fifteen delivered; three Gulstonian, three Croonian, and three Lumleian, so called from the names of those who left endowments to the college for the purpose; and six leetures on Materia Medica. A museum and library are attached to the institution, to which the fellows, and, by permission, their friends, have aeeess.

The president may each year propose one eandidate for the lieenee, he being an M.D., but not otherwise eligible ; and he may also name annually a lieentiate of ten years' standing for the fellowship. The fellows have also the power of proposing a licentiate of seven years' standing, who is thirty-six years of age, for the fellowship; but this has been done so rarely, as to be, in fact, obsolete.

The college fees are £56 17s. for the lieense; the fellow pays, in addition, £1 1s. annually to the eollegiate fund.

Several of the penal statutes are of a stringent charaeter, and, though but rarely acted on, and never, save in very flagrant cases, should be generally known.

If any fellow or lieentiate can be proved, to the satisfaction of the president and eensors, to have wilfully accused any other fellow or licentiate of professional ignorance, &e., unless it be before the

legally-constituted judges, he shall he fined £4 for the first offence, and £8 for the second; if he offend a third time, if a fellow, he shall be expelled, and if a licentiate, fined £10. This last fine is to be enforced every time afterwards the licentiate shall so offend. If any fellow or licentiate shall offer his professional assistance to any patient whom he shall know to be under the care of another physician, whether fellow or licentiate, without having been called in to see the patient professionally, he shall be fined 40s.

If any fellow be proved to have made any arrangement with a druggist, to share with him the proceeds in his prescriptions, he shall be expelled; if a licentiate have entered into a similar arrangement, he shall be fined £10 every time he shall so offend.

Every physician, whether fellow or licentiate, shall attach to each prescription which he writes, the day of the month, the name of the sick man, and his own initials. When a consultation takes place, it is to be carried on with modesty, not in the presence of the sick; and if any difference of opinion occurs, it is to be stated with prudence and moderation, so that it may not be noticed by the patient or the friends, but, if requisite, should be mentioned by the ordinary medical attendant. Whoever infringes these regulations will be fined £5 by the president and censors.

No fellow or licentiate may consult, in London or within seven miles thereof, with a physician who does not belong to the college, under a penalty £5 fine.

All fines are to be paid immediately.

The president and court of the college have the power of committing individuals contemning their authority to Newgate. This power has been exercised by the court, but not of late years.

ROYAL COLLEGE OF SURGEONS OF ENGLAND.

Regulations of the Council respecting the professional education of candidates for the diploma who commenced their studies before the year 1838.

I. Candidates will be required to bring proof—1. Of being twenty-two years of age. 2. Of having been engaged five years in the acquirement of professional knowledge. 3. Of having studied anatomy and physiology, by attendance on lectures and demonstrations, and by dissections, during two anatomical seasons. (An anatomical season is understood to extend from October to April inclusive, and to comprise at least one hundred and forty lectures on anatomy and physiology, occupying not less than one hour each, given on separate days; and at least one hundred demonstrations of the like duration, given in a similar manner; exclusive of dissections, of which distinct certificates are required.) 4. Of having attended at least two courses of lectures on surgery, delivered in two distinct periods or seasons; each course to comprise not less than sixty lectures. 5. Of having attended lectures on the practice of physic, on chemistry, and on midwifery, during six months, comprising not less than sixty lectures respectively, and on botany and materia medica, during three months. 6. Of having attended during twelve months, the surgical practice of a recognized hospital in London, Dublin, Edinburgh, Glasgow, or Aberdeen; or, for six months, in any one of such hospitals, and twelve months in any recognized provincial hospital.

II. Members and licentiates in surgery of any legally constituted college of surgeons in the United Kingdom, and graduates in surgery of any university, requiring residence to obtain degrees, will be admitted for examination on producing their diploma, license, or degree, together with proofs of being twenty-two years of age, and of having been occupied five years in the acquirement of professional knowledge.

N.B. Certificates will not be recognised from any hospital, unless the surgeons thereto, or a majority of them, be members of one of the legally constituted colleges of surgeons in the United Kingdom; nor from any school of anatomy, physiology, or midwifery, unless the respective teachers be members of some legally constituted college of physicians or surgeons in the United Kingdom; nor from any school of surgery, unless the respective teachers be members of some legally constituted college of surgeons in the United Kingdom. Certificates will not be received on more than two branches of science, from one and the same lecturer; but anatomy and physiology—demonstrations and dissections—materia medica and botany—will be respectively considered as one branch of science. In the certificates of attendance on hospital practice and on lectures, it is requested that the dates of commencement and termination may be inserted in words at full length. Blank forms of the required certificates may be obtained on application to the secretary, to whom they must be delivered, properly filled up, at least ten days before the candidate can be admitted to examination; and all such certificates are retained at the college.

Regulations of the Council respecting the professional education of candidates for the diploma, after the termination of the session, 1839-1840.

I. Candidates will be required to bring proof—1. Of being not less than twenty-one years of age. 2. Of having been engaged in the acquirement of professional knowledge for not less than four years, three of which shall have been passed in a recognised school or schools of surgery; three months of vacation being allowed in each year, and in the event of absence or absences from such school or schools during the said term of three years, (exclusive of the vacations,) the full term being completed in a subsequent year. 3. Of having studied anatomy and physiology, by attendance on lectures and demonstrations, and by dissections, during two anatomical seasons. (An anatomical season is understood to extend from October to April inclusive, and to comprise at least one hundred and forty lectures on anatomy and physiology, occupying not less than one hour each, given on separate days; and at least one hundred demonstrations of the like duration, given in a similar manner, exclusive of dissections, of which distinct certificates are required.) 4. Of having attended at least two courses of lectures on surgery, delivered in two distinct periods or winter seasons of six months, each course to comprise not less than seventy lectures. 5. Of having attended one course of lectures on the practice of physic, and one on chemistry, during six winter months, comprising not less than seventy lectures respectively; one course on materia medica with medical botany during six months, and one on midwifery during six months, each comprising not less than sixty lectures; and at least twenty-five lectures on medical jurisprudence. Certificates of attendance on these lectures during the summer season will be received, provided they are equally divided over a period of four months. The lectures on medical jurisprndence may be delivered three days in the week. 6. Of having attended, during twenty-one months, the surgical practice of a recognised hospital in London, Dublin, Edinburgh, Glasgow, or Aberdeen; or for twelve months in any one of such hospitals, and twelve months in any recognised provincial hospital. 7. Of having attended the medical practice of a hospital or dispensary during six months.

II. Members and licentiates in surgery of any legally constituted college of surgeons in the United Kingdom, and graduates in surgery of any university requiring residence to obtain degrees, will be admitted for examination on producing their diploma, licence, or degree, together with proofs of being twenty-one years of age, and of having been occupied at least four years in the acquirement of professional knowledge.

N.B. Certificates will not be recognised, in future, from any hospital, unless the surgeons thereto be members of one of the legally constituted colleges of surgeons in the United Kingdom, nor from any school of medicine or midwifery, unless the respective teachers be members of some legally constituted college of physicians or surgeons in the United Kingdom; nor from any school of anatomy or surgery in England, unless the respective teachers be members of some legally constituted college of physicians or surgeons in the United Kingdom, and have undergone a second or special examination on those branches of science, according to the ordinances relating thereto. Certificates will not be received, in future, on more than one branch of science from one and the same lecturer; but anatomy and physiology—demonstrations and dissections—materia medica and botany—will be respectively considered as one branch of science. In the certificates of attendance on hospital practice and on lectures, it is requested that the dates of commencement and termination may be inserted in words at length. Blank forms of the required certificates may be obtained on application to the secretary, to whom they must be delivered, properly filled up, ten days before the candidate can be admitted to examination; and all such certificates are retained at the college.

Regulations of the Council respecting the professional education of candidates for the diploma. August 15, 1843.

I. Candidates will be required, in addition to a certificate of being not less than twenty-one years of age, to bring proof—1. Of having been engaged in the acquirement of professional knowledge for not less than four years; during which period they must have studied practical pharmacy for six months, and have attended one year on the practice of physic, and three years on the practice of surgery, at a recognised hospital or hospitals in the United Kingdom;—three months being allowed for a vacation in each year. (By a resolution of the Council, on the 7th of November, 1839, no provincial hospital will, in future, be recognised by this college, which contains fewer than 100 patients, and no metropolitan hospital which contains fewer than 150 patients.) 2. Of having studied anatomy and physiology, by attendance on lectures and demonstrations, and by dissections, during three winter sessions, of not less than six months each. 3. Of having attended at least two courses of lectures on the principles and practice of surgery, delivered in two distinct periods or seasons; and one course on each of the following subjects—viz., the practice of physic, chemistry, materia medica, and midwifery with practical instruction.

II. Members and licentiates in surgery of any legally constituted college of surgeons in the United Kingdom, and graduates in surgery of any university requiring residence to obtain degrees, will be admitted for examination on producing their diploma, licence, or degree, together with proofs of being twenty-one years of age, and of having been occupied at least four years in the acquirement of professional knowledge.

III. Graduates in medicine of any legally constituted college or university requiring residence to obtain degrees, will be admitted for examination on adducing, together with their diploma or degree, proof of having completed the anatomical and surgical education required by the foregoing regulations, either at the school of the university where they shall have graduated, or at a recognised school or schools in the United Kingdom.

IV. Certificates will not be recognised from any hospital unless the surgeons thereto be members of one of the legally constituted colleges of surgeons in the United Kingdom; nor from any school of anatomy, physiology, or midwifery, unless the respective teachers be members of some legally constituted college of physicians or surgeons in the United Kingdom; nor from any school of surgery, unless, the respective teachers be members of some legally constituted college of surgeons in the United Kingdom.

V. Certificates will not be received on more than one branch of science from one and the same lecturer, but anatomy and physiology, demonstrations and dissections, will be respectively considered as one branch of science.

VI. Certificates will not be received from candidates for the diploma who have studied in London, unless they shall have registered their tickets at the college, as required by the regulations, during the last ten days of January, April, and October, in each year; nor from candidates who have studied elsewhere, unless their names regularly appear in the registers transmitted from their respective schools.

N.B. In the certificates of attendance on hospital practice and on lectures, it is required that the dates of commencement and termination be clearly

expressed; *and no interlineation, erasure, or alteration, will be allowed.* Blank forms of the required certificates may be obtained on application to the secretary, to whom they must be delivered, properly filled up, ten days before the candidate can be admitted to examination; and all such certificates are retained at the college.

These three forms of regulations are in force, respecting candidates for the diploma, according to the period when they commenced their studies.

Fee for the diploma, (including stamp,) 22*l.*; for an articled student, (allowed in the diploma fee,) 10*l.* 10*s.*; for a certificate of having had the diploma, 5*l.* 5*s.*; for being enfranchished, 10*l.* 10*s.* a certificate for a surgeon in the Royal navy, or East India Company's service, (allowed in diploma fee,) 5*l.* 5*s.*; for an assistant surgeon, 2*l.* 2*s.*; for a candidate calling a special court, 5*l.* 5*s.*

Studentships in Anatomy.—Three studentships in human and comparative anatomy have been instituted by the college, to be held by each student for the term of three years, at a salary of one hundred pounds per annum. And with the view of promoting the objects of the college, in the institution of these studentships, the commander-in-chief of the army, the lords commissioners of the admiralty, and the court of directors of the East India Company, have placed at the disposal of the president and the council, an assistant-surgeoncy in each service, once in three years, for such of the said students as may be considered worthy of these honourable distinctions. 2. Candidates to be members of the college, under twenty-six years of age. 3. The council will determine annually whether one or more of such appointments shall take place during the current year; and will notify its resolution by public advertisement. 4. The appointment is made in the month of June, or as soon after as possible. 5. The students are subject to such duties and restrictions as the council shall from time to time direct; and in case of misconduct are liable to dismissal. 6. Candidates are required to transmit to the secretary, on or before the 1st of May, their applications for the appointment, together with certificates of general good character, and of fair acquirements in general learning, signed by two qualified members of the medical profession. 7. A meeting of the museum committee will be held as soon after the 1st of May as conveniently may be, at which the applications of the persons offering themselves will be examined, and, if approved, the applicants will be admitted as candidates. 8. The museum committee will determine the merits of the several candidates, and report to the council which, in their opinion, possesses the highest merit. 9. The students are required to attend in the museum daily, (Sundays excepted,) from ten till four o'clock, and are under the immediate direction of the museum committee.

JACKSONIAN prizes of twenty guineas each. There are two prize subjects for the year 1844—viz., Injuries and Diseases of the Scalp, and the Anatomical Structure and Diseases of the larger Blood-vessels.

Candidates to be members of the college, not of the council.

The dissertations to be in English; and the number and importance of *original facts* will be considered principal points of excellence. Recited cases to be placed in an appendix.

Each dissertation to be distinguished by a motto or device; and accompanied by a sealed paper, containing the name and address of the author, and having, on the outside, a motto or device corresponding with that on the dissertation.

The dissertations to be addressed to the secretary, and delivered at the college before Christmas-day, 1844.

The manuscript prize dissertations, and every accompanying drawing and preparation, will become the property of the college.

Those dissertations which shall not be approved, with their accompanying drawings and preparations and correspondent sealed papers, will be returned upon authenticated application within the period of three years; and those manuscripts which shall remain three years unclaimed, and every accompanying drawing and preparation, will become the property of the college; at which period their accompanying papers, containing the names of the respective authors, will be burned, unopened.

The subject for the COLLEGIAL Triennial Prize of Fifty Guineas is, the Anatomy of the Fibres of the Cerebrum, Cerebellum, and Spinal Cord in the Human Subject; together with the origin of the Cerebral, Spinal, and Sympathetic Nerves; specially illustrated by the Anatomy of the same Parts in the lower Vertebrate Animals.

Candidates to be members of the college, not of the council.

The dissertations to be in English, and to be distinguished by a motto or device, accompanied by a sealed paper, containing the name and residence of the author, and having on the outside a motto or device corresponding with that on the dissertation.

The dissertations to be addressed to the secretary, and delivered at the college before Christmas Day, 1845.

The manuscript prize essay, with every accompanying drawing and perparation, will become the property of the college; the other dissertations and their corresponding sealed papers will be returned, upon authenticated application, within the period of three years; after which period, the papers containing the names of the respective authors will be burned, unopened, and the manuscripts will become the property of the college.

The *museum* is open to visitors on Monday Tuesday, Wednesday, and Thursday, from 12 till 4, except during the month of September; on Friday, to gentlemen for studying in it; and on Saturday, from 10 till 1, to gentlemen desirous of comparing specimens with those in the museum. The *library* is open to members and students of the college, and visitors having tickets of admission, daily, (Sundays excepted,) from the 1st of October to the 1st of April, from 10 till 4; and from the 1st of April to the 1st of September, from 10 till half-past 5.

The lectures at the college by the professors are delivered in the Spring of the year, the Hunterian oration on the 14th of February.

APOTHECARIES' HALL.

Every candidate for a certificate of qualification to practise as an apothecary, will be required to produce testimonials:—1. Of having served an apprenticeship of not less than five years to an apothecary:—No gentleman practising as an apothecary in England or Wales, can give his apprentice a legal title to examination, unless he is himself legally qualified to practise as an apothecary, either by having been in practise prior to, or on the 1st of August, 1815, or by having received a certificate of his qualification from the Court of Examiners. An apprenticeship for not less than five years to surgeons practising as apothecaries in Ireland and Scotland, gives to the apprentice a title to be admitted to examination.—2. Of having attained the full age of twenty-one years:—As evidence of age, a copy of the baptismal register will be required in every case where it can possibly be procured.—3. Of good moral conduct:—A testimonial of moral character from the gentleman, to whom the candidate has been an apprentice, will always be more satisfactory than from any other person.—4. And of having pursued a course of medical study, in conformity with the regulations of the court.

Course of Study.

Every candidate, whose attendance on lectures commenced on or after the 1st of October, 1835, must have attended the following lectures and medical practice during not less than three winter and two summer sessions: each winter session to consist of not less than six months, and to commence not sooner than the 1st, nor later than the 15th October; and each summer session to extend from the 1st May to the 31st of July.

First Winter Session.—Chemistry; Anatomy and Physiology; Anatomical Demonstrations; Materia Medica and Therapeutics: this course may be divided into two parts of fifty Lectures, each one of which may be attended in the summer.

First Summer Session.—Botany and Vegetable Physiology; either before or after the first Winter Session.

Second Winter Session.—Anatomy and Physiology; Anatomical Demonstrations; Dissections; Principles and Practice of Medicine.

Second Summer Session.—Forensic Medicine.

Third Winter Session.—Dissections; Principles and Practice of Medicine.

Midwifery, and the Diseases of Women and Children, two courses, in separate sessions, and subsequent to the termination of the first Winter Session.

Practical Midwifery, at any time after the conclusion of the first course of Midwifery Lectures.

Medical Practice during the full term of eighteen months, from or after the commencement of the second Winter Session; twelve months at a recognised hospital, and six months at a recognised hospital, or a recognised dispensary; in connection with the hospital attendance, a course of Clinical Lectures, and instructions in Morbid Anatomy will be required.

The sessional course of instruction in each subject of study, is to consist of not less than the following number of lectures:—

One hundred on Chemistry—One hundred on Materia Medica and Therapeutics—One hundred on the Principles and Practice of Medicine—Sixty on Midwifery, and the Diseases of Women and Children—Fifty on Botany and Vegetable Physiology.

Every examination of an hour's duration will be deemed equivalent to a lecture.*

The lectures required in each course must be given on separate days.

The lectures on Anatomy and Physiology, and the Anatomical Demonstrations, must be in conformity with the regulations of the Royal College of Surgeons of London in every respect.

Candidates must also bring testimonials of instruction in Practical Chemistry, and of having dissected the whole of the human body once at least.

The above course of study may be extended over a longer period than three winter and two summer sessions, provided the Lectures and Medical Practice are attended in the prescribed order, and in the required sessions.

Those gentlemen whose attendance on Lectures commenced before the 1st of October, 1835, will be allowed to complete their studies in conformity with the previous regulations of the court.

Recognition of Lecturers and Schools.

No member of the court of examiners will be recognised as a lecturer on any branch of medical science.

The Court will not recognise any lecturer, unless he lectures in connection with a recognised medical school; nor will they recognise a lecturer on more than *two* branches of medical science; nor will they recognise a lecturer, until he has produced very satisfactory testimonials of his attainments in the science he purposes to teach, and of his ability as a teacher thereof, from at least two persons of acknowledged talents and distinguished acquirements in the particular branch of science in question; nor will they recognise a lecturer until he has given a public course of lectures on the subject he purposes to teach; but if, after such a preliminary course, the lecturer shall be recognised, certificates of attendance on the course will be received.

Satisfactory assurance must also be given, that the teacher is in possession of the means requisite for the full illustration of his lectures, viz., that he has, if lecturing—

On Chemistry, a laboratory and competent apparatus—On Materia Medica, a museum sufficiently extensive—On Botany, a hortus siccus, plates or drawings, and recent plants—On Midwifery, a museum, and such appointment in a public institution as may afford the means of practical instruction to the pupils.

The lecturer on the Principles and Practice of Medicine, if he lectures in London, must be a member of the Royal College of Physicians of London; and if in a provincial town, either a member of the Royal College of Physicians of

* The court particularly request attention to this clause.

London, or a graduated Doctor of Medicine of a British University of four years' standing, unless prior to his graduation he had been for four years' a licentiate of this court.

The lecturer on Materia Medica and Therapeutics, must be a member of the Royal College of Physicians, or a graduated Doctor of Medicine of a British University of four years' standing; or he must have been a licentiate of this court for the same period.

The lecturer on Midwifery must be a member of one of the legally constituted Colleges of Physicians or Surgeons in the United Kingdom, of four years' standing, or he must have been a licentiate of this court for the same period.

The names of the lecturers recognised by the court, may be known on application to the secretary at the hall of the society.

The certificates of teachers recognised by the constituted medical authorities in Dublin, Edinburgh, Glasgow, and Aberdeen, as also those of the medical professors in foreign Universities, are received by the court.

Much inconvenience having arisen from the presentation of schedules signed by *lecturers unknown to the court*, it is particularly requested that the registrars of the medical schools will furnish a correct list of their recognised teachers to the secretary of this court, at the commencement of every winter session.

No Hospital will be recognised by the court, unless,—1. It contain at least one hundred beds.—2. It be under the care of two or more physicians, members of the Royal College of Physicians of London, or graduated Doctors of Medicine of a British University—3. The physicians give a regular course of Clinical Lectures and instruction in Morbid Anatomy—4. The apothecary be legally qualified, either by having been in practice prior to the 1st of August, 1815, or by having received a certificate of qualification from this court.

No Dispensary will be recognised by the court, unless it be situated in some town where there is a recognized medical school, and be under the care of at least two physicians and an apothecary legally qualified.

No Medical Practice will be available, unless it be attended in conformity with the course of study prescribed for pupils.

Registration of Testimonials.

All testimonials must be given on a printed schedule,* with which students will be supplied at the time of their registration:—

In London, at this hall.

In Edinburgh, at Messrs. MacLachlan and Stewart's, booksellers.

In Dublin, at Messrs. Hodges and Smith's, booksellers.

In the Provincial towns, from the gentlemen who keep the registers of the Medical Schools.

All students, in London, are required *personally* to register the several classes for which they have taken tickets; and those only will be considered as complying with the regulations of the court, whose names and classes in the register correspond with their schedules.

Tickets of admission to Lectures and Medical Practice must be registered in the months of October and May; but no ticket will be registered unless it be dated within *seven* days of the commencement of the course; and certificates of attendance must be registered in the months of April and August. Due notice of the days and hours of such registrations will be given from time to time.

The court also require students at the provincial medical schools to register their names in their own hand-writing, with the registrar of each respective school, within the first twenty-one days of October, and first fourteen days of May; and to register their certificates of having duly attended lectures or Medical Practice, within fourteen days of the completion of such attendance.

The registrars are requested to furnish the Court of examiners with a copy of each registration *immediately* after its close, as those students only will be admitted to examination, whose registrations have been *duly* communicated to the court.

Names of Gentlemen having the care of the Registers.

Bath, R. T. Gore, Esq., Lecturer on Anatomy—Birmingham, W. Sands Cox, Esq. ditto—Bristol, Dr. Wallis, Henry Clark, Esq. ditto—Hull, Edw. Wallis, Esq. ditto—Leeds, Thos. Nunneley, Esq. do.—Liverpool, Dr. Malins, Lecturer on Medical Jurisprudence—Manchester, Thomas Turner, Esq., Lecturer on Anatomy, Thomas Fawdington, Esq., ditto—Newcastle, William Dawson, Esq. Lecturer on Midwifery—Sheffield, W. Jackson, Esq. Lecturer on Anatomy—York, John Hopps, Esq. ditto.

Preliminary Examination.

Students may undergo their Latin examination at any time after their first registration, except during the months of August and September. A book is opened at the Beadle's office at the Hall, for the signatures of those gentlemen who are desirous of undergoing this examination, to which twenty will be admitted on each successive Saturday; but unless twenty names are entered on the list, no examination will take place. Candidates are required to attend at half-past three o'clock, and those who fail to pass this examination satisfactorily, will not be re-admitted until they appear for their general examination.

Examination.

Every person intending to offer himself for examination, must give notice in writing to the clerk of the society, on or before the Monday previously to the day of examination, and must at the same time deposit all the required testimonials at the office of the beadle, where attendance is given every day, except Sunday, from Ten until Four o'clock.

The examination of the candidate for a certificate of qualification to practise as an apothecary, will be as follows:—

In translating portions of the first four books of Celsus de Medicinâ, and of the first twenty-three chapters of Gregory's Conspectus Medicinæ Theoreticæ.

In Physicians' Prescriptions, and the Pharmacopœia Londinensis.

In Chemistry.

In Materia Medica and Therapeutics.

In Botany.

In Anatomy and Physiology.

In the Principles and Practice of Medicine. This branch of the examination embraces an inquiry into the pregnant and puerperal states; and also into the diseases of children.

The examination of the candidate for a certificate of qualification to act as assistant to an apothecary, in compounding and dispensing medicines, will be as follows:

In translating Physicians' Prescriptions, and the Pharmacopœia Londinensis.

In Pharmacy and Materia Medica.

By the 22d section of the Act of Parliament, no rejected candidate for a certificate to practise as an apothecary, can be re-examined *until the expiration of six months* from his former examination; and no rejected candidate as an assistant *until the expiration of three months.*

The Court meet in the Hall *every Thursday*, where candidates are required to attend at a Quarter before Four o'clock.

The Act directs the following sums to be paid for certificates.

For London, and within ten miles thereof, Ten Guineas.

For all other parts of England and Wales, Six Guineas.

Persons having paid the latter sum, become entitled to practise in London, and within ten miles thereof, by paying Four Guineas in addition.

For an assistant's certificate, Two Guineas.

By order of the Court,
HENRY BLATCH, Sec.

Apothecaries' Hall,
Aug. 1843.

For information relative to these Regulations, students are referred to the Beadle, at Apothecaries' Hall, every day (Sunday excepted), between the hours of Ten and Four o'clock,

It is expressly ordered by the Court of Examiners, that no gratuity be received by any officer or servant of the Court.

Information on all subjects connected with the "Act for better regulating the Practice of Apothecaries," may be obtained on application to Mr. R. B. Upton, clerk of the society, at the Hall every day (Sunday excepted), between the hours of one and three o'clock.

NEW REGULATIONS FOR CANDIDATES FOR THE FELLOWSHIP OF THE ROYAL COLLEGE OF SURGEONS OF ENGLAND.

1. That every candidate for the fellowship, whether a member of the college or not, shall produce certificates satisfactory to the court of examiners,—

That he is twenty-five years of age.

That he is (if found qualified upon his examination) a fit and proper person to be admitted to the fellowship, and the certificate of which shall be signed by three fellows.

That he has attained a competent knowledge of the Greek, Latin and French languages, and of the elements of mathematics.

That he has been engaged for six years in the acquirement of professional knowledge in recognised hospitals or schools of surgery and medicine within the United Kingdom of Great Britain and Ireland, or in foreign countries; and that three of such years at least have been passed in one or more of such recognised hospitals or schools in London.

That he has attended the surgical practice of a recognised hospital or hospitals during four years, and the medical practice of a recognised hospital or hospitals for one year.

That he has studied anatomy and physiology by attendance on lectures and demonstrations and by dissections, during three winter sessions of not less than six months each, at one or more recognised school or schools.

That he has attended lectures on the theory and practice of medicine, and on clinical medicine, and also on the theory and practice of surgery, and on clinical surgery, during two sessions of six months each, at one or more recognised school or schools.

That he has attended one course of lectures on each of the following subjects, viz.: chemistry, materia medica, midwifery, medical jurisprudence, and comparative anatomy, at one or more recognised school or schools. And that he has served the office of house surgeon or dresser in a recognised hospital in the United Kingdom. Every such candidate (except in the cases and instances hereinafter provided for to the contrary) shall also present for examination clinical reports, with observations of six or more surgical cases taken by himself at a recognised hospital, or recognised hospitals within the United Kingdom, with sufficient certificates of their authenticity and genuineness, and shall leave such reports at the college.

3. That as to any candidate, who shall have taken the degree of bachelor of arts in an English university, and shall produce satisfactory evidence thereof, it shall, instead of the certificate or certificates that he has been engaged for six years in the acquirement of the professional knowledge as before mentioned, be sufficient for him to produce a satisfactory certificate or certificates that he has been engaged for five years in the acquirement of professional knowledge in recognised hospitals and schools of surgery and medicine within the United Kingdom, or in foreign countries, and that three of such years at least have been passed in one or more of the recognised hospitals and schools of London; and that it shall not be necessary for any candidate having so taken the degree of bachelor of arts to produce any certificate of his having acquired a competent knowledge of the Greek, Latin and French languages, and of the elements of mathematics.

4. That upon the 1st day of January, 1850, or at any earlier period which may be thought proper, the Council shall, under such regulations, and for such time or period, as to them shall seem proper (but always subject to removal at the pleasure of the Council), appoint three persons, and being, or not being, and either all, or in part, members of the College, as the council shall think proper, for the purpose of examining persons intending to become candidates for the fellowship, and required to be examined in the Greek, Latin, and French lan-

* It is particularly requested that the lecturer himself will fill up the blanks in the schedule, specifying the mode of attendance.

guages, and in the elements of mathematics; and the said council, from time to time after the first appointment of such persons for such purpose as aforesaid, and as often as shall be necessary, or to the said council shall seem proper in their behalf, shall appoint such other person and persons as to them shall seem fit and proper to succeed or supply the place or places of any person or persons previously appointed for such purpose, and that from and after the first appointment of any such persons for the purpose of making such examination as aforesaid, no certificate of a candidate having competent knowledge of the Greek, Latin, and French languages, and of the elements of mathematics, shall be received or allowed by the court of examiners, except the certificate or certificates of the persons for the time being so appointed as aforesaid.

5. That all members of the college, future as well as present, shall be entitled to be admitted to the examination for the fellowship according to the foregoing bye-laws and ordinances.

6. That any person who shall have been a member of the college on the 14th day of September, 1844, shall, after the expiration of eight years from the date of his diploma, also be entitled to be admitted to the examination for the fellowship upon the production of a certificate signed by three fellows that he has been eight years in the practice of the profession of surgery, and that he is a fit and proper person to be admitted a fellow, if upon examination he shall be found qualified.

7. That any person who shall have become a member of the college after the said 14th day of September, 1844, shall, after the expiration of twelve years from the date of the diploma, also be entitled to be admitted to the examination for the fellowship upon the production of a certificate signed by three fellows that he has been for twelve years in the practice of the profession of surgery, and that he is a fit and proper person to be admitted a fellow, if upon examination he shall be found qualified, and also, if he have not taken the degree of Bachelor of Arts in an English university, of a certificate or certificates that he has a competent knowledge of the Greek, Latin, and French languages, and of the elements of mathematics.

EXAMINATION OF CANDIDATES FOR THE FELLOWSHIP.

1. The examination for the followship shall be held three times in the year, at or within such periods as the council shall from time to time determine.

2. Each candidate shall be examined on two days, either successive or at such an interval as the Court of Examiners may appoint.

3. The subjects of the first day's examination shall be anatomy and physiology, those of the second pathology, therapeutics and surgery.

4. The time allowed for examination each day shall be from ten o'clock in the forenoon until five o'clock in the afternoon.

5. The examinations shall be conducted in the following manner. Each candidate shall, upon going in for examination, have delivered to him a written or printed copy of such questions as shall have been previously determined upon by the Court of Examiners, and to which questions he shall give written answers, and which answers shall be considered by the Court of Examiners.

The court may, however, if they should think fit, interrogate any candidate on any matters connected with the questions or answers. In the anatomical examination, the candidate shall also perform dissections and operations on the dead body in the presence of the Court of Examiners, or of such members thereof, as may be deputed by the court to superintend the same. Candidates whose qualification shall be found insufficient, shall not be allowed to present themselves a second time until after the expiration of one year from their first examination. The Court of Examiners shall report in writing to the council the names of such persons as they shall have found upon examination to be qualified for the followship.

*** Members of the college will pay ten guineas besides charges for status, and non-members thirty guineas.

UNIVERSITY OF OXFORD.

Full term is understood to begin on the first day of the week after the congregation has been held; so that if the congregation be held on the Monday, the Sunday after is considered the first day of full term.

According to the lately altered statute respecting medical degrees, a candidate for the degree of bachelor in medicine, before he can be admitted to examination for that degree, must have kept four whole years, or sixteen terms, in the university, in like manner as is required by candidates for a degree in arts;* must have passed the examination for the degree of bachelor in arts; and, subsequently to that examination, must have studied medicine during three whole years, or twelve terms; and must also have completed seven years, or twenty-eight terms, from his matriculation. In testimony of his having fulfilled the above conditions, he is required to produce his matriculation paper, together with the "testamur" of his examination for the degree of bachelor of arts, and the requisite medical certificates.

The medical examination takes place only once in the course of the year—namely, in the second week of full Trinity term, commencing usually on the *second Tuesday* after Trinity Sunday. The candidate is examined, principally "viva voce," but partly in writing, in the theory and practice of medicine, in anatomy, in physiology, pathology, and materia medica; and also in chemistry and botany, as far as they elucidate the art of medicine. The candidate is required to be conversant with the entire works of Aretæus and Celsus; the aphorisms and epidemics of Hippocrates; and that portion of Galen's writings, entitled "De usa Partium;" in two, at least, of which authors, the statute directs that the examiners fail not to test the candidate's attainments. The candidate must express his intention of being examined, to the regius professor of medicine, full fourteen days before the day of examination, sending at the same time certificates of three years' attendance on the medical practice of some accredited hospital, and on the usual lectures on anatomy, &c.

With respect to attendance on lectures, certificates are required for two courses of anatomy and physiology, each course extending through the usual winter session, from October till the following April or May; two courses on the theory and practice of medicine, each course of the same extent as those of anatomy and physiology; one course in materia medica; one course in botany; one course in chemistry, provided the course extend through the usual winter session, otherwise two courses will be required.

A candidate for the degree of doctor in medicine must have pursued the study of medicine during three years after he has graduated as bachelor in medicine, and must give at least a fortnight's previous notice of his intention to the professor of medicine, at the same time submitting to his approbation a subject for a medical dissertation, which dissertation must be read in the public schools of the university within a few days of taking the degree of M.D., and a fair copy of it be delivered to the professor immediately after it has been read. No graduate in medicine from another university can be incorporated at Oxford, unless he produce testimonials by which it may clearly appear that he has kept by residence terms equal to those required to be so kept in this university; has completed all the exercises prescribed by the university, from which he migrates, for the degree of bachelor of arts; and shall have previously undergone the medical examination above described; and shall have fulfilled all the other conditions of the present statute. The fees for a bachelor of medicine are £23; for a doctor in medicine, £40.

The University of Oxford is in possession of the Bodleian library, (librarian, B. Bandinel, M.A.); of the Radclyffe library, (librarian, Dr. Kidd); of the Ashmolean museum, (keeper, P. B. Duncan, M.A,); and of botanic gardens, founded by the Earl of Danby in 1632. All these are open to students under certain restrictions.

Radclyffe Travelling Fellows.—Dr. Radclyffe left by will an endowment of £600 per annum, to be paid by two persons, to be chosen out of the University of Oxford, when they are M.A., entered on the study of physic, for their maintenance for ten years and no longer,-the half of which time, at least, they are to travel in parts beyond sea, for their better improvement. In case of vacancy by death, or at the expiration of the ten years, a new election is to take place within six months. The present fellows are, Edward Wells, of New College, B.M., elected July, 1840, and George Joseph Bell, of Baliol, B.M., elected September, 1842.

* That is, he must be of sixteen terms' standing, and have actually *resided* in the university twelve terms.

UNIVERSITY OF CAMBRIDGE.

Dr. Haviland delivers a course of fifty lectures on the principles of pathology and the practice of physic; £5 5s. first course, afterwards gratis. The professor of chemistry delivers thirty lectures, on the general principles of that science, during Lent term, and twenty lectures, principally on organic chemistry, during Easter term. He has a salary of £100 a year. The lectures on experimental philosophy, to illustrate the laws of hydrostatics, pneumatics, and optics, with particular reference to the mathematical theories of light and sound, are delivered in Easter term. The lectures on anatomy, by Dr. Clark, consist of above fifty, and are delivered in Michaelmas and Lent terms. The terms of attendance are £5 5s. for each of two courses, afterwards gratis. The pupils have the opportunity of dissecting in private. The lectures on botany are given during the Easter term; students in medicine must present a certificate of attendance, if twenty lectures are delivered. Herborising excursions occasionally take place. Professor Willis' lectures on natural and experimental philosophy are during the Michaelmas term; the subjects being statics, dynamics, and mechanism, with their practical illustrations; first course, £3 3s.; second, £2 2s.; afterwards gratis. The Downing professor of physic delivers a course of fifty lectures on some medical subject. A certificate of attendance is required of persons proceeding to the degree of M.B. His salary is £200 a year. Lectures are also delivered on crystallography and mineralogy during the Lent term. Addenbrooke's hospital, which is connected with the university, is recognised by the Colleges of Physicians and Surgeons, and by Apothecaries' Hall. It contains 100 beds, and has a department reserved for cases of midwifery. The physicians are, Dr. Thackeray, Dr. Bond, and Dr. Paget. Dr. Haviland is the consulting physician. The surgeons are, Mr. Lestourgeon, Mr. Hammond, and Mr. Humphry. Mr. Okes is the consulting surgeon.

Proceedings in Physic. M.B.—A student, before he can become a bachelor of physic, must have entered on his sixth year, computed from the date of his first admission at the university, have resided nine terms, and have passed the previous examination.

A bachelor of arts may become a bachelor of physic after having entered on his sixth year, computed from the date of his first admission at the university, provided that one year at least has intervened between his final determination in arts and his admission to the degree of bachelor of physic.

The exercises for this degree are one act and one opponency.

Candidates for the degree of bachelor of physic must, previously to the performance of these exercises, in addition to the examination by the regius professor of physic, be examined by the professors of anatomy, chemistry, and botany, and by the Downing professor of medicine. This examination may take place any time in the fifth year after admission, but not earlier. They must have diligently attended the lectures of the regius professor of physic for two terms, and must bring to him certificates of examination by the above professors, and of attendance on their lectures, in case the course of lectures of the professor of botany consist of not less than twenty lectures, and the courses of lectures of the professors of anatomy and chemistry, and of the Downing professor of medicine, of not less than fifty lectures each. They must also deliver to the regius professor of physic certificates of having

been diligently employed in attendance on medical lectures, and the practice of some well-known hospital, for two years, or for as long a time as they have been absent from the univerity during their undergraduateship. Fee, £10 16s.

L.M.—A license *ad practicandum in medicina* may be granted to a bachelor of physic in the term subsequent to that in which he has taken the degree, or to a master of arts of two years' standing.

Candidates for a licence *ad practicandum in medicina*, being previously bachelors of physic, are required to produce to the regius professor of physic certificates of their having attended on hospital practice for three years, exclusive of the nine terms which they kept by residence for the degree of bachelor of physic, and of their having attended lectures on the following subjects—namely, practice of physic and pathology, anatomy and physiology, chemistry, botany, medical jurisprudence, materia medica and pharmacy, principles of surgery, principles of midwifery, practical anatomy for two seasons.

Candidates for a licence *ad practicandum in medicina*, being previously masters of arts, are required to bring satisfactory evidence to the regius professor of physic of their having been employed in the study of physic for five years after they became bachelors of arts; and to produce to him certificates of their having attended on hospital practice for three of the said five years, and of their having attended lectures on the subjects before mentioned.

Every candidate for a licence *ad practicandum in medicina* is required to pass an examination to the satisfaction of the regius professor of physic, the professor of anatomy, the Downing professor of medicine, and a doctor of physic, to be nominated by the vice-chancellor, and approved by the senate, at the first congregation after the 10th of October in each year.

There are two such examinations in every year; one in the week immediately preceding that in which the division of the Michaelmas term falls; the other in the week immediately preceding that in which the division of the Easter term falls.

A candidate for a licence *ad practicandum in medicina*, being previously bachelor of physic, cannot be examined for the said licence until the examination which shall occur next but one after his having passed the examination required for the degree of bachelor of physic. Fee, £11 6s.

M.D.—The degree of doctor of physic is granted to a bachelor of physic of five years', or to a master of arts of seven years' standing.

The exercises for this degree are two acts and one opponency.

Every candidate for the degree of doctor of physic, who has not previously obtained a licence *ad practicandum in medicina*, is required to produce to the regius professor of physic the same certificates, and pass the same examination, as are required in the case of candidates for a licence *ad practicandum in medicina*. Fee, £11 12s.

The university possesses an anatomical museum, to which has been added the valuable collection of the late Dr. Macartney, the Fitzwilliam, Mesman, Mineralogy, and Geological museums, an extensive botanic garden, and the university library. To all these the students have access.

REGULATIONS OF THE ARMY MEDICAL DEPARTMENT,

13, ST. JAMES'S-PLACE.

A candidate for an assistant-surgeoncy in the army is required to fill up a blank form of certificate, which may be obtained at the War-office, specifying by whom he is recommended, his Christian and surname at full length, the course of study he has pursued—viz., the lectures, lecturers' names, places where the lectures were delivered, and the number of months during which he has attended, in accordance with the regulations, together with any others in his possession. If he possess any university degree, he must also state its nature, whether A.M. or A.B., M.D., or a diploma in surgery, and when and at what college or university it was obtained. The number of months' attendance at a hospital or infirmary must also be stated, and if he have attended at hospitals for mental derangement and diseases of the eye, or a lying-in institution, particulars of such attendance must also be furnished. The candidate is, in addition, to sign and forward the following declaration:—

"I [Christian name and surname at full length], ... years of age, a candidate for employment in the medical department of the army, do hereby attest my readiness to engage for general service, whether at home or abroad, and to proceed on duty immediately on being gazetted. I declare my age not to exceed twenty-six years, that I am unmarried, and that I labour under no mental nor constitutional disease, nor physical disability, that can interfere with the most efficient discharge of the duties of a medical officer in any climate." [Signature] . . . .

QUALIFICATION.—1. In selecting from among the candidates for the medical department of the army, a preference is given to those who can fill up all the blanks in the printed form, by having the acquirements there stated; but the name of no gentleman can be placed on the list who does not possess the diploma of either of the colleges of surgeons of London, Edinburgh, or Dublin, and who cannot produce the following testimonials:—18 months' attendance at a hospital of celebrity, where the average number of in-patients is not less than 100; 24 months' anatomy; 12 months' practical anatomy; 12 months' surgery; or (what is preferred) 6 months' surgery, and 6 months' military surgery; 8 months' clinical surgery, a complete course of 2 or 3 lectures during the week; 12 months' practice of physic, and 6 months' of general pathology; 8 months' clinical lectures on ditto, the same as required in surgery; 12 months' chemistry; 6 months' practical chemistry; 3 months' botany; 4 months' materia medica; 3 months' practical pharmacy, or apprenticeship; 5 months' natural history; 5 months' midwifery; 5 months' natural philosophy.

2. The candidates must be unmarried, not beyond 26 years of age, nor under 21 years.

3. Candidates who have had an university education, and have the degree of A.B. or A.M., as well as that of M.D., will be preferred, but a liberal education, and a competent knowledge of the Greek and Latin languages are indispensably requisite in every candidate.

4. The greater the attainments of the candidates in various branches of science, in addition to competent professional knowledge, the more eligible will they subsequently be deemed for promotion in the service; for selections to fill vacancies will be guided more by reference to such acquirements than to mere seniority.

5. The rank of physician to the forces, or assistant inspector of hospitals, requires, in addition to the knowledge and experience to be gained in the regular progress of study and experience in the service, that the individual should be a fellow or licentiate of the Royal College of Physicians of London, or a graduate of the University of Oxford, Cambridge, Edinburgh, Dublin, Glasgow, Aberdeen, or of the Faculty of Medicine of Glasgow.

6. Although the British schools are specified, it is to be understood that candidates who have received regular education in approved foreign universities or schools will be admitted to examination.

7. With the exception of practice of physic and clinical medicine by one teacher, candidates must have attended several lecturers for each branch of science.

8. Before promotion from the rank of assistant-surgeon to any higher rank, every gentleman must be prepared for such other examination as may be ordered before a board of medical officers.

9. Diplomas, tickets of attendance on lectures, and certificates of regular attendance by each professor or lecturer, must be lodged at this office for examination and registry at least one week before the candidate appears for examination, and likewise certificates of moral conduct and character—one of them by a clergyman, and that of the parochial minister is desirable. Baptismal certificates are required at the same time; if the parish register cannot be resorted to, an affidavit from one of the parents, or some person who can attest the fact, will be accepted.

10. The certificate of the teacher of practical anatomy must state the number of subjects or parts dissected by the pupil.

11. Certificates of lectures and attendance must be from physicians or surgeons of the recognised colleges of physicians and surgeons in the United Kingdom, or of foreign universities. A certificate that the candidate is acquainted with the art of cupping is also required.

All communications to be forwarded "unsealed," under cover, to "the Right Honourable the Secretary at War," with the words "Army Medical Department" at the corner.

Although, in the examination of candidates, gentlemen are expected to be qualified in every branch of study required, they are requested to be particularly conversant in the knowledge of—1. Tropical diseases, and the diseases to which soldiers are most liable. 2. Military surgery, and works on the habits of soldiers, and the rules of the service. 3. Cullen's Nosology, being that adopted in all returns and reports. 4. Willan's Classification of Cutaneous Diseases. 5. The latest authors on the diseases of the eye. They are expected readily to translate a passage from a Greek or Latin author; to be conversant with Baillie and the later authors on morbid anatomy; with Cullen's, Mason Good's, and Gregory's Practice of Physic, the latter giving an account of tropical diseases, and those most commonly met with in the army; with the works of Hunter, Hennen, Dr. John Thomson, Guthrie, Samuel Cooper, Millengen, Ballingall, Marshall, and Baron Larrey, on Military Surgery; with the works of Chisholm, Bancroft, Lind, Blane, Burnet, Johnstone, and Annesley, on the diseases of warm climates; but Baillie's Morbid Anatomy, Hennen's and Ballingall's Military Surgery, 3rd edition, with his valuable work on Medical Topography, Guthrie on gun-shot wounds and on the eye, and Gregory's Practice of Physic, should form part of the baggage of every military surgeon.

Candidates, after passing their examination, will not have any leave of absence granted, but will be stationed at Chatham for two or three months, previously to being gazetted; and on their conduct there, will depend their obtaining their commissions. The appointment of army assistant-surgeons rests with the director-general, Sir James M'Grigor, Bart., by whom the examinations are generally conducted.

NAVAL MEDICAL DEPARTMENT.

ADMIRALTY OFFICE, SOMERSET HOUSE.

Qualifications.—The Right Hon. the Lords Commissioners of the Admiralty having been pleased to direct "that no person be admitted as an assistant-surgeon in the royal navy who shall not produce a certificate from one of the Royal colleges of surgeons of London, Edinburgh, or Dublin, of his fitness for that office; nor as a surgeon, unless he shall produce a diploma or certificate from one of the said Royal colleges, founded on an examination to be passed subsequently to his appointment of assistant surgeon, as to the candidate's fitness for the situation of surgeon in the navy; and, in every case, the candidate producing such certificate or diploma, shall also undergo a further examination before the inspector-general of naval hospitals and fleets, touching his qualifications in all the necessary branches and points of medicine and surgery for each of the steps in the naval medical service," the inspector-general doth hereby signify, for the information of those persons to whom it may relate, that these regulations and directions will be strictly adhered to; and further, that previously to the admission of assistant-surgeons into the navy, it will be required that they produce proof of having received a preliminary classical education, and that they possess, in particular, a competent knowledge of Latin; also, that they are of good moral character, the certificate of which must be signed by the clergyman of the parish or by a magistrate of the district. That they have served an apprenticeship, or have been engaged for not less than

six months in practical pharmacy. That their age be not less than 20 years, nor more than 24 years, and that they are unmarried. That they have actually attended a hospital in London, Edinburgh, Dublin, Glasgow, or Aberdeen, for two years, subsequently to the age of 18, in which the average number of patients is not less than 150. That they have been engaged in actual dissections of the human body twelve months; the certificate of which, from the teacher, must state the number of subjects or parts dissected by the candidate. That they have attended lectures, &c., on the following subjects, at established schools of eminence, by physcians or surgeons of the recognised colleges of physicians and surgeons in the United Kingdom, for periods not less than hereunder stated, observing, however, that such lectures will not be admitted if the teacher shall lecture on more than one branch of science, or if the lectures on anatomy, surgery, and medicine, be not attended during three distinct winter sessions of six months each.

Anatomy, (or general anatomy 12 months, and comparative anatomy 6 months,) 18 months. *Surgery*, (or general surgery 12 months, and military surgery 6 months,) 18 months. *Theory of Medicine, Practice of ditto.* If the lectures on the theory and practice of medicine are given in conjunction, then the period required is 18 months,) 6 months' lecture on pathology, if given at a university where there may be a professorship on that branch of science, will be admitted in lieu of 6 months' lectures on the practice of medicine. *Clinical Lectures* at a hospital as above, (or the practice of medicine, 6 months, or the practice of surgery, 6 months,) 12 months.—*Chemistry*, (or lectures on chemistry, 3 months, and practical chemistry, 3 months,) 6 months.—*Materia Medica*, 6 months.—*Midwifery*, (accompanied by certificates stating the number of midwifery cases personally attended,) 6 months.—*Botany*, (or general botany, 3 months, and medical botany, 3 months,) 6 months.

In addition to the tickets for the lectures, certificates must be produced from the professors, &c., by whom the lectures were given, stating the periods (in months) *actually* attended by the candidates. The time, also, of actual attendance at a hospital or infirmary must be certified, and the tickets as well as certificates of attendance, age, moral character, &c., must be produced by the candidate immediately on his being desired to appear for examination.

Although the above are the only qualifications which are absolutely required in candidates for the appointment of assistant surgeon, a favourable consideration will be given to the cases of those who have obtained the degree of M.D. at either of the universities of Oxford, Cambridge, Edinburgh, Dublin, Glasgow, or London, or who, by possessing a knowledge of diseases of the eye, and of any branch of science connected with the profession, such as medical jurisprudence, natural history, natural philosophy, &c., appear to be more peculiarly eligible for admission into the service, observing, however, that lectures on these or any other subjects cannot be admitted as compensating for any deficiency in those required by the regulations.

By the rules of the service, no assistant surgeon can be promoted to the rank of surgeon until he shall have served three years in the former capacity, one year of which must be in a ship actually employed at sea; and it is resolved, that not any diploma or certificate of examination from either of the aforesaid royal colleges shall be admitted toward the qualification for surgeon, unless the diploma or certificate shall be obtained on an examination passed after a period of not less than three years' actual service, observing that no one can be admitted to an examination for surgeon unless he be a member of one of the above-named royal colleges; and whenever assistant surgeons, already in the service, (whose professional education may not be in accordance with the above,) obtain leave to study previously to their passing for surgeon, they will be required, on their examination, to produce testimonials of their having availed themselves of the period of leave to complete their education, agreeably to these regulations.

It is also to be observed, that candidates who may be admitted into the naval medical service must serve in whatever ships, &c., they may be appointed to, and that, in the event of their being unable to do so from sea-sickness, their names cannot be continued on the naval medical list, nor can they, of course, be allowed half pay.

ORDNANCE MEDICAL DEPARTMENT.

63, PALL MALL.

Regulations for the admission of candidates.—*Provisional list.*—Medical students who have completed their twentieth year, who have been well instructed in the Latin and Greek languages, the elements of mathematics and natural philosophy, and who can produce satisfactory proofs of being of good moral character, and diligent in the study of their profession and the sciences connected with it, may be entered in the provisional list of gentlemen desirous to be admitted candidates for employment in the Ordnance medical department. A knowledge also of modern languages, though not indispensable at the time of provisional reception, is highly desirable, and will be duly appreciated.

Candidates.—No applicant is to be received on the list of candidates before he is 22, or retained on it after he is 25 years of age. The age of every individual must be verified by a certificate of his baptism, if it can be procured; but if not, by a solemn declaration of one of his parents, or of some other person who can attest the date of his birth. He must be also unmarried, and in the full enjoyment of health, both bodily and mental.

Qualifications.—Every candidate must produce a diploma from one of the colleges of surgeons of London, Edinburgh, or Dublin; and a certificate of qualification from the Society of Apothecaries in London. He must also bring proof of having diligently gone through the following branches of professional education, nearly all of which are required to enable him to take out the above-mentioned diploma and certificate—viz., Of having served an apprenticeship of five years to a surgeon and apothecary, if educated in England; but if not, qualification in the practice of medicine and pharmacy equivalent thereto;—of having attended the practice of surgery in a recognised hospital or hospitals, where clinical instruction is constantly given, for three years, three months being allowed for a vacation in each year;—of having attended the undermentioned lectures, &c.

Anatomical lectures ..	Three anatomical seasons or sessions.
Ditto - - demonstrations	
Ditto - - dissections ..	

An anatomical season is understood to extend from October to April inclusive, and to comprise at least 140 lectures on anatomy and physiology, occupying not less than an hour each, given on separate days; and at least 100 demonstrations of the like duration, given in a similar manner, exclusive of dissections, of which distinct certificates are required.

Morbid anatomy and pathology	one course.
Lectures on the principles and practice of surgery, delivered in two distinct periods or sessions	two courses, each comprising seventy lectures, on one course of surgery and one of military surgery.
Natural history, or comparative anatomy ..	one course.
Chemistry	one course of a hundred lectures.
Botany	one course.
Materia medica and therapeutics	one course of a hundred lectures.
Lectures on the principles and practice of medicine	two courses, each a hundred lectures; second & third winters.

Medicine practice, with clinical lectures, 18 months, commencing the second session—viz., 12 months in a recognised* hospital, and the remaining six months, either in a recognised hospital or a dispensary.

* No provincial hospital is recognised which contains fewer than a hundred patients; and no metropolitan hospital, which contains fewer than a hundred and fifty patients.

Medical jurisprudence with toxicology ..	one course of fifty lectures.
Midwifery	two courses each of lectures, second and third sessions.
Practical midwifery (not less than thirty cases)	After the conclusion of the first course of midwifery lectures, a certificate of having passed the usual examination is to be produced
Diseases of the eye	with attendance on patients of that class. — one course

He must produce a diploma from either of the colleges of London, Edinburgh, or Dublin; and, if not a graduated M.D. of Scotland or Ireland, after having actually passed an examination in the university where he has obtained his degree; a certificate of qualification also from the Society of Apothecaries in London. It is likewise expected that candidates shall have attended establishments for the cure of diseases of the ear and skin; and for the treatment of patients affected with mental derangement. Certificates will not be received on more than two branches of cience, from one and the same lecturer; but anatomy and physiology, demonstrations and dissections, materia medica and botany, will be respectively considered one branch of science. In the certificates of attendance on hospital practice, and on lectures, the dates of commencement and termination are to be inserted in words at full length. The moral conduct and character of each individual must be certified by the gentleman to whose care his education was confided; and also by a clergyman, who, if practicable, should be the incumbent or officiating minister of the parish in which the applicant usually resides. The documents above detailed are to be inspected by a board, to consist of not less than five medical officers, after which they are to examine the candidate as to his professional acquirements. If his education has been chiefly medical, the examination will be principally in practical surgery; but if surgical, in the theory and practice of physic, including pharmacy. The full qualification being required on admission, a second examination is deemed unnecessary.

EAST INDIA COMPANY'S SERVICE.

REGULATIONS FOR THE ADMISSION OF MEDICAL GENTLEMEN INTO THE EAST INDIA COMPANY'S SERVICE AS ASSISTANT-SURGEONS FOR INDIA.

Age.—The assistant-surgeon must not be under 22 years, in proof of which he must produce an extract from the register of the parish in which he was born, or his own declaration, and other certificates, agreeably to forms to be obtained in the Office for Cadets and Assistant-Surgeons, Military Department, East India House.

Qualifications in Surgery.—The assistant-surgeon, upon receiving a nomination, will be furnished with a letter to the Court of Examiners of the Royal College of Surgeons, to be examined in surgery, and their certificate will be deemed a satisfactory testimonial of his qualification; but should the assistant-surgeon be previously in possession of a diploma from the Royal College of Surgeons of London, or of the College of Surgeons of Dublin or Edinburgh, or of the College and University of Glasgow, or of the Faculty of Physicians and Surgeons of Glasgow, either of them will be deemed satisfactory as to his knowledge of surgery, without any further examination. He is also required to produce a certificate from the cupper of a public hospital in London, of having acquired, and being capable of practising with proper dexterity the art of cupping.

Qualification in Physic.—The assistant-surgeon will also be required to pass an examination by the Company's examining physician in the practice of physic, in which examination will be included as much anatomy and physiology as is necessary for understanding the causes and treatment of internal diseases, as well as the art of prescribing and compounding medicines; and Dr. Hume will then require him to produce satisfactory proof of his having attended at least two

courses of lectures on the practice of physic; and, above all, that he should produce a certificate of having attended diligently the practice of the physicians at some general hospital in London for six months; or at some general hospital in the country (within the United Kingdom) for six months, provided such provincial hospital contain at least, on an average, one hundred in-patients, and have attached to it a regular establishment of physicians as well as surgeons. No attendance on the practice of a physician at any dispensary will be admitted.

The assistant-surgeon is also required, as a condition to his appointment, to subscribe to the Military or Medical, and Medical Retiring Fund at his respective presidency, and also to the Military Orphan Society, if appointed to Bengal.

The assistant-surgeon is required, by resolution of court of the 21st of May, 1828, to apply at the Office for Cadets and Assistant-Surgeons for his orders for embarkation, and actually proceed under such orders within three months from the date of being passed and sworn before the committee for passing military appointments; he will then be furnished with an order to obtain the certificate of his appointment, signed by the secretary, for which he will pay a fee of £5 in the secretary's office.

Assistant-surgeons who shall fail to apply at the cadet department for their orders within three months from the date of their being passed and sworn before the committee, or shall not actually proceed under such orders, are considered to have forfeited their appointments, unless special circumstances justify the court's departure from this regulation.

General Cautions.—First. Notice is hereby given, that should it be discovered at the time the assistant-surgeon is appointed, or at any subsequent period, that his appointment has been obtained by purchase, or agreement to pay any pecuniary or valuable consideration whatsoever, either directly or indirectly, when the appointment is completed, the assistant-surgeon will not only be dismissed, and rendered incligible to hold any situation in the East India Company's service, under the court's resolution of the 9th August, 1809, but all the parties concerned in procuring the appointment surreptitiously, or in disposing of, or receiving the same under such circumstances, will subject themselves individually and collectively to a criminal prosecution for a misdemeanor, under the Act of the 49th of George the Third, cap. 126; and the Court of Directors of the East India Company do hereby declare, that they will prosecute any person or persons who shall hereafter be detected in such illicit traffic.

Secondly. The assistant-surgeons are desired to present themselves to Mr. T. R. Clarke, clerk for passing cadets and assistant-surgeons, at the East India House, with their certificates, as underneath, properly filled up and signed, by ten o'clock in the morning, or as soon after as possible, in order that they may have their nominations prepared against the committee meet, or the nominating director arrives; in failure of which they may have to wait for several hours, or to come another day.

If an assistant-surgeon produces a false certificate, or the dates are found to have been altered for the purpose of making him appear to be of a proper age, he is rendered ineligible to hold any situation in the Company's service.

UNIVERSITY OF EDINBURGH (1582.)

Matriculation.—Every student in the faculties of arts, law, and medicine, before entering with any professor, must produce a matriculation ticket for the ensuing session. Tickets will be issued at the matriculation-office, in the college, every lawful day, from ten till three. Enrolment in the general album is the only legal record of attendance in the university.

Library.—The library will be open for the purpose of giving out books to students, either on loan or for reference, in the hall appropriated for that purpose, every lawful day during the winter session, from ten A.M. till four A.M., except on Saturdays, when it will be shut at one precisely.

Every student applying for books, must present to the librarian his matriculation ticket for the session, with the ticket of at least one professor.

Every book taken out must be returned within a fortnight, uninjured.

Fee for each course, £4 4s. For graduation, £25.

STATUTES OF THE UNIVERSITY OF EDINBURGH RELATIVE TO THE DEGREE OF M.D.

Sect. 1. No one shall be admitted to the examinations for the degree of doctor of medicine who has not been engaged in medical study for four years, during at least six months of each, either in the University of Edinburgh, or in some other university where the degree of M.D. is given; unless, in addition to three Anni Medici in an university, he has attended, during at least six winter months, the medical or surgical practice of a general hospital, which accommodates at least eighty patients, and during the same period a course of practical economy, in which case three years of university study shall be admitted.

Sect. II. No one shall be admitted to the examinations for the degree of doctor who has not given sufficient evidence,—1. That he has studied, once at least, each of the following departments of medical science, under professors of medicine, in this or in some other university, as already defined—viz.:—

During courses of six months.—Anatomy, chemistry, materia medica and pharmacy, institutes of medicine, practice of medicine, surgery, midwifery and the diseases peculiar to women and children, general pathology, practical anatomy, (unless it has been attended in the year of extra-academical study allowed by Sect. I.)

During courses of six months, or two courses of three months.—Clinical medicine, that is, the treatment of patients in a public hospital, under a professor of medicine, by whom lectures on the cases are given.

During courses of at least three months.—1. Clinical surgery, medical jurisprudence, botany, natural history, including zoology.

2. That in each year of his academical studies in medicine, he has attended at least two of the six months' courses of lectures above specified, or one of these and two of the three months' courses. 3. That, besides the course of clinical medicine already prescribed, he has attended, for at least six months of another year, the medical or surgical practice of a general hospital, either at Edinburgh or elsewhere, which accommodates not fewer than eighty patients. 4. That he has attended, for at least six months, by apprenticeship or otherwise, the art of compounding and dispensing drugs at the laboratory of a hospital, dispensary, member of a surgical college or faculty, licentiate of the London or Dublin Society of Apothecaries, or a professional chemist or druggist. 5. That he has attended, for at least six months, by apprenticeship or otherwise, the out-practice of a hospital, or the practice of a dispensary, or that of a physician, surgeon, or member of the London or Dublin Society of Apothecaries.

Sect. III. No one shall obtain the degree of doctor who has not studied, in the manner already prescribed, for at least one year previously to his graduation, in the University of Edinburgh.

Sect. IV. Every candidate for the degree in medicine must deliver, before the 24th of March of the year in which he proposes to graduate, to the Dean of the Faculty of Medicine,—1. A declaration, in his own handwriting, that he is 21 years of age, or will be so before the day of graduation, and that he will not be then under articles of apprenticeship to any surgeon or other master. 2. A statement of his studies, as well in literature and philosophy as in medicine, accompanied with proper certificates. 3. A medical dissertation, composed by himself, in Latin or English, to be perused by a professor, and subject to his approval.

Sect. V. Before a candidate be examined in medicine, the medical faculty shall ascertain, by examination, that he possesses a competent knowledge of the Latin language.

Sect. VI. If the faculty be satisfied on this point, they shall proceed to examine him, either *viva voce*, or in writing,—1. On anatomy, chemistry, botany, institutes of medicine, and natural history bearing chiefly on zoology; and, 2. On materia medica, pathology, practice of medicine, surgery, midwifery, and medical jurisprudence.

Sect. VII. Students who profess themselves ready to submit to an examination on the first division of these subjects, at the end of the third year of their studies, shall be admitted to it at that time.

Sect. VIII. If any one, at these private examinations, be found unqualified for the degree, he must study, for another year, two of the subjects prescribed in Section II., under professors of medicine, in this or in some other university, as above defined, before he can be admitted to another examination.

Sect. IX. Should he be approved of, he will be allowed, but not required, to print his thesis; and, if printed, forty copies of it must be delivered, before the 25th day of July, to the Dean of the Medical Faculty.

Sect. X. If the candidate have satisfied the medical faculty, the dean shall lay the proceedings before the Senatus Academicus, by whose authority the candidate shall be summoned, on the 31st of July, to defend his thesis; and finally, if the senate think fit, he shall be admitted, on the first lawful day of August, to the degree of doctor.

Sect. XI. The Senatus Academicus, on the day here appointed, shall assemble, at ten o'clock, A.M., for the purpose of conferring the degree; and no candidate, unless a sufficient reason be assigned, shall absent himself, on pain of being refused his degree for that year.

Sect. XII. Candidates for graduation shall be required to produce evidence of their having conformed to those regulations which were in force at the time they commenced their medical studies in an university.*

JAMES SYME.
Professor of Clinical Surgery,
Dean of the Faculty of Medicine.
W. HAMILTON,
Secretary to the Senatus Academicus.

ROYAL COLLEGE OF PHYSICIANS, EDINBURGH.

The members of the college are respectively entitled Ordinary Fellows, Non-resident Ordinary Fellows, and Licentiates.

Ordinary Fellows.—No one shall be elected an ordinary fellow of the college, till he has obtained the degree of doctor of medicine.

Every motion for the election of a fellow shall be made, at a quarterly meeting, by one of the fellows present, and seconded by another; and this motion shall be determined by ballot—a majority of three-fourths being necessary to carry it in the affirmative.

No physician residing in Edinburgh shall be proposed for a resident fellowship, till he has been a licentiate for nine months, or, in case of his not being a licentiate, till nine months after his petition to be admitted a resident fellow shall

* Candidates who commenced their university studies before 1825, will be exempted from the fourth year of attendance, (Sect. I.) from the additional hospital attendance, (Sect. II., Art. 3) from the necessity of a year's study in Edinburgh, (Sect. III.) and from any attendance on clinical surgery, medical jurisprudence, natural history, military surgery, practical anatomy, pathology, and surgery distinct from anatomy. Those who commenced between 1825 and 1831, will be exempted from attendance on general pathology, and also on surgery distinct from anatomy. Those who commenced between 1825 and 1833, will be required to attend only two of the following classes—viz., clinical surgery, medical jurisprudence, natural history, military surgery, practical anatomy. And those who commenced before 1833, will be exempted from the attendance specified in Sect. II. Arts. 4 and 5.

N.B.—The attendance on midwifery in an university (Sect. II, Art. I) is required of all candidates.

have been presented, unless an urgent reason be assigned: in this case, he may be proposed even on the same day on which he becomes a licentiate, or at any other quarterly meeting, or at a meeting specially called for the purpose, if this proposal shall be agreed to by every member present.

No fellow shall engage himself to any candidate before the ballot; nor shall he reveal to any person in what manner he did ballot, under the pain of being considered as one who has broken his faith and honour to the college.

No fellow shall take his seat in the college, till the quarterly meeting after that on which he is elected, intimation to attend being then sent to him by the clerk.

The fellows shall be placed on the roll according to the dates of their admissions; and, when two or more fellows are admitted on the same day, they shall be entered on the roll, according to the dates of their diplomas; and, if their diplomas be of the same date, they shall be enrolled according to their ages.

Every fellow, before taking his seat in the college, must sign a promissory engagement to this effect:—"I ————, one of the fellows of the royal college of physicians at Edinburgh, do, by subscribing these presents, solemnly declare and surely promise, First, That I shall, all my life, according to my power, preserve and maintain the privileges, liberties, jurisdiction, and authority, granted to the said college by his sacred Majesty's gracious patent, for the good and necessary ends and uses therein contained. Secondly, That I shall lay hold of all occasions to promote the welfare and flourishing of the said college, and always give my vote, when it is asked, as I think may be most conducive thereto. Thirdly, That I shall, as much as I can, advance and preserve unity, amity, and good order, among all the fellows thereof; and shall heartily wish and endeavour to promote the prosperity of them all, while they continue orderly and faithful to the college. Fourthly, That during my being a fellow of the college, I shall at all times be subject to the due order and government thereof, according to the aforesaid patent. Fifthly, That I shall never divulge anything that is acted or spoken in any meeting of the said college, or council, or court thereof, which I think may tend to the prejudice or defamation of the same, or any member thereof. All the aforesaid articles I shall keep, and never wittingly and willingly break any one of them, as I desire to be holden and reputed an honest man."

Petitions for admission as fellows from graduates of the Scottish universities, or of the universities of Oxford, Cambridge, or Dublin, who propose to reside and practise in Edinburgh, shall be in the following form:—"Unto the much honoured the president and remanent fellows of the royal college of physicians in Edinburgh,—the petition of ——, doctor of medicine, humbly sheweth, that for several years past I have applied myself to the study of medicine, and have obtained the degree of doctor of medicine from the university of ———, conform to my diploma, dated ———, and being willing to observe the whole laws and regulations of the college,—may it therefore please the royal college to admit me a fellow (or licentiate) of the college, with power to practise medicine within the city or liberties thereof, and to enjoy all other rights, liberties, and privileges, which any other fellow (or licentiate) does or may enjoy."

When a candidate for the rank of a fellow, who has a foreign degree, shall apply for a previous examination, his petition shall be in this wise:—"Unto the much honoured the president and remanent fellows of the royal college of physicians of Edinburgh,—the petition of ———, doctor of medicine, humbly sheweth, that for several years past I have applied myself to the study of medicine, and have obtained the degree of doctor of medicine, from the university of ———, conform to my diploma, dated ———. That being desirous of obtaining the rank of fellow (or licentiate) of the college, I am willing to undergo any trial of my qualifications prescribed by the regulations of the college; [and being willing, and hereby engaging, if I come to reside within the city or liberties of Edinburgh, I will then fulfil the whole conditions which the college does or may require of resident fellows (or licentiates);] and being also most willing to observe the whole laws and regulations of the college,—may it therefore please the royal college to take trial of my qualifications, and, if found qualified, to admit me a fellow (or licentiate) of the college, with power to enjoy all the rights and privileges which any other fellow (or licentiate) not residing in Edinburgh, does or may enjoy."

It shall be in the power of any fellow of the college to move that the candidate having a foreign degree be admitted without a previous examination; and, if the motion shall be seconded, it shall be determined by ballot at next quarterly meeting, a majority of three-fourths of the fellows present being necessary to carry it.

If an examination shall take place, it shall consist of three trials: the first by two fellows appointed by the college, on any part of medicine; the second, by two other fellows, on two aphorisms of Hippocrates; and the third, by two other fellows, on two medical cases. All these trials shall be in the presence of the college, and in the Latin language.

Non-resident fellows.—No physician residing in Edinburgh is eligible for a non-resident fellowship.

The mode of election of a non-resident fellow is the same as that of a resident fellow; and the laws regarding examination, in the case of a foreign degree, also apply to him.

Fees.—The fee to be paid by a resident licentiate is £100.

The fee to be paid by a non-resident licentiate is £55.

The fees are exclusive of any tax payable to government now existing, or which may hereafter be imposed.

ROYAL COLLEGE OF SURGEONS, EDINBURGH. (1505.)

Regulation for Fellows.—The candidate is required—To present an essay on some surgical subject, which, if approved of, he must print for circulation among the fellows. He must then undergo three examinations—1. On anatomy and surgery; 2. On chemistry, materia medica, &c.; 3. On the essay he has written. If these are satisfactorily passed, he is admitted to the fellowship. Fee, £250; to apprentices of fellows, £100.

School of Medicine.—Every candidate for a surgical diploma must have followed the course of study, to be specified afterwards, in a university; or at the seat of an established school of medicine, as defined below; or in a provincial school, specially recognised by the college.

Under the title, established school of medicine, are comprehended all places in this kingdom where diplomas in surgery are granted, and such foreign schools as are acknowledged by the constituted authorities of the countries in which they exist.

The extent and period of study allowed to be gone through at a provincial school will be regulated by the means and facility of study which the college receive evidence of its affording; but the lectures delivered at a provincial school will be held as qualifying for only one year's course of study, unless specially recognised for more.

Qualifications of Teachers.—The following classes of persons shall be entitled to give lectures, which may be attended as part of the course of study: 1. In the universities of Great Britain and Ireland, and in university college and king's college, London, the professors of these institutions. 2. In Edinburgh, resident fellows of the royal college of physicians of Edinburgh, and fellows of the royal college of surgeons of Edinburgh. 3. In London, fellows and licentiates of the royal college of physicians of London, and members of the royal college of surgeons of London, whose status as teachers has been admitted by that college. 4. In Dublin, fellows of king's and queen's college of physicians in Ireland, and members of the royal college of surgeons in Ireland. 5. In Glasgow, members of the faculty of physicians and surgeons of that city. 6. In recognised provincial schools, teachers whose status as such as has been admitted by the college, on special application. 7. In any of the above schools, teachers, who, having acquired a status as such in one of the four established schools, in conformity with the above regulations, shall have been subsequently admitted, on application to the college, to the enjoyment of the same privileges in another school.*

The college will not recognise any course of lectures delivered subsequently to the 1st May, 1839, by a professor or teacher who lectures upon more than one of the branches of instruction included in their curriculum; nor will they recognise any course of lectures delivered by a professor or teacher who, in addition to the said course, lectures upon a branch of instruction, medical or general, not included in the curriculum, unless such professor or teacher shall have obtained special leave from the college to do so.

Notwithstanding the above regulation, the teaching of the following branches may be conjoined, without disqualification being incurred—viz., anatomy and practical anatomy, chemistry and practical chemistry, practice of medicine and clinical medicine, practice of surgery and clinical surgery, mathematics and mechanical philosophy; and, for the present, clinical medicine or clinical surgery may be taught in conjunction with any one of the other courses of education prescribed in the curriculum, by a physician or surgeon qualified according to the regulations of the college, and attached to a public hospital of the size which these regulations prescribe.†

Course of Study, Preliminary Instruction.—Every candidate for the diploma of the royal college must, either previously to or during his medical education, have received regular instruction in the elements of mathematics; and must have subsequently attended a course of mechanical philosophy of at least three months' duration, and of not fewer than sixty lectures.

Professional Instruction.—The candidate must have been engaged in attending the following separate and distinct courses of lectures during a period of not less than twenty-seven months, in which must have been included three winter sessions of six months' duration each. Anatomy, two courses of six months each. Practical anatomy, twelve months. Chemistry, one course of six months. Practical chemistry (the number of pupils in each class being limited to twenty-five), one course of three months. Materia medica and pharmacy, one course of six months. Practical pharmacy, one course of six months. Institutions of medicine, or physiology, one course of six months. Practice of medicine, one course of six months. Clinical medicine, one course of six months, or two courses of three months each, during the period of his attendance at the hospital where they are delivered. Principles and practice of surgery, two courses of six months each; or, principles and practice of surgery, and military surgery, one course of six months each. Clinical surgery, one course of six months, or two courses of three months each, during the period of his attendance at the hospital where they are delivered. Midwifery and diseases of women and children, one course of three months. Medical jurisprudence, one course of three months.

The six months' courses delivered in Edinburgh must consist of not fewer than one hundred and

---

* The only lectures excepted from this law are those on mechanical philosophy and on chemistry. The former may be professors in universities, lecturers in public institutions, or teachers specially recognised by the college; and the latter may be persons not medical, if recognised by the college on special application, in conformity with a resolution of the college on the 25th October, 1838. In all cases of special recognitions, proof of capability, and of the applicant possessing the requisite apparatus for illustrating his lectures, will be required.

† In making the above concession respecting clinical medicine and surgery, the college wish it to be understood that this is done rather in consideration of the present state and arrangements of existing schools, than from their entertaining any doubt that the teaching of either of those branches would afford ample occupation for a teacher, in addition to his hospital duties.

ten lectures, with the exception of clinical medicine, clinical surgery, and military surgery. The three months' courses must consist of not fewer than sixty lectures. Two London courses of three months each on any of the above subjects will be taken as equivalent to one six months' course.

The candidate must also have attended for twenty-one months a public general hospital containing at least eighty beds.

Fees payable by candidates.—For a diploma, ordinary candidates pay the sum of £7 5s. (Apprentices of fellows of the royal college, bound for the freedom, pay 25s.; their other apprentices pay £2 16s. 6d. Assistant-surgeons in the navy, having previously obtained certificates from the college, pay £2 11s. 6d. Surgeons in the navy, having obtained certificates from the college, pay 15s. 6d.)

For the certificate of qualification to act as assistant-surgeon in the navy, candidates not having paid for any previous qualification, pay £4 19s. 6d.

For the certificate of qualification to act as full surgeon in the navy, assistant-surgeons who have already obtained certificates from the college, pay £3 18s. 6d., and those who have previously obtained the diploma of the college, pay £2 17s. 6d.

The sums stated above include all fees of every kind, and the officer is prohibited from receiving any.

UNIVERSITY OF GLASGOW.

REGULATIONS REGARDING DEGREES IN MEDICINE AND SURGERY, TO CANDIDATES ENTERING THE UNIVERSITY IN, OR SUBSEQUENT TO, 1839-40.

Medicine.—Every candidate for a medical degree must lodge with the clerk or senate—

1. A certificate of moral character, by two respectable persons, with evidence of having attained the age of 21.

2. Evidence of having attended, for four years, an university in which medicine is regularly taught, or medical lectures delivered in London or Dublin; and at least one year of the four must be spent at the University of Glasgow. In each year he must have attended at least two courses of lectures of six months' duration, but if he shall spend one year only at the University of Glasgow, then he must attend three courses of lectures delivered there, two of them, at least, being of six months' duration.

3. Certificates of having attended one or more courses of lectures on the following subjects, each course, except forensic medicine and botany, being of six months' duration; if of less extent, then two courses shall be deemed equivalent to one of six months:—Anatomy and physiology; chemistry; the theory or institutes of medicine; practice of medicine; materia medica and pharmacy; midwifery; surgery; forensic medicine; botany;* anatomical dissections; and two years' practice of a general hospital, containing eighty beds, and in which the student must spend at least one-half of the period of attendance in the physicians' wards. Neither hospital attendance nor anatomical dissections shall be considered as equivalent to a course of lectures.

4. Each candidate must lodge with the clerk of senate, with the above certificates, a schedule of his course of study, properly filled up, together with an English essay on some medical subject chosen by himself, two months before the time of graduation—that is, on or before the 1st of March, or the 10th of June, yearly, otherwise he cannot be admitted for examination till the following term. All tickets of attendance lodged by candidates must be certified, not excepting those of the current session; but the certified botanical tickets of the current session shall not be received until the 1st of April.

5. No student entered in any medical class later than the 1st of December, without special permission of the senate. And it is strictly required of every candidate for graduation that he produce evidence of his name having been enrolled in the library book, on or before that day, as well as an express certificate of his regular attendance by each professor on whose lectures he attends. In order, further, to insure attendance, all students must inscribe their names, once a fortnight, in a register kept for the purpose, stating the lectures, &c., which they attend.

6. Every candidate shall prove that he has a competent knowledge of Latin, and shall undergo full examinations on all the subjects included in the curriculum.

Surgery.—The regulations respecting certificates of age and moral character are the same as those under the head of degrees in medicine.

Candidates for the degree of master of surgery shall produce evidence that they have attended medical lectures in one or other of the universities or schools already specified for four years, during which they must have attended one or more courses on the following subjects, the extent of each course, with the exception of forensic medicine, being six months, or the equivalent two courses of a shorter duration. The candidate must have attended not less than three courses of medical lectures in the University of Glasgow. In each year of his study he shall have attended at least two or more courses of lectures, of six months' duration, on anatomy, surgery, chemistry, theory or institutes of medicine, practice of medicine, midwifery, materia medica and pharmacy, forensic medicine, anatomical dissections, and two years' practice of a general hospital, in which the student must attend one-half of the prescribed period in the surgical wards, and the other half in the medical.

The regulations as to lodging certificates of attendance, with an essay in English, and as to the candidate's knowledge of Latin, are the same as under the head of medical degrees, only the essay is to be on a surgical subject. The days of graduation are the last Wednesday of April and the first Wednesday of August.

Fee to the library, &c., for the degree of M.D.	£15	0	0
Duty on stamp for ditto	10	3	0
	£25	3	0
Fee for the degree of Chirurgiæ Magister	10	10	0

N.B. Candidates for degrees who attended classes in the University of Glasgow previously to 1839-40, admitted to examination, according to the regulations which existed at the time when they began to study medicine.

FACULTY OF PHYSICIANS AND SURGEONS OF GLASGOW.

Regulations for the Surgical Diploma.—The faculty recommend that candidates should attend elementary courses of study in mathematics and natural philosophy. These branches, however, are not imperative. Every candidate's knowledge in Latin shall be tested, at his examination, by being required to construe some part of Gregory's Conspectus Medicinæ Theoreticæ.

Curriculum—Anatomy, two courses of six months. *Practical anatomy*, one course of six months; enacted 7th June, 1830. *Surgery*, two courses of six months. *Chemistry*, one course of six months. *Practical chemistry*, one course of three months; enacted 8th November, 1831. *Theory of medicine*, one course of six months. *Practice of medicine*, one course of six months. *Materia medica*, one course of six months: *Midwifery*, one course of six months. *Clinical medicine*, one course of six months; enacted 7th June, 1830. *Clinical surgery*, one course of six months; enacted 7th June, 1830. *Medical jurisprudence and police*, one course of six months; enacted 4th April, 1841. *Botany*, one course of three months; enacted 3rd February, 1834. *A public hospital*, eighteen months; enacted 3rd February, 1834. *A surgeon's or apothecary's shop*, six months; enacted 3rd February, 1834.

The above lectures must have been delivered by professors or lecturers in an university; or by resident members of the royal colleges of physicians or surgeons respectively of London, Edinburgh, or Dublin; or by members of the faculty. Every candidate must have been employed in the above course of studies for four winter sessions, or for three winter sessions and two summer sessions, so that the whole period of attendance shall not be less than three years complete. An essay, the subject to be fixed by the examinators, to be written by the candidate, in his own handwriting; and no essay to be submitted for a shorter period than 24 hours. Specimens of bones, or other anatomical or surgical preparations, or specimens from the materia medica, shall be used at the discretion of the examinators. The fee of seven guineas shall be deposited with the president previous to the examination, and at the same time satisfactory documents shall be produced, that the above curriculum of education has been duly completed by certified attendance.

N.B. These branches, whose dates are specified, are not required by those students who commenced their studies anterior to these enactments. The commencement of education is ascertained by the date of the first ticket.

The fees for the diploma are £7 7s. The president, visitor, collector, box-masters, and scalkeeper, form, along with the assistant-examinators, the Court of Examiners. The diploma of the faculty is recognised by all the licensing bodies in the three kingdoms, and by the poor-law commissioners in England and Ireland.

* No course of botany attended previously to 1839-40 is received, unless it shall have been delivered in an university.

KING'S COLLEGE, ABERDEEN.

REGULATIONS TO BE OBSERVED IN GRANTING DEGREES IN MEDICINE AT KING'S COLLEGE.

All candidates for the degree of M.D. must be of the age of twenty-one years, and must produce satisfactory certificates of moral character, and exhibit the diploma of A.M. from some university.

All candidates, with the exceptions mentioned below, must have been engaged in the study of medicine for at least four years, one of which must be passed in Aberdeen, and must produce evidence of having attended, in some recognised school of medicine, the following courses of lectures: — Six months' courses — anatomy, two courses; chemistry, one course; materia medica, one course; surgery, one course; institutes of medicine and physiology, one course; practice of medicine, one course; midwifery, one course. Three months' courses—dissections, two courses; practical chemistry, one course; medical jurisprudence, one course; clinical surgery, one course; botany, one course; clinical medicine, two courses.

In addition to the above, the candidate must have attended for two years the wards of a hospital containing 100 beds; and during three months, a shop or dispensary for the compounding of medicines.

The preceding regulations are strictly enforced in the case of all students who shall commence their medical studies at a period subsequent to 1st October, 1840. But gentlemen who possess a licence or diploma from any of the royal colleges of physicians or surgeons, and who have been engaged for at least five years in the practice of medicine, may be admitted to examination on producing their licence or diploma, along with satisfactory evidence of sufficient preliminary education and of good moral character. In the case of students who have commenced their medical education previously to the above period, and who have not the degree of A.M., the senatus reserves the power of judging of their preliminary education, by examination, or otherwise.

Previously to examination each candidate must lodge with the secretary £26 5s. 6d., the same to be returned to him should he not obtain his degree.

Degrees in medicine are conferred at two stated periods annually—viz., at the end of April, and at the end of July.

REGULATIONS FOR GRANTING MEDICAL DEGREES IN MARISCHAL COLLEGE AND UNIVERSITY, ABERDEEN.

Curriculum.—Four years of attendance on medical classes, of which one year may be passed at any recognised medical school; but three, at least, must be passed in a university, including one, at least, in this university. The attendance, in each year, to embrace not fewer than two medical

classes of six months each; or one of six months, with two or three months each. But it will be held equivalent to *one* of four years of such attendance in a university—1st, in a master of arts, to have attended one medical class while passing through the curriculum of arts; or 2ndly, in any student, to have attended a medical class, in each of two years, along with classes in the curriculum of arts. The university attendance to include the following eight classes, each for a course of six months:—anatomy, practical anatomy, chemistry, materia medica, institutes of medicine, surgery, practice of medicine, midwifery, and the following three classes, each for a course of three months—botany, practical chemistry, medical jurisprudence.

Eighteen months of attendance on the medical and surgical practice of a hospital containing not fewer than eighty beds, along with attendance for six months on lectures on clinical medicine, and for three months on lectures on clinical surgery.

Six months of compounding and dispensing medicines in the laboratory of a hospital, or of a public dispensary, or of a licensed general practitioner, or of a regular dispensing druggist.

Exemption to practitioners.—It will be held equivalent to the curriculum prescribed in the three foregoing regulations, to have obtained, upon examination, a diploma or a licence, in medicine or in surgery, from a university or other authority established by law within the United Kingdom, and to have subsequently attended medical classes in this university during one winter session.

Examinations.—The examination terms to be two in each year—the *first* to commence on the 20th of April, if a Wednesday, but if not, on the first Wednesday thereafter; the *second* on the 13th of October, if a Wednesday, but if not, on the first Wednesday thereafter.

Every candidate to undergo at least three separate professional examinations—the first, pharmaceutical; the second, surgical; the third, medical; to be conducted partly in writing, as well as *vivâ voce*, and partly by demonstration. The *first* to include chemistry, botany, materia medica, pharmacy, and the doctrines of physics relating to specific gravities, to gases and vapours, and to climate. The *second* to include anatomy, institutes of medicine, surgery, and the doctrines of chemistry and physics illustrative of animal structure and function. The *third* to include the practice of medicine, midwifery, and medical jurisprudence.

Every candidate, not a master of arts, must undergo a preliminary examination on the Latin language (the book to be used being *Celsus de Medicina*), and on the etymology of such terms in the medical sciences as are derived from the Latin and the Greek.

Any candidate that so desires shall be admitted to each one, or to any two, of his three professional examinations, at different terms; but not to the first examination, until the beginning of his third year of medical classes; nor to the second until the end of his third year; nor to the third until the end of his fourth year, and until he be twenty-one years of age; nor shall a greater interval than eighteen months be allowed between two successive professional examinations, without a full renewal of the previous one or two. The preliminary examination must be passed at the same term as the first professional examination.

In order to be received for examination, certificates must have been lodged with the professor of medicine on the first day of the month of the examination term, shewing that the candidate is of the required age, that he is of good moral character, and that he has passed through the requisite course of professional education. Along with such certificates must be lodged a schedule, filled up in his own handwriting, containing a list of them, and specifying such additional branches of education, professional and general, as he may have studied.

UNIVERSITY OF ST. ANDREW'S. (1412.)

REGULATIONS FOR GRANTING MEDICAL DEGREES.

The senatus academicus having taken into their serious consideration the mode of conferring degrees in medicine, and with the view of requiring from candidates for that honourable distinction a course of study calculated to prepare for the full and enlightened discharge of their professional duties, and of affording to the public the most ample security that no degree will be conferred until it has been ascertained, by a minute and scrupulous examination, conducted by the professor of medicine, in conjunction with other distinguished members of the medical profession, being resident fellows of the royal college of physicians or surgeons in London, Edinburgh, Glasgow, Aberdeen, or Dublin, that the candidates have suitably profited by attending the prescribed classes and hospitals, and are in every respect qualified to practise with advantage to the community, have adopted the following regulations:—

The candidate must produce evidence of unexceptionable moral character, and before being admitted to examination must subscribe a declaration that he is twenty-one years of age.

The candidate must have had a liberal and classical education, and if he be not in the possession of the degree of A.M., must be ready to undergo an examination as to his proficiency in the Latin language.

The candidate must produce certificates that he has regularly attended lectures delivered by professors in some university, or by resident fellows of the royal colleges of physicians or surgeons of London, Edinburgh, Glasgow, Aberdeen, or Dublin, for at least four complete winter sessions, or three winter and three summer sessions, on the following branches:—1, anatomy, two courses of six months' each; 2, practical anatomy, twelve months; 3, theory of medicine, or physiology, one course of six months; 4, chemistry, one course of six months; 5, practical chemistry, one course of three months; 6, materia medica and pharmacy, one course of six months; 7, surgery, one course of six months; 8, clinical medicine, one course of six months; 9, practice of medicine, one course of six months; 10, clinical surgery, one course of six months; 11, midwifery, and diseases of women and children, one course of three months; 12, an apprenticeship, or six months' attendance in the shop of an apothecary, or in the laboratory of a public hospital or dispensary; 13, attendance at a public hospital, containing not less than eighty beds, for at least eighteen months.

These regulations will be invariably observed, except when the candidates are possessed of a surgeon's diploma or licence from the colleges of London, Edinburgh, or Dublin, or the faculty of physicians and surgeons of Glasgow, or a licence from the apothecaries' company, in which case they have merely to present such diploma or licence, previous to their examination for M.D.

UNIVERSITY OF DUBLIN. (TRINITY COLLEGE.) 1591.

Chancellor, his Majesty the King of Hanover; *Vice-Chancellor*, his Grace the Lord Primate of Ireland; *Provost*, Dr. Sadleir.

The days of graduation are, Shrove Tuesday, and the first Tuesday in July. The degree of bachelor of medicine may be obtained in two modes:—

1. Graduates in arts can obtain the degree at any of the half-yearly periods of graduation, provided the requisite medical education and examination shall have been accomplished. Fee for entrance, £16; fees for study in arts during four years, £7 10s. each half year. Fees for graduation in arts, £8 17s. 6d.

2. Candidates are admissible to the degree of M.B., without previous graduation in arts, at the end of five years from the July following the Hilary examination of the first undergraduate year, provided the usual education and examinations in arts of the first two years of the undergraduate course shall have been completed, as also the medical education and examinations, as in the case of other candidates. Fees for two years' study in arts (besides the usual entrance payment of £16) are £7 10s. each half year. The graduation fees for the degree of bachelor of medicine are £11 15s. The standing of the first undergraduate year may be obtained by attending the October examination of that year, if the student has entered not later than the first Monday of the July of the same year, and has completed the payments due since the ordinary period of entrance in the preceding November. The medical education of a bachelor of medicine comprises attendance on the following courses of lectures in the school of physic established by act of parliament, provided that one, and not more than three, of the courses which begin in November be attended during each of four sessions. Three of these courses, at the discretion of the candidate, may be attended at the university of Edinburgh. The courses are on—anatomy and surgery; chemistry; botany; materia medica and pharmacy; institutes of medicine; practice of medicine; midwifery (by the professor to the college of physicians); clinical lectures at Sir Patrick Dun's hospital, during at least one session (six months), as delivered by the professors in the school of physic; the attendance on such clinical lectures by the professors to be extended to three additional months of a summer session commencing in May. This regulation to affect all students commencing their medical studies after 17th July, 1841, and to be in lieu of attendance on the hospital from 1st May to the 1st November following. The fees for attendance on the clinical lectures are £3 3s. to the professors for each three months' attendance, and (provided the student be of two years' standing in the university) £3 3s. to the treasurer of the hospital for the first year, with a proportionate sum for any longer period. The fee for each of the other courses is £1 4s. The examinations are conducted by the regius professor of physic of the university, the six professors of the school of physic, and the professor of midwifery to the King and Queen's College of Physicians. No further examination is requisite for the degree of doctor of medicine, which may be taken at the expiration of three years from having taken the degree of M.B., provided the candidate shall have graduated in arts. The fees for the degree of doctor of medicine are £22. The degrees are publicly conferred by the vice-chancellor, in the senate or congregation of the university.

COLLEGE TERMS:

Hilary begins January 10, ends March 25.
Trinity — April 15, — June 30.
Michaelmas October 10, — December 20.

KING AND QUEEN'S COLLEGE OF PHYSICIANS IN IRELAND.

Qualifications of candidates for licence.—Candidates must produce evidence of having been engaged in the study of medicine for four years, and of having attended two at least of the required courses in each year. Candidates, except those who have taken a medical degree prior to 1840, must produce certificates of attendance on one or more courses of lectures on the following subjects, each course being of six months' duration, with the exception of botany and forensic medicine, which must include at least fifty lectures:—Anatomy and physiology, chemistry, materia medica and pharmacy, botany, institutes of medicine, practice of medicine, principles and practice of surgery, midwifery, and forensic medicine. The lectures on anatomy, chemistry, botany, materia medica, institutes of medicine, and practice of medicine, are required to have been delivered by the respective professors of the school of physic in Dublin, or in an university. The lectures on surgery are required to have been delivered on at least three days in the week, during four months, by a professor of surgery in an university or college of physicians or surgeons, in the United Kingdom, or by the surgeon of a medico-chirurgical hospital recognised by the college. These lectures must not form a part of a course of lectures on anatomy. The lectures on midwifery are required to have been delivered by a professor of midwifery in the university, or college of physicians or surgeons in the United Kingdom, or by the master of the lying-in hospital, Dublin. The lectures on medical jurisprudence are required to have been delivered by a professor in an university or college of physicians or surgeons in the United Kingdom. Certificates must also be produced of six months' attendance on anatomical demonstrations and dissections, and of at least two years' hospital practice; one year in the hospital of the school of physic in Dublin or Edinburgh, the other in any recognised medico-chirurgical hospital. The certificate must include attendance on the entire practice of the hospital, and on all the clinical lec-

tnres delivered in the hospital during such attendance. Candidates who have taken a medical degree in an university shall be admitted to examination upon such degree alone. Every candidate for licence, exeept those who have taken a medieal degree prior to 1840, is examined on two separate days; on the first day on anatomy and physiology, chemistry, botany, materia medica, and pharmacy; and on the seeond day on aeute and chronic diseases, midwifery, and non-naturals, and on the translating of one or more of the following books, from the original Greek — viz.: Hippocrates, Aretæus, and Galen. Graduates in medicine are only required to undergo the second day's examination. The examinations, which are public, are eonduetel in the English language; but every candidate, exeept graduates in arts of Oxford, Cambridge, or Dublin, is required to translate medical cases from the English into the Latin language, before he is admitted to examination as to his professional aequirements. Fee for licence, £30.

The licence of this college is equivalent to a medical degree, and it confers privileges which a degree does not.

The fellows are chosen from the licentiates of three years' standing; they are required by statute (40 Geo. III., cap. 84, sect. 42) to have taken the degree of M.D. in one of the universities of Dublin, Oxford, or Cambridge; or to have taken the degree of A.B. in one of these universities, and to have received the medical education requisite for obtaining the licence, for which a degree in medicine is not necessary. Fee to the college, on election to the fellowship, £20, with an additional stamp duty of £25.

The act of parliament provides that these qualifications may be dispensed with, whenever, at any time, the number of fellows is reduced to six.

The college has the power of conferring the honorary fellowship on any of its own licentiates, who have not the statutable qualifications; on such of its fellows as resign, or vacate the fellowship; and on such eminent medical men, not licentiates, as it may wish to distinguish by its approbation.

ROYAL COLLEGE OF SURGEONS IN IRELAND. (1784—1828.)

Bye-laws respecting the registry of pupils.—Every person requiring to be registered as a pupil on the college-books shall be so registered, if he shall have laid before the court of censors the following documents, viz.:

Provided he be an apprentiec, and shall have paid an apprentice fee: 1. A receipt shewing that he has lodged, to the credit of the president, and for the use of the college, in the bank of Ireland, the registry fee of ten guineas. 2. A receipt, shewing that the member or licentiate to whom he is indentured has lodged a similar sum of ten guineas. 3. A declaration, subscribed by the member or licentiate to whom he is indentured, stating that he has really and *bonâ fide* received the usual fee of one hundred and fifty guineas, or value to that amount. 4. His indenture of apprenticeship, duly executed, and bearing the requisite stamp.

Provided he be an apprentice, and shall not have paid an apprentiee fee, he shall lay before the court —1. A declaration, subscribed by the member or licentiate to whom he is indentured, that he has not received, or that he does not expect to receive, any apprentice fee. 2. A receipt, shewing that he has lodged, to the credit of the president, and for the use of the college, in the bank of Ireland, the sum of fifty guineas. 3 His indenture of apprenticeship, regularly executed and registered.

Provided he be an apprentiec, and be the son, brother, or nephew, of the member or licentiate to whom he is indentured, or the son of some other member or licentiate of the college, and shall not have paid an apprentiee fee, he shall lay before the court—1. A declaration, subscribed by the member or licentiate to whom he is indentured, that he has not received, or that he does not expect to receive, any apprentiec fee. 2. A receipt, shewing that he has lodged, to the credit of the president, and for the use of the college, in the bank of Ireland, the sum of ten guineas. 3. His indenture of apprenticeship, regularly executed.

Provided he shall not be an apprentice to a member or licentiate of the college—1. A receipt, shewing that he has lodged, to the credit of the president, and for the use of the college, in the bank of Ireland, the registry fee of ten guineas.

Bye-laws relating to education and the qualification of candidates for letters testimonial.—Every registered pupil or apprentice shall be admitted to an examination for letters testimonial, if he shall have proved and shewed that his professional education has been, in all respects, conformable and agreeable to the provisions and enactments of the bye-laws and rules of the college, and shall have laid before the court the following documents:—1. A receipt, shewing that he has lodged, as a registry-fee, the sum of ten guineas in the bank of Ireland, to the credit of the president, and for the use of the college, previously to his being admitted to any examination. 2. A receipt, shewing that he has lodged a sum of twenty guineas in the bank of Ireland, to the credit of the president and for the use of the college, previous to his final examination for letters testimonial. 3. A certificate, signed by the president or vice-president, and two of the court of censors, that he has passed an examination as to his acquaintance with the Greek and Latin languages. 4. Certificates, shewing that he has been engaged in the study of his profession for not less than four years, three of which shall have been passed in attendance on lectures or hospitals, during the winter sessions, in Dublin, London, Edinburgh, or Glasgow. 5. Certificates of attendance on a surgical hospital where clinical instruction is constantly given, containing fifty patients, at least, for a period of not less than twenty-four months. 6. Certificates of attendance on the medieal practice of a recognised hospital or dispensary, where clinical instruction is constantly given during twelve months. 7. Certificates of attendance on three courses of lectures on anatomy and physiology, three courses of lectures on the theory and practice of surgery, and of the performance of three courses of dissections, accompanied by demonstrations; also certificates of attendance on two courses of lectures on chemistry, or one course of lectures on general, and one on practical chemistry; one course of lectures on materia medica; one course of lectures on the practice of medicine; one course of lectures on midwifery, and one course of lectures on medical jurisprudence. 8. A thesis, essay, or dissertation, in Latin or English, on any of the following subjects:—Anatomy, physiology, surgery, the practiee of medicine, chemistry, materia medica, midwifery, or medical jurisprudence; or, in place of such dissertation, a series of cases collected in the hospital in which the candidate has attended, illustrated by comments or observations.

A candidate, being a registered pupil, shall be allowed to pass the first of the two days' examination above mentioned, on anatomy and physiology, on laying before the court of censors the following documents:—1. A receipt, shewing that he has lodged a sum of ten guineas in the bank of Ireland, to the credit of the president and for the use of the college. 2. Certificates, shewing that he has been engaged in the study of his profession for not less then three winter sessions in Dublin, London, Edinburgh, or Glasgow. 3. Certificates of attendance on three courses of lectures on anatomy and physiology, and of the performanee of three courses of dissections, accompanied by demonstrations, such candidate not being admissible to the second day's, or the final examination, on the other subjects above specified, until he shall have lodged a further sum of ten guineas in the bank of Ireland, to the credit of the president and for the use of the college, and shall have laid before the court of censors all the documents enumerated in the bye-laws relative to "qualifieations for the letters testimonial." Notice of every examination for letters testimonial is posted in the hall; and the secretary also, by regular summonses, gives notiee of such examination to the members resident in Dublin. The examination takes place in the presence of such members and licentiates as choose to attend. The candidate is examined on two several days in auatomy and physiology, on the practice of medicine and surgery, and on any other branch of medical science, and shall perform such surgical operations or dissections, and explain such anatomical preparations, as the court may require.

Fee for letters testimonial or diploma, £31 10s., and for admission as member (which takes place by ballot after three years' standing as a licentiate, and confers corporate rights), £31 10s.

APOTHECARIES' HALL OF IRELAND.—1791.

Laws regarding the education of apothecaries.—Every candidate must undergo two separate examinations—one for the certificate of apprentice, the other for the licence to practise.

Every candidate for the certificate of apprentice must have attained the age of fifteen years, and will be examined in the following books:—The works of Sallust; the first six books of the Æneid of Virgil; the Satires and Epistles of Horace; the Greek Testament; the dialogues of Lucian; the first four books of Homer's Iliad; the first six books of Telemachus, or the History of Charles the 12th (in French); the first two books of Euclid; and algebra—to simple equations.

Every candidate for the licence to practise as an apotheeary must lay before the court the following documents:—1. The certificate of apprentice. 2. The indenture of apprenticeship, enrolled according to the act of parliament, and bearing the certificate of the licentiate apothecary to whom he has been indented, that he is of good moral charaeter, and has fulfilled the period of his apprenticeship. 3. Certificates duly signed that he has diligently attended at least one course of lectures on each of the following subjects, delivered at the school of apothecaries' hall, or at some other school of medicine recognised by the court (the order of study here laid down is recommended for the guidance of students). Chemistry, anatomy and physiology, six months; practical chemistry* and botany, three months; materia medica, demonstrations and dissections, theory and practice of physic, surgery, midwifery, and the diseases of women and children, six months; medical jurisprudence, three months.

A certificate of twelve months' attendance on the entire practice of a medico-chirurgical hospital, recognised by the court, containing not less than fifty beds, and where clinical instruction is regularly given.

Also, a certificate of having assisted in at least thirty cases of midwifery practice, twenty of which must be attended in a recognised hospital.

The examination for the licence to practice as an apothecary will be as follows:—In translating and explaining the process of the British pharmacopœias and extemporaneous prescriptions; in chemistry and general physics; in materia medica and therapeutics; in natural history and medical botany; in anatomy and physiology; in the theory and practice of medicine; in midwifery; in medical jurisprudence.

The examination for the licence to act as assistant to an apothecary in compounding and dispensing medicine will be confined to the following subjects:—To translate the Dublin pharmacopœia, and extemporaneous prescriptions; pharmacy, botany, materia medica, and mechanical philosophy.

The candidate for the assistant's licence may present himself for examination at the termination of five years' apprenticeship.

The court of examiners sit every Friday, at two o'clock, and proceeds with the examination of candidates, in the order in which their names appear on the list.

A rejected candidate cannot be re-admitted to examination until the expiration of six months, and, after a second rejection, can appeal to be examined by the king and queen's college of physicians.

All lecturers are required to furnish the court of examiners with a list of such gentlemen as have taken out admission tickets on or before the first day of January; also a similar list of those who have obtained certificates of having attended their respective courses, with the number of lectures in each course, on or before the 10th of May, annually.

---

* The practical chemistry must be attended in a laboratory where the pupils shall be required to make the several pharmacopœial preparations.

According to the act of parliament no person can be taken or employed as an apprentice or assistant to any apothecary, and no person can open shop or act in the art and mystery of an apothecary within the kingdom of Ireland, until such person shall have been examined and obtained the certificate of the court of examiners of the apothecaries' hall of Dublin. . . . . It is also provided, that if any one shall take or employ any person as an apprentice or assistant, or shall open shop or ware-room for the retail of medicine, or practice the art and mystery of an apothecary within the kingdom of Ireland, without such person having obtained the proper certificate for the purpose, or shall take any apprentice for less time than seven years, such person so offending shall for every such offence forfeit the sum of twenty pounds, to be recovered by the apothecaries' hall of Dublin: 31 Geo. III., cap. 34, sec. 18, 22, and 26.

A SESSIONAL SYNOPSIS FOR LONDON.

	MIDWIFERY.	CHEMISTRY.	ANATOMICAL DEMONSTRATION.	ANATOMY AND PHYSIOLOGY.	MEDICINE.	MATERIA MEDICA.	SURGERY.	BOTANY.	MEDICAL JURISPRUDENCE
Guy's School	Ashwell, Lever, Oldham	Aikin, Taylor	Birkett, Poland	Cock and Hilton	Babington, Addison	Addison and G. Bird	Morgan and Cooper	Johnson and Bird	A. Taylor
London School	Ramsbotham	Pereira and Lotheby	Crickett	Adams	Cobb, Little	Pereira	Luke, Curling	Quekett	Ramsbotham, Frampton
St. Thomas's	Cape, Waller	Leeson	Le Gros Clark	R. D. Grainger	Barker, M. Hall, G. Gregory	R. Bennett	Green, Travers, Macmurdo	R. D. Hoblyn	Leeson, Risdon Bennett
St. Bartholomew's ..	Rigby	Griffiths	Wormald, MacWhinnie	Paget	Burrows	Roupell	Lawrence	Farre	Baly
Aldersgate	Druitt	Makins	Holthouse and Chance	Goodfellow and Holthouse	Aldis, and K. Grant	Garrod	Smee	Brown	C. B. Sewell
Charlotte Street	Tyler Smith	Scoffern	Dermott	Dermott	Aldis	Ryan, Brown	Dermott	B. Clarke	Scoffern, H. P. Hinde
University	Murphy	Graham	Ellis, Potter, Quain, Sharpey	Sharpey	C. J. B. Williams	Thomson	Cooper and Liston	Lindley	Thomson
King's College	Farre	Daniell	Partridge	Todd	Budd	J. F. Royle	Fergusson	Forbes	W. A. Grey
Middlesex	North	Fownes	Wilson and Rowden	Tuson, E. Wilson	Hawkins	Crawford	J. M. Arnott and Shaw	Rogers	De Morgan
Charing Cross.....	Chowne	Ayres	Hird, Canton	Hird and T. W. Jones	Shearman and Rowland	Steggall and Willshire	Hancock	Willshire	Chowne
Westminster	Andrews and Bird	Lewis	Hunter, J. W. C. Pennell	Hunter and Erichsen	Roe, Kingston	Basham	B. Phillips	Basham and Bird	F. Bird and Hodges
St. George's.....	Bloxam	Rodgers	Pettigrew	Lane, W. V. Pettigrew	Goolden	Lankester	Lane and Pilcher	Cooke	Ancell and Warder
St. George's Hospital	B. Lee	Brande, Solly	H. C. Johnson	Tatum, and H. J. Johnson	M'Leod	Nairne, Page	C. Hawkins	Dickson	Page

There are also Lectures—At *King's College*, on Comparative Anatomy, by Dr. E. B. Todd—At the *School*, near *St. George's Hospital*, on Aural Surgery, by Mr. Pilcher—At the *University School*, by Professor Grant, on Zoology; by Mr. Quain, on Descriptive Anatomy.—At *King's College*, on Descriptive Anatomy, by Mr. E. Partridge; on Comparative Anatomy, by Mr. Rymer Jones; on Chemical Manipulation, by Mr. W. A. Miller.—At *Guy's Hospital School*, on Diseases of the Teeth, by Mr. Thomas Bell; on Morbid Anatomy, by Mr. T. W. King; on Natural Philosophy, by Dr. Gull; on Moral Philosophy, by the Rev. T. D. Maurice.—At *St. Thomas's School*, on Dental Surgery, by Mr. Saunders; on Pathological Anatomy, by Dr. Barker; and on Comparative Anatomy, by Dr. Carpenter.—At *St. Bartholomew's School*, on Natural Philosophy, by Mr. Griffiths; on Comparative Anatomy, by Mr. M'Whinnie; on Descriptive and Surgical Anatomy, by Mr. F. C. Skey.—At the *Westminster School*, on Physics, by Mr. C. Brooke; on Comparative Anatomy, by Dr. Hunter.—And at the Charlotte Street School of Medicine, on the Doctrines of Liebig, and on Modern Organic Chemistry, by Dr. Keenan.

HOSPITAL PRACTICE.

The following are the Various Terms for Hospital Practice, (Perpetual, where not otherwise named,) with the List of the Physicians and Surgeons.

Westminster School; *Physicians:*—Drs. Bright, Roe, Kingston, Basham. *Practice*, £21. *Surgeons:*—Messrs. White, Lynn, Hale Thompson, Phillips. *Practice*, £31.——St. George's Hospital; *Physicians:*—Drs. Seymour, Wilson, Macleod, and Nairne. *Practice*, 24 Guineas. *Surgeons:*—Messrs. Keate, Hawkins, Cutler, Tatum, H. J. Johnson, and H. C. Johnson. *Practice*, 50 Guineas.——St. Thomas's Hospital; *Physicians:*—Drs. R. Williams, Burton, Barker, Leeson, Risdon Bennet. *Practice*, £24 3s. *Surgeons:*—Messrs. Green, South, Macmurdo, Solly, and B. Travers. *Practice*, £26 6s.——King's College Hospital; *Physicians:*—Drs. Watson, Budd, Todd, Farre, and Guy. *Practice*, £21. *Surgeons:*—Messrs. Arnott, Fergusson, Partridge, Simon, and Bowman. *Practice of both*, £36 15s.——Middlesex Hospital; *Physicians:*—Drs. Hawkins, Wilson, and Ashburton. *Practice*, for 18 months, £12 12s. *Surgeons:*—Messrs. Arnott, Tuson, and Shaw. *Practice* (not named).——University College Hospital; *Physicians:*—Drs. C. J. B. Williams, Thompson, Taylor, and Walsh. *Surgeons:*—Messrs. Cooper, Liston, Quain, and Morton. *Practice for both*, £26. 5s——Bartholomew's Hospital; *Physicians:*—Drs. Roupell, Hue, Farre, Jeffreson, and Black. *Practice*, 30 Guineas, *Surgeons:*—Messrs. Lawrence, Stanley, Skey, Loyd, and Wormald. *Practice*, 25 Guineas.——London Hospital; *Physicians:*—Drs. Billing, Gordon, Cobb, Frampton, Little, and Pereira. *Surgeons:*—Messrs. Andrews, I. Scott, Luke, Hamilton, Adams, and Curling.——Charing Cross Hospital: *Physicians:*—Drs. Shearman, Golding, and Chowne. *Practice*, 15 Guineas. *Surgeons:*—Messrs. Hancock and Avery. *Practice*, 15 Guineas.——Guy's Hospital; *Physicians:*—Drs. Bright, Addison, Babington, Barlow, and Hughes. *Pupil* for 18 months, £15. 15s.; for longer period, £24. 4s. *Surgeons*: Messrs. B. Cooper, Key, and Morgan, Practice 50 Guineas.

MIDWIFERY.

Mr. Protheroe Smith, Surgeon-Accoucheur to the Farringdon, and Consulting-Accoucheur to the Central London Lying-in Institution, and who assists Dr. Rigby in the practical department of his course on Midwifery, has sent us a code of rules and regulations, drawn up for the students of the Midwifery class of St. Bartholomew. Agreeing with our correspondent, that they are of excellent utility, and that their general adoption must lead to an increased interest in the study and higher standard of professional merit: we have great pleasure in submitting them to our readers:—

I. That a General Meeting of the Midwifery Class be called Quarterly, for the purpose of regulating the system of Midwifery Practice, and of forming an alphabetical list of the names of all gentlemen desirous of attending cases during the ensuing quarter.

II.—That no addition of names to the quarterly list shall be allowed during the interval between the general meetings, but that in peculiar circumstances, exceptions to this rule may be obtained by application to Mr. Protheroe Smith.

III.—That the quarterly list of students shall be divided into two classes: the first to consist of gentlemen, who, having previously practised midwifery, and attended, at least, one course of midwifery lectures, are competent to take the entire charge of cases, each gentleman being required to send for the student of the second class who shall be appointed to attend with him. They will have the privilege of sharing in the distribution of casual cases, on application to Mr. P. Smith. The second class shall consist of gentlemen who have not hitherto practised midwifery, but have merely attended a course of midwifery lectures, and who will not be eligible to take the entire charge of cases until they shall have attended four labour cases with a student of the first class.

IV.—From the first class shall be selected, from time to time, a Clinical Assistant, who will have the privilege of witnessing and assisting in all cases of difficult labour, during the period of his continuance in office, and shall perform the duties assigned to him.

V.—That Mr. P. Smith shall distribute the cases equally among all the students of the first class, case by case, according to the alphabetical arrangement of the last quarterly list, assigning to each gentleman his patient in alphabetical rotation; and without any regard to residence, number of children, or condition of the patient; which distribution may be altered, according to the mutual convenience of the gentlemen, provided it be done at the meeting in the presence of the clinical assistant, who shall be required to enter such alterations in the case book, and to endorse the patients' admission card accordingly; and each gentleman shall be considered responsible for any

neglect or inattention to the case thus allotted to him.

VI.—That in event of any gentleman refusing, from any circumstance, to take the case allotted to him in alphabetical succession, he shall forfeit his turn, and that such case shall be assigned to the gentleman whose name is next vacant on the list.

VII.—Should any gentleman, without sufficient reason, refuse to attend a patient when she sends for his assistance, or in any other manner neglect the observance of these rules, his name shall be removed from the quarterly list, and he shall be ineligible to contend for the Practical Midwifery Prize of the session in which such neglect occurs.

VIII.—That the gentlemen whose names are upon the list for the current quarter shall meet Mr. Protheroe Smith, in the place, and at the time agreed upon at the quarterly meeting, once every week, when the distribution of the list of cases will be made known by the Clinical Assistant, and a Report made of the cases attended during the week, together with Clinical Observations on them, or on other subjects connected with the Practice of Midwifery, by Dr. Rigby or Mr. P. Smith.

IX.—That every gentleman, after accepting his case, shall call upon his patient before the ensuing weekly meeting, or, otherwise, forfeit the case. He shall consider himself strictly responsible for a ready attendance when required by the patient, and shall adopt such means as may best ensure it; as by keeping a list of the patients allotted to him, and the periods of their expectation, and by leaving a direction at his house or rooms when he absents himself therefrom, by which he, or some one of the first class with whom he shall previously arrange, may immediately be found when his assistance is required. And that, moreover, he shall continue his visits for at least a week after the date of delivery, and, if necessary, for a longer period.

X.—That, within a week after the conclusion of the case, he shall concisely report such case in the book kept for that purpose in the Reading-room, according to the plan therein suggested, and shall attend the weekly meeting when the report is read, and if absent, without sufficient reason, from such meeting, the case shall not be reckoned in the number by which the prize for Practical Midwifery is obtained.

XI.—That, should any danger or difficulty arise during labour, for which the gentleman in attendance thinks proper to send for Mr. Protheroe Smith, or the Clinical Assistant, he shall in so doing be particular to describe, in writing, the precise character of the case.

XII.—The members of the First Class may become candidates for the Prize in Practical Midwifery, which will be awarded to him who acquits himself best in the record of his cases, which will be estimated at the end of the Winter Session.

XIII.—That all members of the First Class, who shall attend cases during two quarters, strictly obeying the above regulations, shall be entitled to an honorary certificate.

XIV.—That every gentleman shall produce a certificate from Mr. P. Smith, of having attended cases, according to the above mentioned regulations, before the practical part of his schedule for the College or Hall can be signed.

NOTICES TO CORRESPONDENTS.

A Grateful Subscriber *makes us grateful.*

Mr. Swinfen.—*We do not know. The remedy must vary so much with the cause of baldness.*

The Index to the closing Volume will be a separate Number, and will be ready on October 5. Gentlemen not subscribing to the Office, should order it specially of their booksellers. The price will be that of the ordinary Numbers.

In answer to an enquiry—we were unable to reply to last week—we are desired to state, that the Aldersgate School, far from being discontinued, will continue its customary duties, this year, with more than customary vigour.

Fair Play, *on Mr. T. H. Cooper's connection with Mr. Turner, must authenticate his letter.*

Z.—*The successor of Dr. Macartney is not the Mr. or Dr. Harrisson of Guy's Hospital.*

Alpha.—*The Analysis will be found in every work on Animal Chemistry.*

S.—*We think our correspondent will obtain the license he seeks without difficulty. A frank communication to Dr. Paris would, we think, be certainly successful. The regulations will be found in another part of the Journal,—but it is not to be supposed that, in a proper case like our correspondent's, they will be* rigidly *enforced.*

We shall next week give original papers by Dr. Segalas, of the Faculty of Paris, member of the Academy of Medicine; Dr. Rigby, Lecturer on Midwifery to St. Bartholomew's Hospital; Dr. Costello, Surgeon-Lithotritist to the Royal Free Hospital; G. D. Dermott, Esq., Lecturer to the Charlotte Street School of Medicine; I. H. Tosswill, Esq., Surgeon to the Leicester Union; T. Howitt, Esq., Lancaster; I. Williams, Esq., Corwen, &c. &c.

Several other communications have been received, and, when considered, we shall announce those accepted. The length at which we have given the regulations, precludes our giving this week, with other customary articles, the Pencilling we have promised. It will appear next week.

Lithotrity.—*Dr. Costello has recently performed this operation in the Royal Free Hospital with great success. We shall early present our readers with the case.*

Royal Ophthalmic Hospital, Charing Cross.—*Mr. Guthrie's lectures, announced in another part of our journal, will be delivered at this institution. The first lecture will be on cataract, and the operations to be performed for its relief.*

THE MEDICAL TIMES.

SATURDAY. SEPT. 28, 1844.

"No sense have they of ills to come,
Nor care beyond to-day.
Yet see how all around 'em wait
The ministers of human fate,
And black misfortune's baleful train.
Ah! show them where in ambush stand,
To seize their prey, the murderous band!
Ah! tell them they are men."

GREY.

To thousands of warm-hearted, high-minded young men—the future associates of our honoured labours—buoyant with life in its youngest freshness and most elastic vigour, a new course of destiny opens with the present week. Youth's pleasures are now gradually to merge into manhood's business—the thoughtless, the dreamy, or the theoretical, to make way for a character deliberative—active—practical: the duties of existence, the end of being, now begin to advance their stern requisitions—the finishing stone is put to the edifice called man. We do not forget that such an epoch has been our own—and with the cordial fellow feeling begotten by the reminiscence we seek one moment's colloquy with our young and now heartily welcomed successors,

Gentlemen! The man as he will be three years later—his character, worth, wealth, knowledge—is this day under creation. As you now mould your organism, so will you shew yourself to society years hence: the pupil is the maker of the practitioner. This thought remembered, a benign influence will be shed over both character and action: in the lethargy of idleness there will be a spur—in the whirlwind of passion, a check—and the revolution of youth to manhood, will be as the spring's growth into exuberant summer—the fruits promised not held back, and many not expected repaying a grateful culture by budding, and ripening into a blessed and blessing maturity. These words are earnest and solemn: they are less so than your responsibilities. Something even stronger might be justified, if our speech were urged by no motive but an extended care for your more temporal well-being.

Two careers are before you, and the one that ends in your social destruction is not without its allurements. The young and agile mind, quick in its movements, and as variable and desultory in its tendencies, brooks restraint at first with difficulty, and, to save the momentary pang of an effort now, would risk the numberless griefs of idleness, and more active woes of dissipation later. If you forget that in yielding to so unworthy a craving you give yourself much more unhappiness than you suffer by commanding it—you run no small hazard of shipwreck. You can never know the delights and attractions of study, or reach its rewards, unless you can enforce for a while on the mind a voluntary restraint. The Kingdom of Science is not entered without violence, and our first instruction, therefore, is, to institute a rigid self-compulsion. Be your own taskmaster, that you may not be the slave of that worst of taskmasters—a doom, low as painful, irrevocable as low!

If we could only paint to you the wretched and ignominious career, of perhaps one-third of your predecessors; if we could make the *sense*, without the fact, of their experience yours; if we could describe the remorse given by vulgar debaucheries, the humiliation suffered from scientific deficiencies; if we could depict, in their full force, the harassing vexations, dangers, and destitutions which follow so close on the heels of profligate expenditure, or convey to your perceptions the moral degradations which is made a portion of the character by a student's dissipation—a character engendering around the foolish wretch through life, an atmosphere of disregard, of insult, and contempt—we should have no anxiety that you would exercise personally over yourselves that rigid control we recommend, and which would secure your taking rank among the worthy students, who, passing with unstained characters through the initiatory rites of our science, enter Society at their close, an honour to themselves, and their profession, and a blessing to the world.

And the reflection here suggested should not be forgotten—that on your weal depends that of hundreds. A mispent pupillage may make a calamitous practitionership. The sense of duty, combined with that of interest second then *your* wishes and *our* advice, and folly and crime are the words that describe each transgression.

"Magno de flumine mallem
Quam exhoc fonticulo tantumdem sumere!"

THE Council of Health is the great positive enactment of the New Bill. It stands by itself. It has nothing to do with the annihilation of the Apothecaries' Company: it no way concerns the existence or non-existence of Quackery. Whatever its action on the unfortunate state of our medical mis-government, it will be an action perfectly independent. We are constantly made aware of numberless anomalies in *theory*, which, in action, are individual cruelties. They shock our sense of justice: they wound our feelings of brotherhood; they endanger the interests of our science. The Council of Health will do something for a cure. If so, who shall fail to welcome it? Is it because the curative property is not wholly perfect, that we shall reject it wholly? To do so, would shew a strange love of wrong!

We last week considered the action of the Council on the London College of Physicians: let us now fulfil our promise of saying a word of it in its relation to the London College of Surgeons.

The first effect of the Council of Health will be to strip the present twenty-four Councillors of

their huge and irresponsible powers. President, Examiners, and Counell must all, for the future, be on their good behaviour. Their fees may be pared down : their curricnlum of study, both for fellows and members, supervised : their bye-laws overhauled—an emissary of the Controlling Board watch them in the very hour of their examinations. They will find their masters; and their candidates and members will obtain what they now have not—a Court of Appeal. The Councillors have only to behave ill, and their power over fees, and with it their importance, vanishes!

Do we regret this? In sober truth—No. Their aeceptance, and—worse than that—their voluntary abuse of the New Charter, has estranged from them all our sympathies. Wc escape the pain of pronouncing them degenerate surgeons, unworthy their eraft and brotherhood—of stigmatizing them as bandits, who, having their brethren at their mercy, have turned them to the greatest possible aecount in helping their own finances or social position—by pitying them as men of small minds, without an idea of gentility or prudenee that does not necessitate an utter disregard of generous or noble feeling. The malevolent and small-minded woman, Fulvia, mutilating the head of her enemy, Cicero, is the type of the majority of the Council, in the treatment of those whom an unjust fortune has placed below them.

Before, *on*, and *after* the eoncession of the New Charter, we deseribed most distinctly the world of evil feeling it would engender. We must have wearied our readers by our endless iterations of the truth. So far back as February, we insisted on an amended Charter, thus expressing ourselves on the Fellows:—

" There is, however, one subsidiary topie, which will probably force attention; and may be productive of some differenee of opinion. We refer to the conduct that must be pursued in referenee to limiting, enlarging, or destroying the order of Fellows. All will agree in destroying the present system; but the diffieulty is, how replace it, or what do with the present Fellows ? One suggestion the committee will be surc to hear, will be the creation as Fellows of all those who have been a certain number of years members of the College. All would admit this plan to be an improvement ou the present one; but on the one hand, it would not be without its hardships to young members of the College at the most critical period of their lives, and, on the other, the nominal honour of the title, from its wide distribution, would give little credit to the surgeon in settled and successful practice. Perhaps, the best solution of the difficulty would be to make every member a Fellow: for the existence of a select body of Fellows as the sole depositories of the represcntative power—a hypothesis favoured by a few gentlemen—cannot please the profession, and can be justified on no tenable ground of policy or justice."

Yet with a few honourable exceptions—among whom Mr. Guthrie, winning by a fresh title the Profession's gratitude, stands out in brilliant and characteristic promineney—we have had the Councillors industriously making a bad Charter take its worse possible course of âction, and exhausting their small ingenuity in turning themselves and their adopted document into a eurse to their brethren. With powers which amply justify their admitting *three-fourths* of their members to the honour of the Fellowship, and the rights of Counell election, they have restricted the paltry—the invidious—the revolting privilege to about 550! The final list of these infatuated Governors extends to only 240 Fellows ! If ever men deserved that the outlawry which they have proclaimed to their own common sense, should be extended to their praetise, it is surely Sir B. Brodie and his narrow-minded clique. They have lost the most brilliant of opportunities !—Wherefore ? To cast themselves into the lowest slough of sordid impoliey!

We rejoice, therefore, at the approaching limitation of their ill-used irresponsible power. We exult that they are to be submitted to a yoke, even if with their customary wisdom they have themselves been invoking the thraldom. But the College is to supply a member of the Counell of Health. This is important, and we have, therefore, to ask what is meant by the College ?—the Council? That would be, indeed, a sad blunder in the Bill. " *L'etat c'est moi*," said Napoleon; but the State might be the Emperor and the Council yet not be the College. The Board of Health is the Court of Appeal against the Counell, and it is absurd that the Council should furnish one of the Judges. The " College" must be the whole body of members : they must all by their votes, share in the appointment of a representative in the great Council. This is an important point that deserves all the attention of the members. They cannot be too explicit, courteously explicit, in urging it on Sir James Graham. It is a *necessary* improvement.

THE BEST AND WORST OF SCIENTIFIC CORPORATIONS.

" How happy could I be with either."
BEGGARS OPERA.

There are some men whose acts condemn them : there are others whose words condemn them : there are a third class, whom aets and words both condemn. To the last, soeiety may play the part of executioner : the part of judge and jury is performed by themselves. Let them act and talk for themselves, and they will certainly not eseape conviction. With this conseiousness, we present, without a word of our own, some of the sayings and doings of a gentleman known to fame, as a eonsistent Medical Reformer, who, in the words of hired treachery, pursues his old time-worn course " *qualis ab incepto processerat*."

LANCET AGAINST THE APOTHECARIES' ACT.

" The truth is, that these fellows (the Apothecaries' Company) are as ignorant as their own porters, and are only calculated to wield the pestles in the shop which they have opened in Bridge-street. A contemptible gang of Retail Druggists to legislate for the members of the College of Surgeons, and for Medieal Students! This is the 'march of intellect' indeed!"—" The powers claimed are elearly the result of USURPATION, and proceedings ILLEGAL."—" Old Hags."—"Hungry Wolves."—*Lancet*, for 1828-29, vol. I., p. 148.

" Old Hags of the rotten corporation in Rhubarb Hall."—p. 178.

" The Act was projected by avarice, supported by intrigue, and enacted by ignorance."—p. 179.

" The inutility of the Aet in its present shape; its pernicious effects on the interests of the public and the medical profession."—p. 180, see also 181.

" Scarcely possible to find any individual more ignorant than themselves." " In short, the repeal of the Apothecaries' Act must be one of the first steps towards that reform in the state of the medical profession, for which the public has been so long prepared, and which, now that other and more pressing questions of domestic policy are disposed of, cannot be longer delayed."—vol. II. p. 81.

" Hags of the Cauldron."—p. 145.

" Delicate Hags."—p. 179, and seq.

" The Apothecaries' Act, of 1815, was another boon proffered to corruption by eorporate jobbing, and partial legislation."—1830-31, vol. 2, p. 146.

" Frail and aged sisterhood."—p. 369.

" The unsightly corporation, which has so long been permitted by the 'Vico Society,' to disfigure the Hall of the Company of Retail Drug-dealers."—p. 370.

" A more useless and worthless piece of legislation never issued from the Houses of Parliament."—p. 372.

" Disgraceful document."—p. 467.

" The spirit of the act is mercenary—its powers, unconstitutional, and its eonditions are ignorant, contradietory, and arbitrary. It is as unfitted for the government of the members of the medical profession, as the examiners of the company are unequal to give dignity and importance to the profession."—"Is it not the grossest insult that ean be offered to common sense, to say that the Apotheearies' Aet is a proper proteetion for the medical profession."—p. 469.

" An odious enactment."—p. 469.

" Is it not disgusting, sickening, torturing, to reflect that chemists and druggists, &c."—p. 469.

" Infamous work of monopoly and oppression. Their pest house."

" The Apothecaries' Act is, without exeeption,

LANCET FOR THE APOTHECARIES' ACT.

" He (Mr. Wakley) drew a frightful picture of the condition of the profession before 1815, and spoke with admiration of the great benefits which had been conferred on medical practitioners by the carrying out of the Apothecaries' Act by the company during the last few years."—*Lancet*, 1843-44, vol. 2, p. 709, eol. 1.

" Without doubt, the *protective* portion of the Apothecaries' Aet, and the omission of some summary mode of punishing uneducated practitioners of medieine, form the most objectionable features of the Government Bill. By the one the measure is actually disfigured; by the other, with respect to *utility*, it is rendered an abortion ;—by both, a hideous piece of mental deformity."—*Ibid*, p. 677.

" It will be seen that the poison begins at clause 1, with the repeal of certain portions of the 55. George III. c. 194, commonly called the Apothecaries' Aet of 1815."—*Ibid*, p. 641, c. 2.

" That the public should derive a still more efficient protection against the swindling pretensions of *quacks and impostors*, than is already afforded to them by the Apothecaries' Act of 1815,"—*Ibid*, p. 645 c. 2.

" The avowed determination of the Government to repeal the Act of the Apothecaries', the only statute which affords *any* protection to the qualified praetitioner, and opposes *any* barrier to the introduction, into all the towns and villages of this empire, of a host of pretenders to medical skill, fixing themselves side by side with men of learning and education, will be hailed, we are convinced, by all the general practitioners of England, as an outragcous assault upon rights and privileges which they have, it seems, vainly hoped had been secured to them by the Act of 1815."—*Ibid*, p. 613, c. 1.

" And assuredly, the Society of Apothecaries will make the most strenuous efforts to protect the ten or twelve thousand licentiates of their body, whose interests are so rudely and so unjustly assailed in the measure now proposed by the Government."—*Ibid*, p. 613, e. 2.

" The right honourable baronet seemed to like that portion of his measure best which gave every man, who thought himself competent, the right to praetice medicine, and on this account the Apothecaries' Act was to be repealed.—*Ibid*, p. 619 c. 2.

" The license required from the Apothecaries' Company have had a great effect in restraining unqualified medieal practitioners, and was a great proteetion to the public."—*Ibid*, p. 620. c. 1.

" The Apotheearies' Act of 1815, in consequenee of the deeision of the judges, is now some protection to you, but I believe that even that measure is about to be repealed, without providing any

the most irrational measure that ever received the sanction of the legislature."

"The provisions reach the summit of absurdity."

"The persecuting character of the Apothecaries' Company."—vol. 2, p. 114.

"The *cruel* Hags of Rhubarb Hall."—vol. 2, p. 146.

"That the Apothecaries' Act was an incomplete, anomalous, and grossly absurd measure, none, we think, will have the temerity to deny."—vol. 2, p. 376.

"As matters now stand, no young man can pass the door of the Apothecaries' Company, to receive his warrant to practice, without having cost his parents, or his friends, not less than *one thousand pounds*, money almost wholly expended in forms or ceremonies, in compliance with the by-laws of individuals, who, in too many instances, have the effrontery to pocket the fees which are thus so infamously extorted."—p. 342.

"English students may visit the establishments here—labour zealously in the pursuit of knowledge—study unceasingly, and then receive, as their only reward, THE WORTHLESS LICENCE OF A TRADING COMPANY OF APOTHECARIES."—p. 602.

"Of all the disgusting specimens of imbecile legislation, the Apothecaries' Act of 1815 stands probably the most prominent."—p. 698.

"Oh! how perseveringly, and, we trust, how consistently, have we denounced that vile, that atrocious, that plundering Apothecaries' Act of 1815! During nine long years has the *Lancet*, alone, been directing attention to the enormities of that foul and ill-begotten measure."—p. 184, and seq.

"Essentially, the new bill is designed to relieve the members of universities and colleges from the odious restraints imposed on their professional pursuits by the prosecutions and persecutions of the company of retail drug dealers of the City of London."—p. 374.

"The hired agents of the Worshipful Company of Blackfriars contend, that the allowing physicians and surgeons to dispense the medicines prescribed by themselves, would amount to a complete destruction of the Act of 1815. This is the assertion of knaves, and is put forth at the critical moment for the basest of purposes."—p. 375.

"The petitioners (the master, wardens, and society of Apothecaries) must, therefore, confess either thst their Court of Examiners meanly, unfairly, and unjustly, rejected Scotch graduates; or that the statements in their petition to the House of Commons are false, and directly in the teeth of their knowledge and recorded experience."—*Ibid*, **1840-41**, vol. 2, p. 133.

"Drs. Quin and Curie (Homœopathists) may imagine that their best friends are among the dowager countesses, and listless ladies of fashion, but we can assure them that there is another set of females to whom they are infinitely more indebted, namely, the old ladies at Rhubarb Hall, who have done all that in them lay to convert the medical practitioners of this realm into pill-mongers. If the above-named gentlemen do not bequeath at least one-half of their fortunes to the tabbies at Blackfriars, they will be excessively ungrateful."—*Ibid*, 1842-43, vol. 1, p. 687.

"But now of the mere Company of Apothecaries. These, if they be more contemptible in a medical point of view than either of the preceding bodies, have at least shown themselves to be much more dexterous politicians. * * * But the ladies of Rhubarb Hall have legal power, and can exercise it; they prosecute and persecute, and their coffers are well filled out of the pockets of the profession. The passing of the Apothecaries' Act was a master-stroke of knavish policy on the part of those with whom it originated, at the same time that it was a melancholy proof of the utter ignorance of the Legislature in all that relates to our profession—of the bad disposition of those ruling bodies in the profession, which ought to have stood forth to protect the rights of their members; and, we grieve to add, a proof also of the supineness and want of spirit of the mass of practitioners, who were to be the sufferers by that most odious act." * * *

"But the Apothecaries carried their point, and a state of things has resulted which is entirely without a parallel. Various have been the persecutions with which unprincipled power has tormented its victims. There have been religious persecutions, and political persecutions, and literary persecutions, and scientific persecutions; but the general practitioners of England are the first men who have groaned under a *rhubarb* persecution, most nauseous and disgusting.—*Ibid*, p. 721-22.

"Who are the victims of the Act of 1815? The graduates of the Scottish Universities, the Fellows of the Irish Medical and Surgical Colleges, and the members of the London College of Surgeons, if they presume to dispense and supply the medicines prescribed by themselves in any part of England or Wales. Nor were these the only gentlemen on whom the iron hand of the monopolists so rudely fell."—*Ibid*, p. 501.

"Are the people who manage the affairs at Rhubarb Hall *lunatics*? Are they stark *mad*?—*Ibid*, 1833-34, vol. 1, p. 309.

"In fact, the interference of the Worshipful Company, its meddling with the rights of practitioners, protective power in its stead."—*Ibid*, p. 55. c. 1. (*Wakley's Speech.*)

"If they (the members of the medical profession) do not move at this juncture, and exert themselves with all the intelligence they can exercise, and all the influence they can command, we can make to them the startling and astounding announcement, that the 55. of George III. the ACTS OF THE APOTHECARIES' COMPANY will be *repealed before* MIDSUMMER, and with it will be annihilated, at one fell swoop, the vitally important *decisions of the* JUDGES *of the* COURT OF QUEEN'S BENCH, interdicting the *medical* practice of CHEMISTS *and* DRUGGISTS throughout England and Wales."—*Lancet*, 1843-44, vol. 1, p. 764.

"The announcement of the meditated *repeal* of the ACT OF THE APOTHECARIES, the announcement of the intended ANNIHILATION of that basis ON WHICH ALONE stand the decisions of the JUDGES of the superior courts, making it unlawful and penal for chemists and druggists, and all other unqualified persons, to practice in England and Wales,—that announcement, we say, has struck upon the ears of general practitioners, with a startling, a stunning, effect; and is happily arousing them, not only to a true sense of the danger of THEIR PRESENT POSITION, and to a clear foresight of the injury intended for them, but it is also producing in them a fixed resolution to engage in a just and holy struggle for the maintenance of their own honourable professional character, and for increasing the amount of their utility amongst their fellow-citizens.—*Ibid*, p. 794.

"Whilst the general practitioners of England and Wales, cling to the Apothecaries' Act, supporting as it does the decisions of the judges, as the only existing check and barrier against their being swamped by an overwhelming tide of unlawful practice, the graduates in medicine of the universities and medical colleges of Scotland and Ireland, are at this moment actively memorialising the Government, and petitioning the Legislature, for the UNQUALIFIED REPEAL, the UNCONDITIONAL DEMOLITION OF THAT STATUTE. Ibid. 795.

"Instead of placing medical interests on a higher and a nobler foundation, it (the New Medical Bill) is indexed, we are informed, on authority we cannot doubt, to direct against the existing rights of the medical practitioners of this country, one of the deadliest blows that ever was aimed by a government against a body of men who have a hundred times petitioned for the removal of their manifold grievances.—Hence it becomes the duty of our professional brethren to prepare for the worst, and to resolve to petition, and even to remonstrate, against the enactment of any Bill which shall provide for the repeal of the Apothecaries' Act of 1815, unless it at the same time offers some protective provision against unqualified practitioners of equal, or greater, value, than the provision to that effect, which is found in that statute.—*Ibid*, 1842-43, vol. 2, p. 167.—(See do. 1841-42, vol. 1, p. 159.—do. 1840-41, vol. 2, p. 868-9.

was a nuisance at first, is a nuisance now, and will prove to be a nuisance so long as it lasts. * * It is a pity, it is really a pity, that the domination of the Company is so near its termination; for truly the worshipful old gentlemen, or the venerable old ladies, have furnished both the *Lancet* and the profession with many sources of amusement. It must, however, be admitted, that in most cases the laughter of the profession has been followed by the infliction of many severe exactions on the time, pockets, and patience, of medical students, their parents, and guardians."—*Ibid*, 1834-6, v. 2, p. 202-3. "The bills of fare for the present year are, for the most part, screwed up to the last turn of extor- tion, in perfect consonance and keeping with the regulations which have been recently issued by the Apothecaries' Company. Oh, those drug-dealers of Rhubarb Hall! They will receive a dose of physic soon from another establishment, the effects of which will be permanent, both upon their constitutions and their coffers, &c.—*Ibid*, 1835-36, vol. 1, p. 13.

"Notwithstanding the frequent and energetic protestations of the independent medical press, seconded by the voice of the honest and well-thinking portion of the profession, the proceedings at Apothecaries' Hall continue to exhibit that character of ignorance and unfeeling brutality, which has gained for the Examiners universal contempt and execration, &c. &c.—*Ibid*, 1837-38, vol. 1, p. 124.

"Even had the great power thus conferred on the drug dealers of Blackfriars been justly exercised, and employed only in a crusade against quacks, instead of against qualified medical men, an unwarrantable source of mischief would have been created by the Apothecaries' Act.

MR. DESHON AND THE POOR LAW GUARDIANS.

IN consequence, as it appears, of the complaint made by Mr. Deshon, one of the medical officers of the Sturminster Union, an enquiry was instituted by the Board of Guardians, under the direction of the Poor Law Commissioners.

Our readers will not have forgotten that Mr. Deshon, in the exercise of his duties as Union Surgeon, was called in to see a lad who had broken his thigh by an accident; that he attended him for several days, and that afterwards one of the overseers, acting on a report, spread by one of the boy's friends, and also on his own opinion that the case was improperly treated, took upon himself to supersede Mr. Deshon, and called in another practitioner, under whose care the patient remained. Naturally dissatisfied with such an extraordinary proceeding, which, if allowed to pass without enquiry, must have materially damaged his reputation and practice, Mr. Deshon made that application to the Poor Law Commissioners, which resulted in his obtaining the enquiry he demanded.

The tenor of his application on this occasion, our readers have been already made acquainted with, and it now remains for us to furnish an account of the proceedings which have taken place since.

Although the complaint originated with Mr. Deshon, and was absolutely a charge against a parish officer, for unduly interfering with and superseding him in the exercise of his duties—a proceeding of a most unwarrantable and unjustifiable character—the Board of Guardians decided upon investigating it as a charge preferred against Mr. Deshon, thus at once converting the complainant into the defendant. The witnesses examined on the occasion were,—the mother of the boy Samuel Rogers, the overseer, the surgeon who was called in in Mr. Deshon's place, then Mr. Henry Hancock, surgeon to the Charing Cross Hospital, and, finally, Mr. Deshon himself; and the real gist of the charge against the Union surgeon seems to

be, that he had recourse to Liston's plan of treatment of fractured bones, in preference to that usually employed, and that, after having seen his patient daily for the first four days after the accident, and having, when required, re-adjusted the bandages, &c., finding all was going on well, he did not again visit the patient for three days.

From the evidence of the mother, it appears that the thigh-bone was broken by the wheels of a waggon passing over the limb; that Mr. Deshon was sent for, and immediately attended, and, being unprovided with splints, had one made by a carpenter, and sent to his own house, for bandages, &c.; after which he set the thigh. The three consecutive days, he attended each day, and on each occasion re-adjusted the limb, and eased the splint at points where it caused too much pressure. Two days afterwards he again saw the child, and removed the bandage, applying another, and bandaging the leg all up. He again visited his patient after the lapse of two days, and, on this occasion, secured the foot to the bed-post, as we, presume, the boy, by his moving, twisted it. At this time, the absurd reports, to which we have alluded, were promulgated, and Mr. Jacob, with some of the neighbouring farmers, paid Mrs. Rogers a visit; expressed themselves dissatisfied, and desired the overseer to obtain further medical advice; in consequence of which, a Mr. Good was called in. Nothing of importance was elicited from this woman on her cross-examination, and the only facts to which Mr. Cox, the overseer, deposed was, that, in his opinion, the thigh was not set, and that it was in consequence of a letter from Mr. Jacob, that he sent for Mr. Good, and countermanded the attendance of Mr. Deshon.

Mr. Good's evidence was given in a guarded manner; he was evidently unwilling to say too much in favor of Mr. Deshon; and yet could not, in justice, allege any thing against his plan of treatment, which he described to have been that of Liston's splint, with a bandage from the ancle to the upper part of the hip, with one outside splint; and, he added, that he found the boy tolerably comfortable, and he had no fault to find with the way in which he found the patient. Mr. Good is clearly one of the old school, and unacquainted with the new views which have been promulgated with respect to the treatment of fractured bones. He did not consider the leg quite secure with Liston's apparatus, and accordingly changed the entire system, and applied additional splints. He would attend a patient with a broken thigh for a week at least; four days were not enough in his opinion.

The evidence of Mr. Hancock was strongly in favour of the treatment employed by Mr. Deshon: he said, unless absolutely necessary, he should use no other apparatus than that used by Mr. Deshon; he is in the habit of recommending fractures to be put up with as little bandage as possible, especially avoiding covering the seat of the fracture, so that it may be examined without disturbing the bandages every time, and that the necessary applications may be made. He also stated, that he had frequently found it necessary to alter the apparatus daily for a month, and he did not think it absolutely necessary to visit the patient more than four days consecutively, although it would have been more prudent.

The official report of the evidence from which we have gleaned the preceding account, is stated by Mr. Deshon to be imperfect, and incorrect, and the enquiry to have been conducted in a partial and unjust manner, the Chairman of the Board publicly stating before the enquiry commenced, that Mr. Deshon should not attend him if he were to break his leg; yet enough may be gathered from it, to see that Mr. Deshon has been most shamefully treated, and that he has been sacrificed to the ignorance and want of common sense on the part of the parish officials. Mr. Good's conduct was decidedly unprofessional. He should have refused to see the patient except in the presence of Mr. Deshon, and have privately communicated to him any difference of opinion that existed between them as to the treatment of the accident; instead of which, as it appeared, he ran, openmouthed, and changed the apparatus at once, although he acknowledged before the Board that he had no fault to find with it.

The facts of the case lie in a nutshell; the mother of the boy, an ignorant woman, was alarmed at seeing the necessary re-adaptations of the apparatus, which were made by Mr. Deshon, in consequence of the restlessness of the patient, and her alarm was participated by a parcel of ignorant farmers, anxious to obtain a character for philanthropy at a moderate rate, namely--the ruin of a respectable surgeon, of the propriety of whose proceedings they were as good judges as the man in the moon. In this undertaking, unfortunately, they have been aided by a brother practitioner. If Mr. Good can, for a moment, consider his conduct defensible, we are glad; it will save the integrity of his character at the expense of some little professional perspicacity; and as the rest of the world will be against him to a man, charity is consoled with the thought, that he is not wholly without something or somebody to fall back on—even if that something or somebody be himself. Of the Guardians our censure is less qualified. They have blundered into an injustice, with a temerity and folly which proves them as unconscious of the real demands of humanity as they were incapable of understanding, or doing right to the claims of science. The intelligent mind pities, the just mind condemns, them.

DR. WEATHERHEAD ON MEDICAL REFORM.

(To the Editor of the "Medical Times.")

Sir,—The Bill on Medical Reform has been amply discussed in detail: it is, perhaps, now time for the Profession to begin to concentrate their opinions into form; and, with that object, I beg, with all deference, to submit to my brethren the modifications that appear to me to be required, in order to make the new measures, proposed to be adopted, generally acceptable. But to justify a main part of what I am about to propose, and to fortify it with ancient precedent and authority, it will be necessary to premise these observations by a rapid review of the early state of the Medical Profession in England, by which we shall be better enabled to trace and develop the origin of much of the confusion introduced amongst us by a piece-by-piece legislation.

Originally, divinity and medicine, if not exactly one profession, at least were professed and practised by the same individuals; a fact which can be deduced from the time of the ancient Egyptians, down to Linacre, one of the six persons named in the charter that first incorporated the College of Physicians; for Linacre was both physician to Henry VIII., and rector of Mersham, in Kent, besides holding a prebendal stall in the cathedral church of Wells. Hence, also, from this circumstance, came the Bishop of London and the Dean of St. Paul's, to be named, in the 3 Henry VIII., as authorised "to examine, approve, and admit persons to take upon them to exercise and occupy as a physician or surgeon;" a fact which presupposes a knowledge of medicine and surgery in the persons holding these appointments. At this time, the surgeons were a distinct body from the barbers, with whom they were afterwards incorporated. This union did not take place till the 32 Henry VIII., and the reason assigned for it was, "to the intent that by their union, and often assembly together, more perfect, speedy, and effectual remedy should be than it hath been, or should be, if the said two companies of barbers and surgeons should continue severed asunder."—By this "intent," it is clear that the surgical knowledge of the one party was deemed equal to that of the other in those days. The incorporation of the barbers and surgeons continued up to the time of George III., when the razor and sealpel ceased to be whetted on the same strop, and a separate charter was given to the surgeons. This was altered the other day, without much mending it; and, by way of botching still more the tag-and-rag condition of the Faculty, a Bill passed in 1815, entirely re-constituting the functions, powers, and privileges of the Apothecaries' Company.

And yet, Sir, this sketch of the chaotic state of matters is not finished. From the time of Hippocrates, down to a comparatively modern date, the real science of surgery (as is apparent to every one familiar with the works of the old writers) was practised solely by physicians: the office of the old surgeons and barber-surgeons appears to have been of the humblest and most mechanical kind; such as tooth-drawing, bleeding, bone-setting, and the rubbing-in of ointments, &c. But, now-a-days, by way of rendering "confusion worse confounded," things have taken quite a different turn. Physicians, in modern times, disuse the scientific practice of surgery, to which they are legally entitled; and surgeons have encroached on the practice of medicine without a legitimate right. In proof of the first position, take the following extract from the 32 Hen VIII. c. 40:—"And forasmuch as the science of physick doth comprehend, include, and contain the knowledge of surgery as a special member and part of the same. Therefore be it enacted, that any of the said company or fellowship of physicians may, from time to time, as well within the City of London, as elsewhere within this realm, practice and exercise the said science of physick *in all and every his members and parts;* any act, statute, or provision made to the contrary notwithstanding." With regard to the second, I have only to refer to the decision of Sir John Popham, Lord Chief Justice of England, in the reign of Queen Elizabeth, in the cause of the College of Surgeons against Read and Jenkins, wherein he decreed that "no surgeon, as a surgeon, may practise physic—no, not for any disease," not purely surgical. The first surgeons, therefore, in the metropolis, are at this moment undoubtedly liable to be prosecuted by the College of Physicians, as irregular and unqualified persons, whenever they meddle with such cases;—and with just cause, although the public are not generally aware of it; but for the correctness of what I am about to state, I appeal to the 10,000 members said to be on the list of the College of Surgeons at the present day. I found my charge, of the "pure surgeons" being unqualified practitioners in medicine, not merely on the law of the case, but on the undeniable fact that, in the examination they undergo, the questions are wholly and solely confined to anatomy and surgery, and never touch on medicine. It were an unworthy equivocation to urge that, by the curriculum, the candidates are enjoined the study of medicine for six months; but if they be not examined in medicine at all, the College of Surgeons can know absolutely nothing of the qualifications of the candidates concerning it. Now, examinations must be admitted either to be, or not to be, tests of qualification. But the College of Surgeons do acknowledge them to be essential tests, by the very fact of their examining for, and granting diplomas themselves; and this being the case as respects surgery, they cannot pretend, with any consistency, that the case is different as regards medicine. It has, therefore, always appeared to me inexplicable, why one that is purely (that is, merely) a surgeon, should put himself forward as the superior of the general practitioner, who not only holds, as surgeon, the identical qualification with himself, but has, be-

sides, passed a highly respectable examination in medicine before a Court of Examiners, who, for the able and useful manner in which they have discharged their duties, deserve the thanks and gratitude of both the Profession and the public. Among the many irregularities, therefore, that prevail in the Profession, requiring revision, the practice of medicine by mere surgeons is an undeniable one.

After this brief exposition of the anomalous state in which the Profession of Physic at present stands;—of physicians being expected to be able to practice surgery, "as a special member and part of medicine," and yet, for the most part, knowing nothing of it,—of "pure surgeons," (as they pride in styling themselves) daily practising medicine, without possessing a regular qualification, they having undergone no examination in the same,—of quacks setting at nought the authority of the College of Physicians, and Apothecaries' Company, to restrain and punish them,—of quacks setting at defiance the College of Surgeons, because it possesses no penal or restrictive power whatever: I repeat, after such an exposition of so many anomalies, of so much confusion, does the proposed Bill of Sir James Graham meet the difficulties of the circumstances? Can his medical councillors, whoever they be, be cognizant of this illegitimate state of things? It would seem not, else we never could have had the skeleton of a Bill so badly articulated.

Still, Sir, from the facts I have ventured to place before you, there may be elicited, in my opinion, the penumbra of a feasible Bill. Sir James Graham has only to peruse the 32 Henry VIII. c. 40, carefully, and he will there find that the "one faculty" idea is no modern novelty, as some have stated it; but, on the contrary, that the practice of medicine and surgery, as one science, was the original state of physic;—in short, in the Act I refer to, he will find, in the facts there stated, a reason, and, in its spirit, a precedent, for the incorporation of the Colleges of Physicians and Surgeons in one Charter: let there be Doctors of Medicine and Surgery (as at Glasgow), and Licentiates of Medicine and Surgery—two grades—leaving it at the option of the party to practice either branch separately, or both branches together; but make it imperative that he should thoroughly know both: let there, likewise, be an Apothecaries' Company, founded in the spirit, and on the principles, of the temperate remonstrance of the Apothecaries' Hall of Ireland: and let there be a Council of Health and Medical Education, according to the New Bill, but with more of liberality and breadth in the election of that body,—a register kept of the duly qualified,—one uniform curriculum of study for the Kingdom generally, adapted to the two grades,—one pharmacopœia,—identity of rights and privileges among the graduates of the several recognised Universities—and, lastly, though not least, let there be a summary mode of punishing unqualified practitioners, as first suggested in a letter of mine, which appeared in the *Times*, on the 31st ultimo—a suggestion that has since met with the approval of almost every public meeting of the Faculty held to remonstrate against the unrestrained license of quackery.

I have the honour to be, Sir,
Your very obedient servant,
G. HUME WEATHERHEAD, M.D.

63, Guildford-street, Russell-square,
Sept. 23, 1844.

THE BEDFORD MEDICAL MEETING.

To the Editor of the "Medical Times."

Sir,—In the "Notices to Correspondents," of the Medical Times, of Sept. 14th, I perceive the following paragraph:—"'*A Bedfordian*' draws our attention to the resolutions agreed to by medical men at Bedford, condemning the Bill for encouraging quackery, yet admitting that penalties for pretending to be on the register would be an effectual check. He remarks, correctly, that there is such an 'effectual check' on the face of the Bill. This, certainly, appears to be a small oversight; but, in the resolutions, generally, there is a very admirable spirit displayed. We see that judicious action, and gentlemanly language, which the Profession cannot have too frequently displayed."

Your correspondent must have merely glanced at the resolutions, or he could not have found in them the inconsistency to which he alludes, for the conclusion of the first resolution runs thus:—"That, in the opinion of this meeting, the *summary* infliction of a penalty on all persons pretending to be on the register"—(here, your correspondent has stopped—but let him notice the conclusion)—"*or practising medicine without being duly qualified, would effectually check* such practice."

His remark, that there is such an "effectual check" on the face of the Bill—in the *correctness* of which, you appear to concur—is certainly erroneous; for, beyond the provision for the appointment to public situations of those persons only who have been duly registered, and the infliction of penalties on unqualified persons, for practising in public offices, or for falsely pretending to be on the register—there is no safeguard, either for the public or the profession. It is clear that the wide field of general practice will be open to the ignorant pretenders; and so far from the above enactments constituting an "effectual check" to quackery, the charlatan will have an undisturbed range among all classes of her Majesty's subjects, with the exception of those in immediate connection with public institutions. How few—compared with the mass of medical men throughout the country—in the metropolis, and larger manufacturing towns, hold public appointments; and if the ill-educated, unqualified practitioner can hold undisturbed possession of private practice, how little will he care to interfere with those public appointments; so that it does not appear that this clause will greatly add to the security of the public and profession, nor will it give great discouragement to the empiric.

It will be unnecessary to make other remarks on this part of the Bill, as it has been so fully commented upon by the editors of the various journals, and in the meetings which have been held in different parts of the country. I am pleased to find that the members of the Profession generally are well satisfied with the other parts of the Bill, inasmuch as a more uniform course of education, and a better regulated registration, will be effected thereby. Surely, Sir James Graham will listen to the appeals of the Profession, and insert a stringent, restrictive clause—with which addition, his Bill would, perhaps, become the greatest boon ever conferred by a legislature upon the Medical Profession.

I am pleased, also, to learn, from the notice which has called forth these observations, that you approve the manner in which the Meeting at Bedford has been conducted. The object of the committee was, not to condemn the Bill *in toto*, but to procure an amendment of it, if possible.

Apologizing for intruding upon your space,
I am, Sir,
Your's obediently.
T. HERBERT BARKER.

Bedford,—Sept. 23d, 1844.

[Our correspondent, and ourselves, in following his authority, were both in error. The resolution, we see, is quite as it should be. It does not shut its eyes to the utility of punishing men who falsely pretend to be on the register; but, with us, it asserts that such a step is by no means enough. Where so much was to be admired, it is a pleasure to us to feel that, even here, there is nothing to disapprove.—Ed.]

BEWARE OF WOLVES IN LAMBS' CLOTHING.

To the Editor of the "Medical Times."

Sir,—The movement, such as it is, against the Bill, is now shewing itself in its true character. It is a movement hostile to everything but the licentiates of the London company of drug-sellers. It is an England for the English movement—a selfish, sordid resolve to restrain English practice solely to the London licentiates. The Act of 1815 does not prevent quackery: but it prevents the Scottish or Irish graduate, or the member of the College of Physicians or Surgeons, in London, practising as a General Practitioner—and, however veiled the desire of those who have most stirred in the matter, it is to have no reciprocity of practice between the three divisions of the empire. True, the discrepancies of education, and restriction of competent practice, may be bad for the poor, for the respectability of the Profession, and the good of the public—but it is good, excellently good, for the Licentiates. The Company itself is at the bottom of the matter. Its members have given their Statement away most profusely: they have set their agent at work most actively; and the *Times* insidiously, at their suggestion, hinted recently, in one of its leading articles, on the mischief to *practice* that Scotch or Irish competition would cause. The Profession should look to this in time, or the scandal and shame of having the great body of British Doctors in disgraceful connection with a low and undistinguished drug company may be perpetuated on it. It is all nonsense opposing the Bill on the flimsy grounds usually put forward to cover sordid considerations. The Bill does neither good nor harm to quackery: and is really not worth a minute's talk, apart from its Council of Health and Board of Annual Registration: the Bill is there, and no where else.

Your's, Sir, respectfully,
HONESTAS.

MEETING OF THE MEDICAL PROFESSION AT NORWICH.

Abridged from the "Norfolk Chronicle" of this day.

In pursuance of a Requisition numerously signed, a Meeting of the Medical Profession took place at the Guild Hall, in Norwich, on the 19th instant, the following gentlemen being present:—from

Norwich.—J. Brownfield, E. Crickmay, G. Chater, W. Cooper, W. Crook, C. Drake, A. Dalrymple, D. Dalrymple, J. R. Evans, W. B. Francis, J. Godwin Johnson, Dr. Lynn, A. Masters, W. P. Nicholls, J. Phillipps,—Rudrum, Dr. Wharton, C. B. Wiles.

Yarmouth.—C. Costerton,—Ferrier,—Prichard.
Lynn.—R. D. Hale, Dr. Wayte.
Swaffham.—G. Rose, E. Seppings.
Fibley.—J. C. Cooper.
Gorleston.—S. J. Smith.
East Harling.—J. Postle.
Mattishall.—W. B. Pitt.
Blofield.—P. Eade.
Wymondham.—R. J. Tunnelay.

John Green Crosse, Esq., F.R.S., and Senior Surgeon to the Norfolk and Norwich Hospital, was called to the chair.

The Chairman said,—Ten years ago, a laborious investigation took place, before a Parliamentary Committee, into the state of the Medical Profession generally in the United Kingdom. On that occasion, he was employed for many days in hearing the evidence, and very laboriously in giving his own evidence, for some six hours in one day, before Mr. Warburton, the chairman of the committee. It might be supposed, that on that occasion, he had devoted no inconsiderable time and attention to the matters upon which he had to give evidence. He was then particularly desirous to give information upon local matters, and for that purpose, he obtained a census of the medical population of the two counties of Norfolk and Suffolk, and gave a statistical table of practitioners in the different grades of the profession. In consequence of both Houses of Parliament being burnt down, all the medical evidence was destroyed, with the exception only of the evidence relating to the great corporate bodies in London; this was a great disadvantage, as it left the state of the provinces misrepresented. He regretted, that medical men were so little accustomed to meet together to discuss topics connected with their profession, and he wished such meetings were held more frequently. Each gentleman would have an opportunity of expressing his sentiments, as the various propositions came before the meeting. In reference to any discussion that

might arise, he recommended, that all personalities and invectives should be avoided, and that care should be taken to point out the clauses in the bill to be retained, altered, or omitted; and also what clauses should be added.

Dr. Wayte, in moving the 1st resolution, said, setting every political consideration aside, he thought, that in many towns Sir James Graham had not been treated as he ought to be in respect to this bill. He had brought it forward with a decided impression that it would be a bill satisfactory to the public and to the profession; and he had not hastened it through Parliament, but left time for it to be thoroughly discussed, in all its parts before the next session. He, therefore, thought, that Sir James Graham had done all he ought to have done, and in a delicate and appropriate manner, and he did not think individuals or public bodies should broach unkind feelings, when a disposition was shewn to benefit society at large. In regard to being deeply impressed with the necessity of fresh legislation, he might say, that before the Apothecaries' Act of 1815, great inroads were made on the profession; and in the early periods of the operations of that Act, many unqualified individuals were prevented practising; but the custom of prosecuting dropped, and consequently illegal practitioners were now rather increasing than otherwise. The new bill would, as it stood, make a great opening for persons who had no pretensions to practise whatsoever. He thought the resolutions of this day would go far to improve the bill, if they were listened to; and would render it, if not perfect, at least nearly so, and such as ought to be palatable to every practitioner in the kingdom. Their high and honourable profession ought not to be invaded by quacks, regular or irregular. It was quite time to make a stand. No doubt, Sir James Graham had received advice from head quarters; and it was now for provincial men to suggest amendments to the bill. He hoped, that throughout the kingdom, the petitions would not be found to clash with each other, but that there would be a kind of harmony among the whole, so that a bill might be brought in which would support the honour of the profession. He did not wish to injure any individual or any body of men, but he thought it high time for the profession to take a defensive course; and he hoped Sir James Graham would attend to the suggestions respectfully offered to him.

"That being deeply impressed with the necessity of fresh legislation to reconcile the discrepancies of the medical profession, and to create reciprocity of privileges and uniformity of education for each grade respectively throughout the United Kingdom, this meeting is thankful for the ample opportunity offered by the Right Honourable Sir James Graham, Bart., for discussing the bill introduced at the close of the late Session of Parliament."

Mr. Chater seconded the resolution; and observed, that advantage would accrue from their being connected with the government by a Council of Health; and had such a connexion before existed, they would not have had the degrading effects of the Poor Law Act, and the system of appointment of medical officers by tender.

The resolution was carried unanimously; as were all the subsequent ones.

Mr. Ferrier, in proposing the second resolution, read the Registration clause of the bill, to which it refers, and added, that he thought the clause should enact, that no medical person be allowed to settle in any city or town, without exhibiting his testimonials before the Clerk of the Peace.

"That the Registration clause of the said Bill deserves the support of the profession; but, in order to be efficient, the registering should not be voluntary, but be made requisite and essential for every one who is permitted to practice as a medical man; whilst the list of the duly registered should be annually published."

Mr. Donald Dalrymple seconded the resolution, believing the Registration clause to involve all the good to be derived from the bill, and that that clause would be of little use unless amended as proposed in the resolution; he contended, particularly, that the registration should be annually published, not only as a matter of security to the profession, but also to the public.

Mr. Archibald Dalrymple moved the third resolution, which, he considered, involved a knotty point for legislators to decide upon, and required more legal knowledge than the medical profession was possessed of. It appeared to him a radical defect in the bill, that it would leave unqualified persons undisturbed in their practice or appointments, and government disliked to legislate on a *post facto* state of things. At any rate, this point should be strongly urged, and therefore he hoped his resolution would be met with the same unanimity as the others.

"That it appears a further defect in the proposed bill that it may leave undisturbed in their present practice and appointments some persons not now legally qualified."

Mr. Wiles, in moving the 4th resolution said, he considered it a vote of confidence in the Apothecaries' Act, which, he thought had grappled with all the difficulties against which it was intended to operate. It was now the only safe-guard in the provinces of England against unqualified practitioners.

"That the Apothecaries Act of 1815 has been very instrumental in advancing and regulating the most numerous portion of the medical profession in the parts of the kingdom to which its operations were limited, and more especially in the provinces; that its provisions have been ably carried out by the Court of Examiners of that Society, who are entitled to the thanks of the community; and in so far as the said Act has failed, such failure is attributable to its being a partial measure, and too feeble in its clauses for repressing the unlicensed and unqualified.

Mr. Seppings seconded this resolution.

Dr. Wayte observed, that it had been stated, that the expense of registration would amount to £75,000, to be taken from the pockets of medical men now practising.

The Chairman said, this was an error, originating with the *Medical Gazette*, whose calculations had been made upon a wrong clause in the bill, the one referring to registration of the present practitioners being overlooked. The amount would, in fact, be less than one-eighth of what was so erroneously stated.

Mr. Northgate moved the 5th resolution; which was seconded by Mr. Nichols, who added, that he felt fully persuaded of the importance of some protecting clause in the bill.

"That to repeal the said Act without substituting any general penal clause, in lieu of the one therein contained, against unqualified practitioners, is to be highly deprecated as eventually injurious to the public and unjust to the profession."

Mr. Costerton moved the 6th resolution; which was seconded by Mr. Francis.

"That some penal check upon the practice of the unqualified, by a summary process easy of application, is essential to the efficiency of every legislative measure, and its restriction to those unlawfully practising in public offices, is wholly inadequate to protect the public; whilst, on the other hand, it seems an anomalous novelty in legislation to enact, that the unregistered shall *not recover charges* for practising, in a way, *not forbidden by the law*."

Mr. Godwin Johnson said he believed the movement now going on in the medical profession was untinctured with selfishness. He considered, that they were indebted to the Secretary of State for not hurrying this bill through parliament. It was now open for discussion till next Session, and if it should be found, as he hoped it would be found, that the profession throughout the kingdom at large were nearly unanimous on certain points, they might, perhaps, be able to congratulate themselves on being protected in their labours in an ill-remunerated profession.

"That the foregoing resolutions be published in the local papers, and a copy of them sent to each Member of Parliament for this city, the County of Norfolk, and its Boroughs, and that a petition, based upon these resolutions be prepared by the following committee; and after receiving the signature of those members of the profession who are willing to support its prayer, be presented to each House of Parliament, and that the committee be requested to continue their services for the purpose of watching the interests of the profession in regard to this Bill."

Mr. Nichols made a question, whether this contemplated act was final, or to be followed by a subsequent act, restricting the vendors of drugs to their proper duties.

Dr. Wayte did not think disabling the unqualified from obtaining remuneration in courts of law as any check; medical men were the last who went to law.—Mr. Johnson remarked, that quacks never trusted.

Mr. Ferrier doubted, whether the preventing unqualified persons from practising, would not be a bad job for surgeons, as they made most money of the cases which quacks had been tinkering.

The Chairman, before putting the motion, begged leave to make a few remarks. If there were to be no general penal clause introduced into this bill he would say let us, in the provinces of England, rather remain as we are. Except in certain instances of public appointments, the new bill would permit, and even sanction, the practise of the unregistered and unqualified in all instances; and what would be the effect? The class just above the pauper, and the lowest poor who choose to avoid applying to the surgeon of a union, would be left to the care of the unregistered. When public appointments were held out as a great boon to the profession, it would be well to ask, what was their pecuniary value? It need hardly be stated, that in their profession, there was very little pecuniary payment to be derived from any public office; and what appointments there were of any value would be found in the metropolis. What the union surgeon received, could scarcely be called payment for his services; and were the total emoluments derived from public offices divided equally amongst the qualified members of the profession, they would not be found to average £20 per annum to each practitioner; and, therefore, the securing their appointments to him was no great boon for his being left without legal protection in all other respects. To refuse that protection which other professions receive, would allure many to hold back in their studies, and they would commence practice without completing them. Many of the rejected, after examination, would not apply again, but practise, unlicensed, without aspiring to a Union appointment. In all other cases, there was first the law to forbid the act; but by this singular part of the present bill, persons were allowed to practice, and yet the power to sue for charges was to be taken away from them. Little effect would, however, ensue from this, as all honest people would pay those whom they voluntarily employed. This did not remove the anomaly of the Act, arising from the absence of a general penal clause. They had heard much of putting the cart before the horse—but here was a cart and no horse at all; a passive machine without a locomotive attached—accomplishing what Hudibras contemplated,

> "To keep us equally in awe,
> Of breaking and maintaining law."

It was a great point to have a general penal clause to render it as effective as possible.

The Chairman then put the resolution, which was carried *nem. con.*

A Committee was then appointed to prepare petitions to Parliament, and watch over the interests of the profession in reference to this bill.

REPORTS ON UTERINE DISEASES.*

By EDWARD RIGBY, M.D., Fellow of the Royal College of Physicians, Senior Physician to the General Lying-in Hospital, Lecturer on Midwifery at St. Bartholomew's Hospital, Examiner on Midwifery to the University of London, &c.

(Continued from page 506.)

In the early part of the present year, a younger sister of this patient came to London to be under my care for the same complaint, and under very similar circumstances. I will, therefore, give merely an abridgement of the case.

Miss S. H., æt. 19.

January 11th, 1844.—Short; stout; bowels habitually costive; motions very dark; pain in left hypochondrium and left shoulder, increased

on pressure or full inspiration ; tongue pale ; pulse small, and feeble; anœmic headache; has been subject to profuse menstruation for some time ; the blood is florid, with clots, and the discharge always lasts a week ; catamenia now present.

℞ Pil. Hydr. chlorid. comp. Ext. Hyosc. āā ℈j. M. Ft. Pil. viij. sumat. ij. o. n.

℞ Acid. hydrochlor. dil. acid. nitr. dil. āā ʒij., Syrupi aurant. ℥j.,Aquæ Cinnamomi ℥iss. M. Ft. Mist. cujus. sumat. cochl. min. j, ter die ex aquâ.

℞ Pulv. Rhæi. potass. sulph. āā ℈j, Sp. Myrist. ʒss. Mannæ opt. ʒj. aquæ carui. ℥iss. M Ft. Haustus primo mane sumend. Sinapism. Epigast. et hypochond. sinistr. applicand.

15th.—Much relieved in the pain of side and shoulder; catamenia have ceased. Pt.

February 6th.—Catamenia returned upon the 4th, sooner than expected; they have been as yet less profuse than usual, but coagula are discharged five or six times a day ; less pain of side ; bowels confined.

℞ Pil. Hydrarg. pil. cambog. co. aa gr. v. o. n.

℞ Magnes. sulph. ℥ij, Infus. Rosæ. ℥viij. solve. sumat. cochl. magn. ij. o. m.

17th.—I have seen her three times since the last report; the discharge which appeared upon the 4th, became afterwards profuse, with much coagulated blood, and weakened her considerably ; as she had still pain of the left side, I gave her the Plummer's pill, so as slightly to affect the gums, keeping the bowels open with the sulphate of magnesia mixture ; as the bowels were still confined, these medicines were then discontinued for the following :—

℞ Extr. Taraxaci cochl. min. ½ m. and n, ex lacte.

℞ Infus. Gentianæ co. Infus. Sennæ co. aa ʒvi. bis die.

The pain of side is less; her strength, appetite, &c., much better ; bowels regular. Pt.

March 6th.—Four visits since last report ; pain of side still further diminished, and health improved. On March 2nd, I prescribed as follows:—

℞ Pil. Hydr. chlorid. co. Ext. Hyoscyami aa gr. v. Quinini disulph. gr. ij.—M Ft. Pil. ij. o. n. s.

℞ Tæ ferri ammon. guttas xxv. ter die ex aquâ.

The catamenia appeared yesterday ; they are moderate in quantity, but still with some coagula.

11th.—The menstrual discharge continued in moderate quantity until the 9th, when it diminished, and ceased on the evening of the 10th ; has considerable leucorrhœa.

Pt. Pil. sumat tinct. ferri ammon. guttas xxxv. ter die ex aquâ.

18th.—Wishing to increase the strength of the tonic medicine, I ordered :—

℞ Ferri potass. tart. gr. x. Infus. Gentianæ co. ℥iss.—M Ft. Haust. bis die sum.

℞ Extr. aloes aquos. ℈ij. Ext. Hyoscyami ℈iss. Mastiches gr. xij.—M Ft. Pil. xx. sumat j.—ij. h.s.

27th, (Half-way time).—Feels well, but the tongue is dry and rough ; some pain in the left hypochond.

℞ Pil. Hydrarg. chlor. Ext. coloc. co. aa gr. v. o. n.

April 15th.—Catamenia have not appeared at the usual time, but she does not feel inconvenienced by their absence. Pt.

23rd.—In excellent health—catamenia have not yet appeared.

May 13th.—Catamenia appeared naturally and moderately; health excellent ; no pain of side or head.

The disease, in this instance, was of longer standing than in her sister's case ; there was also more obstinate constipation, and I have reason to suspect that the liver affection was a good deal aggravated by tight dressing, for the lower edge of the cartilage of the ribs, on the left side, was considerably distorted. The chief difference in the treatment, therefore, was, that greater attention was required to the state of the bowels, and the mixture of gentian and senna seemed to act best with her. I was, perhaps, too impatient in the use of tonics in this case; and believe that if I had been content to go on with mere laxative and alterative medicines, after the gums had become affected, I should have gained my object sooner.

I will give one more case of this form of menorrhagia, chiefly to shew the *manner* in which these attacks sometimes come on, and which I have described more fully in my report of this, than in those of the previous cases.

Mrs. G. æt. 24, of diminutive stature; delicate looking ; twice pregnant ; twins in her first pregnancy.

Feb. 10th, 1844.—Came to me, at St. Bartholomew's, as an out-patient, last week, suffering from pain in the hypochondria, clay-coloured diarrhœa, and symptoms of considerable uterine congestion, viz. pain and throbbing of the back and pelvis, &c.; slight cough; long subject to diarrhœa. I prescribed, then:—

℞. Hydrarg. c. cretâ., pulv. ipecac. co. aa gr. v., altern. noct.

℞. Acid. nitr. dil. M. xv. ex aqua menth. pip. ter die. Linctus.

The report of to-day is as follows:—Diarrhœa has continued, but has latterly improved in colour, with relief to the hepatic symptoms. Catamenia appeared upon the 4th, preceded by great increase of uterine symptoms. They appeared suddenly and profusely ; stopped after 24 hours ; returned as before ; stopped once more for 12 hours ; returned again, and have continued profusely ever since. The first attack of the discharge relieved the uterine symptoms. There have been no coagula since the 8th ; feels weak, and looks pale, but her pulse is good. The bowels, for the last few days, have been moved once a-day.

℞. Acid. nitrici dil. M. xv., infus. gentianæ, co. ℥iss. ter die. Pt. pilulæ et linctus.

17th.—Catamenia continued profusely for five days after last report: feels very weak ; much pain in both hypochondria, especially the right; pain in the shoulder ; motions still clay-coloured; tongue clean.

℞. Acid. nitr. dil., acid. hydrochlor. dil. aa M. vii., infus. gentianæ co. ℥iss. ter die. Pt. pil.

24th.—Motions of a better colour ; severe pain in both hypochondria, especially the left;—headache, want of appetite, no sleep, pulse weak, has less pain of back.

℞. Pil. hydrarg. extr. hyosc. aa gr. v. o.n. Pt. mist.

March 2nd.—Feels better in every respect; complexion clearer ; bowels regular, and of a better colour: by the 5th inst., it will be three weeks since the last appearance of the catamenia, which is a longer interval than between the two previous periods; at present, she has no warnings of its approach.

Contin. medicam.

℞. Aq. menth. viridis. aq. distill. aa ʒvss. acidi sulphurici dil. m. x., syrupi rhœados. ℥ss. M. adde magnes. sulph. ʒi. solve.; ft. haust. omni mane sumend.

9th.—Much stitch-like pain about the lower portion of chest: bowels regular and natural; tongue clean; no warnings of a menstrual period; on the 12th, it will be exactly a month since the last period. Mouth seems to be slightly affected by mercury. Omitt. pilulæ.

℞. Ferri. sulph. gr. ij. extr. hyosc. extr. gentianæ aa gr. iv. m. ft. pil ij. Om. nocte sumend.

16th.—Catamenia appeared on the 10th, without much pain, and moderate in quantity; they have continued moderately up to the present time, but began to diminish yesterday. The menstrual period has not been so moderate for a long time: feels weak; slight pain of side ; much headache. Pt. med.

23rd.—A slight shew returned on the 20th ; lasted for two days, very slightly; disappeared for 24 hours, and returned again this morning. Pt. pil. et mistura gentianæ, c. acido nitro-mur.

Let her take some magnesia every morning.

30th.—Catamenia ceased a week ago. Pulse weak ; feels weak; stomach irritable; tongue good; conplains of pain on sitting down suddenly; and of throbbing about the anus.

Exam. per Vaginam.—Os and cervix uteri painful to the touch ; nothing else abnormal.

The same medicines were ordered to be taken, and five leeches to be applied to the anus ; but she ceased to attend regularly, and it is, therefore, doubtful if she used them. From this reason also, the history of the treatment is unavoidably imperfect, although I have continued to see her occasionally since. She has gradually improved. The interval between the two last attacks was four weeks, and the last appearance of the catamenia was moderate, and without coagula. The pain of the side and shoulder had also ceased, although there was still much gastric derangement and leucorrhœa during the intervals.

The fitful manner in which the catamenial discharge comes on in menorrhagia is a curious feature in the disease; the balance between the power of the circulation on the one hand, and that of the extreme vessels to retain it on the other, is often so nicely poised, that the slightest causes will derange the equilibrium, and bring on hæmorrhage. The pain of hypochondrium and shoulder, and the clay-coloured stools, indicated the presence of considerable hepatic derangement, and these symptoms, as also the severity of the menstrual attacks, gradually yielded under much the same course of treatment which I have described in the two previous cases.

In the present instance a condition was associated which did not occur in the others, viz., an engorged and painful condition of the os and cervix uteri, probably arising from the loaded state of the uterine vessels in general, but showing itself there in greater degree, from its being the lowest and most depending part of the uterus. The pain produced on sitting down, arose solely from the perinæum being pressed up against the os and cervix of the uterus, which, from its increased weight, was lower in the pelvis than natural ; it is a symptom which is almost invariably present in cases where the os and cervix uteri are inflamed, as we shall see hereafter. The throbbing about the anus confirmed the fact, and indicated the application of leeches to that part.

A constipated state of the bowels is by no means an unfrequent cause of menorrhagia; but as this is a condition which is so easily removed, we seldom see the attacks so severe, or of such duration, as those connected with congestion of the liver. The treatment also will be self-evident.

Another cause of menorrhagia, produced by obstructing the circulation, is the presence of tumours, of various descriptions, in the pelvis itself. These may be deposits of morbid structure, either of a malignant, or non-malignant, character, an enlarged ovary, prolapsus, inversion or polypus uteri, &c.; these I propose to describe under their separate heads. I, therefore, conclude my observations on menorrhagia, by giving some cases of the purely passive form.

Miss A. W., æt. 34, light hair and eyes; very fair, with a high colour.

May 19th, 1841.—Much general debility, pain of back on taking exercise; menstruation profuse, and rather inclined to be irregular; the discharge lasts from seven to eight days, at first sparing, and with slight pain, but becoming more profuse, and with increase of pain. Any slight motion increases both, and obliges her to keep very still. At any time she is afraid of putting her feet into warm water, beyond a few moments, lest it should bring on a return of the menses. Appetite variable; dry tongue; irritable pulse, and irritable bowels. Strong tonics and stimulants are stated to have decidedly disagreed with her.

℞. Hydrarg. cum cretâ, extr. taraxaci, ext. hyoscyami aa ℈j. M ft. pil. xij. sumat ij. o.n.

℞ Acidi nitrici dil. tinct. hyosc. aa ʒij. syrupi aurant. ℥ss. infus. gentianæ co. ℥vij. M ft. mist. cujus sumat cochl. magn. ij. ter die.

May 24.—Her symptoms are sufficiently improved to allow me to put her on the use of sarsaparilla and lime water.

29th.—Much better in health and general strength. Pt. pil. and sarza.

June 16th (by letter).—The catamenia did not appear until the right day, which has not been the case for some months. During the two first days of the period, they were much less profuse than usual, and she was, consequently, stronger, with much less pain of the back; but on the third, contrary to custom, they increased much, being over, however, at the end of the sixth, leaving her weak and exhausted. She is, however, recovering her strength; she takes the pills every other night, as they acted rather copiously on the bowels. Pt. med.

To prepare against the next period, let her take

a seidlitz powder for two mornings before the next appearance of the catamenia. Let her keep very still and cool, and as soon as it comes on, let her take the following mixture.

℞ Potassæ nitrat. ℈iv. sp. ætheris nitr. ʒss. tinct. hyosc. ʒij. decoct. cetrariæ ʒvjjss. M ft. mist. cujus sumat cochl. magn. ij. tertiis horis.

21st.—Better. ℞ Ext. taraxaci. ext. hyosc. aa ʒss. M ft. pil. xij.sumat ij. o.n.

July 16th.—Has again gone the full time before the catamenia appeared; they lasted a little more than five days, but have not left her so weak as before. States that the mixture, which I prescribed for the period, appeared to keep up her strength. Pt. pil. and sarza.

August 10th.—Catamenia appeared five days before their time, but she suffered less, and was less debilitated by them. Eats and walks better. Pt. Pilulæ.

℞ Acid. hydrochlor. dil. acid nitr. dil. aa ʒij.; syrup. aurant. ℥j. ; aq. cinnamomi, ℥iss. M. ft. Mist. cujus sumat cochl. min. j. ter die ex aquâ.

A more feeble irritable state of the system can scarcely be imagined; and it required delicate handling to obtain the desired effects, without exceeding the bounds of safety. To allay the irritability of the mucous membrane of the intestinal canal was a point of very great importance, and after getting the stomach and liver into better order, by means of the mildest alteratives and tonics, I was enabled to effect this object by the use of sarsaparilla and lime water. To controul still further the increased irritability of the circulation at the catamenial periods, she took the mixture of nitrate of potass at these times with good effects.

E. D., æt. 42, mother of twelve children.

May 16th, 1835.—Young looking; pale; complains of headache and vertigo on getting up; pulse natural, compressible; much gastric derangement. The catamenia return every three weeks, and are very profuse, amounting, she says, at least to a pint; they are preceded by pain, heat, and weight of loins, and by severe headache. Bowels kept regular by medicine, otherwise costive. Urine scalds her.

℞ Pil. hydrarg. ext. hyosc., aa gr. v. o. n.

℞ Acid, nitr. dil. tinct. hyosc. aa m. xv.; syrupi aurant. ʒj ; infus. gent. co. aquæ menth. pip. aa. ℥ss. M. Ft. haust. bis. die sumend.

℞ Magnes. sulph. ℥ss.; magnes. carb. gr. xv.; omni mane, ex aq. menth. pip. sumend.

21st.—General health improving. Pt.

June 4th.—Went to the full time of the menstrual period. Catamenia natural in quantity; Much debility; tongue clean; bowels natural.

℞. Quinini disulph. gr. ij. bis die.

Rep. mist. magnes. sulph. et carb. o. m.

℞. Ext. hyosc. ext. gentianæ, aa gr. v. o. n.

It is much to be regretted, that the report of this case does not extend over another menstrual period, but being an hospital out-patient, she ceased her attendance as soon as she found her health improving. The case is, however, long enough to point out the importance of deducing our chief indications of treatment, from the constitutional symptoms in these complaints, feeling confident, that when the general tone of the system is improved, the local affection will also begin to yield. In all probability, her early attacks of menorrhagia had been, more or less, of an active character, at any rate, connected with constipation and gastric derangement; had these latter symptoms been absent, I should have ventured to put her on more decided tonics. I have no reason to think, that she experienced a relapse, for, as, at the last report, I was enabled to commence the use of quinine, I have little doubt, but that 2 gr. of this medicine, twice a day, for a week completed her cure.

A H., æt. 41; married; no children.

June 8th, 1838.—Much debility and general symptoms of anæmia; continued discharge of dark blood, from the vagina, for the last fortnight, and the last three appearances of the catamenia have been *very* profuse; states, that the catamenia have always been copious, the periods lasting from four to eight days.

℞. Ferri sulp. pulv. zingib. aa gr. j., ext. gentianæ gr. iij., ext. hyosc. gr. v. M. ft. pil. ij. o. n.

℞. Infusi Columbæ ʒxiss., tinct. aurant. ʒss., sodæ sesquicarb. gr. x. M. ft. haustus sextis horis sumend.

16th.—Feels better and stronger; more appetite; little or no vestige of discharge; bowels regular. Pt.

23rd.—Slight leucorrhœa, otherwise better. Pt.

30th.—Has had no bloody discharge for the last fortnight; slight leucorrhœa; appetite much better. Pt.

July 7th.—Catamenia appeared on the 2nd of July, since which, the discharge has been very profuse, going off, and coming on, until the present moment. Pt.

14th.—Catamenia ceased seven days ago; slight leuorrhœa; feels better. Pt.

21st.—Has much leuorrhœa; complains of debility, omitt. Haust calumbæ.

℞ Aq. Menthæ viridis. Aquæ distill. aa ʒvss. Acidi sulphurici dil. m.x. Syrupi Rhœados ʒss.—M Ft. Haust. ter die sumend.

28th.—Says she is quite well; has a slight leucorrhœa. Pt.

℞ Lotio Plumbi cum decoct. Papav.

August 25th.—Has had no appearance of catamenia for nearly four weeks, omitt. mist.

Rep. Haust. calumbæ ut antea. Rep. pil. et Lotio.

In treating the various forms of deranged menstruation, we must look chiefly to the catamenial periods for evidence as to the real progress we have made in the treatment of a case; for, although the general health may have improved considerably, the local symptoms will frequently for a time return at these periods as severely as before. Indeed, we seldom see a case of menorrhagia of any standing yield quickly, but it requires several successive periods before the uterus is brought into a state of healthy function. In menorrhagia, and more particularly in dysmenorrhœa, the intermediate times between the periods are frequently marked with the greatest regularity by an increase of the symptoms. whatever they may be, and, therefore, require close watching.

In the above case, little was required beyond a gentle course of steel and tonic medicine, steadily persevered in for some time. The symptoms were strictly of the passive character; there were no evidences of hepatic or intestinal derangement, still less of congestion.

I will conclude my passive menorrhagia with the following case which presents some points of difference to the preceding ones.

S. B., æt. 31, mother of three children; delicate looking.

December 1st, 1835.—Six weeks ago had a sudden discharge of blood from the vagina; leucorrhœa in the intervals; this discharge has occurred three times; yesterday she passed a portion of fibrine from the vagina, which was very fœtid; much pain of loins, with sense of dragging and bearing down; she has also pain above the symphisis pubis, but without any difficulty in passing or retaining her water; feels these various pains only when she is standing; abdomen large.

Exam. per vaginum.—Uterus larger and heavier than natural: cervix short; os uteri internum nearly, if not quite closed, soft; no tenderness or anormality; no ballottement.

℞ Pil. Hydrarg. chloridi co. gr. v. alternis noctibus.

℞ Quinine disulph. gr. ij. Acidi sulph. dil. m,x. Infus. Rosæ ℥iss. bis die. Lotio Plumbi.

15th.—Much better; no discharge for three weeks; feels stronger; abdomen smaller, softer; omitt. pil. et Lotio.

℞ Pil. Hydr. Extr. Hyosc. aa gr. v. o.n. Repet. Mist. Quinini disulph. Decoct. Querc. c. Alumine pro Lotione.

29th.—Much better; feels stronger; her other symptoms have disappeared except some degree of leucorrhœa, to which she has been always subject. Omitt. pil. and mixture.

℞ Ext. Hyosc. Ext. Gentianæ aa gr. v. o. n.

℞ Quinini disulph. gr ij. Extr. Lupuli gr. vj.—M Ft. Pil. ij. bis die sumend. Rep. Decoct. Querc. c. alumine. Let her have medicine for a fortnight.

Although the report gives but little of the previous history of this case, it is interesting as regards the disposition to prolapsus uteri, which was evidently associated with the other symptoms. The pain, dragging, &c., about the loins, increased by the erect posture; the uterus larger and heavier than natural; the cervix short, and the os uteri so swollen as to be nearly closed; all indicated the existenec of partial prolapsus uteri, even although at the moment of examination the uterus was not lower in the pelvis than usual. From not possessing the early history of the case, it must remain a matter of doubt which of the two (menorrhagia, or prolapsus) was the cause, and which the effect. I have already shown that in passive menorrhagia, the uterine vessels are much congested, and that even an inflammatory state of the os and cervix uteri may be the result. It is equally evident that a uterus, thus loaded with more than its ordinary amount of circulation, must increase in weight, and thus descend more or less deeply into the pelvis. On the other hand, we know that in a system long subject to leucorrhœa, as in the present instance, the vagina becomes much relaxed, and incapable of affording the uterus its due degree of support; the uterus, therefore, descends somewhat; its ligaments and vessels are put on the stretch; the free return of blood from the organ is obstructed; the uterus swells in consequence; and from its increased weight, as well as size, it not only dilates the vagina still further, but becomes less capable of being maintained in its natural position: it, therefore, descends more and more, and the increase of swelling produces those changes in it, as regards the shortening of the cervix and closing of its mouth, which are noticed in the report. These changes in the state of the uterus deserve notice, because, to a certain extent, they resemble some of those which are produced in this organ by pregnancy; and the presence of an hæmorrhagic discharge, coming on at irregular intervals, could be equally accounted for under this view of the case. But, neither had the catamenia ceased for any considerable period before the appearance of the menorrhagia, nor had she noticed any of those various changes in the system indicative of early pregnancy, which are usually observed to occur. The position of the os uteri in the pelvis, if pregnancy had been present, would have been very different; it would have been high up, and backwards, whereas it deviated but little from the ordinary position which it occupies in the unimpregnated state. The duration of the discharge (six weeks), and the pain of back and loins, being so entirely of the character of those produced by partial prolapsus, and not like those of threatened miscarriage, all tended to put suspicions of pregnancy out of the question. Finding that she had been habitually subject to leucorrhœa, and being of opinion that this state kept up the disposition to prolapsus, and consequent congestion of the uterus, and having, moreover, ascertained, by examination, that no inflammatory tenderness of the organ existed, I commenced with the lotio plumbi as an injection, and thus felt my way in the use of the decoct. querc. c. alumine, which evidently benefitted her greatly.

ON REFLEX NERVOUS ACTS AND THEIR DISTURBANCES, AND THE MORE PROBABLE PARTS OF THE DOCTRINE OF SYMPATHIES.

By T. WILKINSON KING, F.R.C.S.E.

(Continued from page 444.)

Induction—Old Sympathies—Mayo's Example of the Iris—Bell—Müller—Each part of a reflex Arc may err—Proportion needful between Causes and Effects—Arcs only partially over the Body, so should the Diseases be—Vomiting—Asthma—Real causes of Convulsions.

There are very large quantities of medical statements which are true, and which are not; that is, which are more or less true generally, but often (in application) more or less false.

I would by no means find fault even with the more especial dealers in these crude partial facts, but (as it appears to me) it cannot be too well remembered, that all general reasoning founded on such statements, is rarely just; and, for the most part, is absolutely wrong. Now and then,

perhaps, the inference may be right, while the argument *palpably* is wrong. Our doctrines of symptoms and signs furnish, I think, the widest illustration of this opinion. It is hard enough logically to be well convinced at the happy termination of an intricate case; yet the majority will never think so. We should smile to see young rustics climbing a tall peak to examine their native vale, thus rendered insignificant. But what are philosophers at the best engaged about, when endeavouring to set up their own limited views exclusively. The next traveller who takes up a higher point of observation, fairly reduces all our castles to more real proportions. There is yet much to be done towards determining the proper limits of the region of sympathies.

Haller justly ascribed certain sympathies to a reaction of the sensorium commune,* as when snuff, or laryngeal irritation, induces phrenic spasm, &c.; or, the rectum (says Richerand) contracts when irritated, and is aided by the abdominal muscles, &c.; and the stomach likewise. Dr. Copland (1824) adds the case of micturition.—(See his 4th English edition of *Richerand's Physiology.*) Does not retention from coma plainly exclude mere spinal marrow? The actual distinction of "reflex" sympathies, and of "direct," seems to be nearly immemorial. The desideratum is a list of real, and only of the real, sympathies.

The anatomy, physiology, and pathology, of the several reflex acts in our own systems, do not appear very inaccessible. A good deal has been already well advanced by different authors, and it would, no doubt, be an acceptable service to the profession to produce a clear, unbroken account, of the true and probable in these studies. I cannot propose to myself to do more than shew a simple method of effecting this, my main object being to dispose of what I have regarded rather as the useless "impedimenta" of the march.

Divide the opic nerve in a pigeon, the pupil dilates, and is unaffected by light.

Divide the third nerve in another—the result is the same.

Divide the fifth nerve; this removes the feeling of the conjunctiva.

Pinch the optic nerve; the pupil contracts.

Pinch the third nerve; the pupil contracts.

Pinch the fifth nerve; the iris is unaffected.

Divide the optic nerve, and pinch it where connected with brain; the iris contracts. The section of the fifth does not affect this experiment, but that of the third leaves the pupil immovable.—(Vide *Mayo's Commentaries*, 1823.)

The above excito-motory act and circle described by Mayo, even were the inferences erroneous in any measure, seems a clear original and ample discovery—the sign of study, and the fruit of judgment; and, no doubt, like the labours of many, the silent parent of subsequent enquiries and deductions.

The ancients saw nerve cords distributed for will and motion, and also to sentient organs. Charles Bell (1811) suggested this distinction of offices in the nerve-roots and brain tracts. He also circumscribed the tract of respiration. About a century before, Dr. Blair* surmised that the infra orbitar nerve gave touch to the elephant's trunk, &c.

The gradual corroboration and extension of the great theory of Bell, and its connection with that of reflex action seems to have received its latest strong touch from the hand of Müller. Divide the cerebral medulla in a frog, and divide the posterior (sentient) nerve roots of one leg, and the anterior (motor) nerve roots of the other leg. Irritate the leg in which feeling remains, and the other is convulsed.

Nervous pathologists would almost seem to require us to believe that the *least* evident derangements excite the *most* palpable and serious mischiefs; but it is a broad fact in *modern* pathology that the *fearful nervous* irritations are *not* discoverable where tangible causes exist, but only (as some would seem to assert) where doubtful or suppositious causes are concealed. It is somewhat against our physiology, when it does not blush to connect the very extremes of disproportions, as to cause and effect. By this, however, I do not mean to intimate that a slough of the pharynx should excite the movements that water or a crumb does; or that the proper impressable surface is not essential.

Let it be well remembered that the *true* excito-motory circles are liable to disturbance in each of their functions, or in each of the parts of which they severally consist,—in their sentient surface, their afferent nerve, brain centre or arc, motor cord or contracting fibre.

The opinion that all impressable surfaces, and all muscles, are equally correlated for excited acts would, of course, be too great a simplicity to impute to any one, and yet without some such a supposition, how can we admit that teeth, skin, or bowel, or indeed any sentient or sub-sentient surface, may alone excite universal spasm, not to say fever, inflammation, secretion, or arrest of secretion.

I conceive that the light of pathology fairly used is by far the safest guide in these researches.

Let us try the broad assertion which has been already sounded more than once. *No known irritation of impressable surfaces in healthy men produces convulsions; but, on the contrary, all the known irritations of impressable surfaces do not cause convulsions.*

Most known irritations, as vascular, mechanical, and other disturbances of the nervous centre, do cause convulsions, (and, perhaps, these only.) These depend on the blood, forms of inflammation, exposure to cold, injury, adjacent disease, &c.

Pain, inflammation, and ulcerative absorption, are found continually; but as yet nothing is known of their influence on supposed excitor nerves, or on the impressable surfaces over which these nerves may ramify; on the contrary, the little that is known of true excito-motory disturbances, rather indicates that the surmises of sympathy are devoid of foundation. An inflamed muscle has partial contraction; inflammation of the verge of the rectum invades the muscle, and this, when set in action gives transitory tenesmus; so the urethra may suffer. Lytta in the blood excites secretion in the kidney, or it may do more. Sometimes it affects the bladder, and then we see frequent painful micturition, seemingly spasmodic, the muscles being involved in the inflammation. Cold causes these same inflammations. Warmth and powers depurating the blood, cure them.

Enduring priapism is often inflammation, including muscle.

The more the nervous centres are deranged in themselves, up to a certain point, the more they may be influenced prejudicially by the senses, or excitor agency, and *vice versâ*; for example, light, sounds, and chills, in head affections, in declines, and in vigorous health.

In the development of early life, some excited acts seem gradually to be consigned to the sway of volition; for instance, the action of the jaws; while other acts, the result of a highly educated will, as erect balancing and locomotion, seem almost to become the subjects of excited influence. Sucking becomes a rare and voluntary act. Education makes a voluntary emesis easy, and squinting difficult; as well as opposite movements in various symmetrical parts.

I take the liberty to offer a scheme of reflex agency in vomiting, which may be as near the truth as any.

Gastric nerve — irritation } Medulla Oblongata } Gastric and abdominal nerves — contractions

Birds, children, &c. reject almost naturally; gastritis causes emesis; arsenic, antimony, or urine, in the stomach, or in the blood cause gastritis, or diarrhœa, or sweating, or all; and many itises. Brain oppression, lesion, or congestion, is not certainly an *excitor* of emesis. Nausea is certainly distinct, and not very plainly excito-motory. Sea-sickness yet remains to be fully defined. Vomiting, from irritation of the fauces, appears to be very different from anything adverted to here, in fact specific, though very irregular, and as much expiratory as anything

Many supposed causes of emesis are so rare, irregular, and doubtful, as scarcely to deserve attention, as cause and effect, which should ever, in such considerations be inseparables. Disease of the gall-bladder, and rectum for example.* Stone in the ureter, or suppression of urine, is not yet to be mentioned without a thought of diseased blood.

The sympathies of the stomach and uterus are almost too deeply rooted to be wrong—at least, to be disputed. At present, therefore, I dare only avow my opinion, that the physician who contends for these same sympathies, without evincing any knowledge or regard for a certain measure of humoral interferences will turn out to be wrong. To speak of consent between the emptied uterus and the secreting breast, without reference to the altered circumstances of the blood, has been, I think, a great absurdity. To deny arrest of menses, &c., to be one cause of breeding disorders, is, at least, a needless obstinacy.

The vomiting of obstructed pylorus, or small intestine, can hardly be detached from reversed peristaltic action.†

I have thought that hiccup might be simple emesis, arrested at the cardia. Obstruction in the bowel explains accumulation, and this is the cause of the inverted order of vermiculation.

I have before objected to the unqualified assertion, that excited acts are irrespective of *sense*. A child forgets the toy in his hand, in spite of sense. A man carries a parcel for miles, without volition. One who has lost the sense of the hand, grasps only while volition is concentrated to the member. If, under human experiments, excited acts are devoid of sense, is it not also true that such are misguided, imperfect, and useless motions? It would, however, seem to be a truth, that the lower the animal, the more complete are its excited motions (experimentally), and the more they are capable of being (naturally, so to speak, and usefully) isolated in sections; while the more rational the creature, the less are its reflex acts separable from volition, with any degree of completeness or perfection. Stertor is but poor respiration for the ribs of man, while the legs of an insect, or the ribs of snakes, may move almost as well without the head as with it.

The sensorial re-actions of deglutition, micturition, cough, &c. &c., are hardly to be disconnected from sense, in the *human subject.*

A child is said to suffer with his teeth, when he bites much: when we suffer from a like cause, we do not bite. The child is equally busy with his lips and fingers, but these actions are not considered as the effects of uneasiness, unless it may be that of hunger.

---

* Dr. Hall contends that the tone of muscles, their firmness after death, &c., is dependant on the spinal marrow. This appears to be the case in lower animals; but it is, I fancy, an old remark, that in man, division of the spinal marrow destroys the tone of the muscles below.—(See Dupuytren's *Leçons Orales*). This is one more corroboration, were it needed, that the spinal marrow has less, and the medulla oblongata more, to do, in the matters we are studying. It must be a matter of regret to all parties that the valuable views of Dr. Hall are divided amongst some twenty successive repetitions of his doctrines which have appeared in the course of the last twelve years, and of which the mere names, dates, and directions, can never be available to the many. Doubtless, to every reader, one complete memoir, not imposing reference to the rest, were better than all. A compiler disregards first editions. It is the master who is the most concerned whether as to the weeding of the garden, or the full display of its beauties.

* Philosophical Transactions.

* Dr. Hall gives the following as a demonstration of the process of VOMITING. (*Memoir*, 1843.)

Excitor Nerves from internal surfaces.	True Spinal Marrow.	Motor Nerves to their appropriate muscles.
Brain Lesion.		
Fifth Nerve in Fauces.		Recurrent closing Larynx
Poisoned Blood.		Diaphragm inert.
Vagus from Gall Bladder.		Vagus opening the Cardia. (?)
——— Stomach.		
——— Ureter.		
Nerves from the Bowels.		Nerves of Violent Expiration.
——— Os uteri.		
——— Rectum.		

† Vide cases of diverticula, adhering to, and opening at, the navel.—*Guy's Hosp. Rep.* April, 1843.

Emotion causes fainting, with general relaxation of muscles. Cold makes the teeth chatter. Vigour and courage seem opposite. A brain disorganization divides the will cords of a limb, and suspends its motion. The tremor of fear, and the convulsions from loss of blood (in the young and delicate, and, perhaps, with excitor influences), are a good deal alike.

Emotion is, in part, disordered circulation, which alone may explain the spasms which are referred to the mind; and slight capillary changes at the diseased medulla, or brain, are quite enough to account for pangs, tingling, and spasms, during defecation, yawning, sneezing, or even thinking.

Not only may convulsions—depending on mental emotion, with or without palsy—arise simply as syncope or epilepsy, from vascular disorder in the nervous centre, but so, also, may various convulsive concomitants themselves, perhaps, as yawning, sighing, stretching. When, with some paralyses, a limb is in a state of spasm, sometimes flexed, sometimes extended, irritating the limbs will reverse the action of the muscles for many seconds,—i.e., if flexed, a pinch *excites* the extensors, which have been comparatively at rest, and *vice versa*.

With incomplete paraplegia, excited *motions* seem to depend on loss of control by division of will-cords, certain (excito-motor?) fibres remaining entire: so with hemiplegia.

We should remember that much of sensation is involuntary, and not fail to perceive that true excito-motory acts may interfere, or mingle, alike with the act of attention and volition, and, even, perhaps, with the simplest contraction of visceral fibre.

Much has been said and written, to a very ill purpose, on the subject of spasm and sympathy in asthmatic affections. Indeed, granting as much as almost any seem to contend for, viz.: that there is a rare but specific case of spasmodic or of nerve-excited asthma, it cannot, I think, be denied that the proofs of the fact are as irregular and puerile as they can be. I have laboured to demonstrate that a variety of physical and humoral circumstances interfere in each stage of the dyspnœal paroxysm. (Vide *Med. Gaz*, 1841.) I do not presume that this is the whole of the matter, but I shall suppose, for the present, that the nervous partizan, who gives no sign that posture at night, cold in the morning, or repletion at noon, affect the course of the exacerbations, does not deserve to be relied on as a discriminator of the rarer—not to say, of the more doubtful—events.

I cannot consider my views upon this subject as mere theory. Countless experiments have shewn me, that the head a little higher, the feet more pendent, the body warmer, and rather more empty by abstinence, or by excretions, natural or artificial—and asthma declines. The reverses, also, of these cases, are not less certain. Half a cup of water, turning on the pillows, even a cooler surface (if recumbent) will be terrible aggravations. An antispasmodic dose, or a little coffee, may be almost fatal, or may suddenly dispel impending death. Moreover, the stages, forms, and complications of the malady, are various. Now, if all this be true,—and I dare assert it is,—what are the kind of details required to establish the distinct case of nervous asthma? I do not hesitate to declare, that I have never met with even the semblance of a narrative that merited attention, as full and satisfactory illustration (merely as detail) of such an event.

I do not wish to dwell on the fallacies quoted by each succeeding author; but it may be well to say that statements of uncommon facts, which may be of this kind, deserve very little attention, unless brought forward with all the circumspection that rarities demand. We may venture a comment on a few expressions.

Dr. T. Davies heard no respiration in the fit of hooping-cough, and in most violent respiration after exertion; both these cases of extreme expansion of lung demonstrated to him—spasm closing the tubes. All the rare and curious specific excitants of asthma have this in common: that the individual is, before hand, a prey to the disease. I know of no exception to this. In the history of all the nervous anomalies, we find no reference to the facts, that four hours after a meal, difficulty should begin, and be aggravated by exertion, posture, exposure, &c.; or that, in a certain case, a walk warms, depletes, and cures. In short, I venture to assure the reader that, with mingled views of physical, humoral, and nervous agencies, the whole detail of asthma and its anomalies will be found, on examination, a comparatively easy and pleasant problem.

The following is pretty well a transcript plan of Plate 6, in Dr. Hall's last Memoir (1843.)

Asthma of Reflex Origin.

Gastric and intestinal excitor nerves, irritated—the medulla intervening—there follows contraction of the bronchia, with urgent dyspnœa.

Asthma of Centric Origin.

Black blood sent to the medulla, there follow gaspings, flexions of the trunk, severe expirations, which cause emesis.

At present, I do not pretend to know what kind or degree of proof can be found to establish these views, unless, indeed, in small part only.*

Dr. Hall, of course, admits humoral asthma.—The following is from his lectures:—

"*Hay Asthma*—a form of chronic bronchitis which occurs in the hay season.—It consists in an inflammatory state of the conjunctiva and the mucous membranes lining the nostrils, and the air-passages in general. It is attended by sneezing, cough, dyspnœa, &c. &c., in exacerbations."—*Lancet*, May, 1838.

The reader will find the physical and humoral principles of this affection, as derived from my own experience in the *Med. Gaz.*, 1843.

Let us now cursorily apply the principles we have endeavoured to indicate, to the consideration of *convulsion*, *spasm*, *cramp*, *chorea*, *epilepsy*, *tetanus*, *hydrophobia*. We need not doubt that, in due time, the advocates of excito-motion will adduce some convincing facts.

On the whole, the best-known and most uniform cause of general convulsions, is active disease in the medulla oblongata; below which, partial disorder may cause less general convulsive acts (never universal?).

Rigid spasm is, I think, seen to depend on a manifestly morbid nutrition of medullary band—more or less permanent or extended.

Cramp, after exertion, may be only deranged nutrition of the affected muscle; and, even in the cramp of cholera, and other affections, a transitory alteration of the blood supplying great and most used muscles, may be the cause. Lead poisons affect the muscles most exerted. Perhaps, some irritant poisons may act directly to excite all the muscles.

I regard meningites, exostoses and tumours very little as the causes of nerve-irritations; but rather as indications of the site and course of neighbouring morbid varying capillary changes, which in any motor parts of the nervous system may and do give rise to irregular muscular actions. The same changes, involving cords of sense, give rise to pain—sense of heat, cold, numbness, tingling (aura?) flash, noise, &c. The same affecting excitor nerves have hardly yet been mentioned with any thing of discriminating respect.†

Thickening of the lining of the ventricles, or of the tunic of the pons varolii, or spinal cord, are not the diseases of the nerve tracts.

Can any one assert, that chronic inflammation and effusion in the ventricles of children, are as clearly dependant on teething, as on cold? or can he, as a philosopher, be equally satisfied with the current theories of worms, and the effects of tubercles in the nodus of the brain as causes of convulsions?

It yet remains for me to subjoin something in the way of summary, and also of comment and corroboration to these imperfect views. Perhaps somewhat is due in the shape of apology, both to the general reader, and to nervous physiologists in particular for faults of style. I must, however, wait for another opportunity.

36, Bedford Square,
Sept. 18, 1844.

HOSPITAL REPORTS.

KING'S COLLEGE HOSPITAL.

Penetrating Wound of the Right Lung—Emphysema.—James O' Heharty, æt. 34, a tailor, was admitted into King's College Hospital, on the 18th of August, about 11 o'clock in the forenoon, under the care of Mr. Partridge.

His wife, who accompanied him into the hospital, said, that he had been stabbed about 12 o'clock the night before, with a pair of shears, and that he had lost about two quarts of blood afterwards from the wound. He was seen by a medical man, who ordered him to remain very quiet, and to take some ammonia, as he was not in a fit state to be moved into the hospital, till he had rallied. At the time of his admission, he was very low and faint; countenance pale and blanched; upon examination, it was discovered, that there was a wound about half an inch long, a little below the lower angle of the right scapula, and four inches from the median line; its direction was perpendicular to the surface; the upper lip of the wound formed a kind of valve; when desired to take a deep inspiration, or to cough, air passed alternately into and out of the cavity of the pleura, in puffs; there was no bleeding from the wound, surrounding which, however, for about four inches, was an elevated, colourless, elastic tumour, which yielded a crackling sensation when pressed upon; besides this, there were several other wounds, which did not penetrate deeper than the skin, and subcutaneous *fascia*; the respiratory murmur, on the right side of the chest, in front, was natural, but became feeble towards the axilla, reaching as low as the false ribs, also over the back, below the level of the wound; the breathing on the left side, in front and behind, was puerile; there was no rubbing sound, no œgophony, over that part of the chest, which yielded a dull sound on percussion;

---

* With regard to bowel irritations, all pathology shews, that the more the disturbance, which might act on excitor nerves, is certain and considerable, the more certainly do we find the results (in the lungs, &c.) absent. This is most notable with respect to the coarse, morbid anatomy of the mouth, stomach, and bowels,—and do not salivations, vomitings, and diarrhœas exist without any signs of the nervous disturbances? If we can give some real and precise import to a few facts of nervous irritation, is it not by so much the more evident that good grounds are wanting for the rest.

† The oculists seem to have been most advanced. There is no end to the refutation of assertions of sympathy: the statements are innumerable and always new, or newly-shaped; yet, analysed, they are found to be the same old scanty and weak opinions, as from the beginning of medicine. Surely, if the authors had a right estimation of the wonders they present to sceptical minds, they would produce more of the usual kinds of proof that simpler statements require. I cannot but impute to something like heedlessness, such declarations as the following. Doubtless, we all commit the like fault too often. "The expulsors and sphincters of the animal frame, are liable to similar (morbid excito-motory) affections. A minute calculus situated high up in the *urethra*, has induced such contraction of the sphincter ani, as almost to close the canal. A ligature upon a hæmorrhoidal tumour has induced absolute retention of urine. A source of irritation within the rectum, or within the bladder, frequently induces tenesmus, or strangury, or both. These phenomena are all induced through the spinal excitor and motor nerves. But a more extraordinary case of this kind, is induced through excitor nerves more remotely situated. In a little boy, the nephew of Dr. H——, strangury was induced in the most unequivocal manner, by dentition. The case was supposed to be calculus. It was relieved at once, by effectually lancing the gums." Every one of these statements seems to me fallacious, and capable of different and better explanation, excepting the simple fact, that a source of irritation (as inflammation), within the rectum or the bladder may induce—the one tenesmus, or the other strangury.

there was urgent dyspnœa, great anxiety of the countenance, and inability to lie down; had had several shivering fits: pulse 100, weak; breathing, 28; is very faint, and feels almost suffocated, when he lies down: ordered a foot-warmer to the feet, and two table-spoonfuls of wine every half-hour, till he rallies, and the shivering ceases; the edges of the wound were brought together with adhesive plaster, spread upon leather.

At three p.m.—Feels better; countenance not so pale; breathing less anxious; complains of a great deal of pain over the wound; pulse stronger; lies on his right side; has no pain in front of the chest; has no cough, nor bloody sputa; to relieve the pain over the wound, he was ordered: ℞ morphiæ, gr. ½; statim.

Six p. m.—Has much less pain since he has taken the morphia; can lie on either side, the head being well elevated; pupils dilated; to have low diet.

Twelve p. m.—Lies comfortably on the right side; has had a little sleep, and feels much better; the emphysema has not increased.

August 19th, ten a. m.—Slept well the greater part of the night; is thirsty: pulse 80, full; breathing 16; breathing over the left side of the chest still puerile; over the wound, the breathing is not heard, on account of the crackling produced by the emphysema; the wound was dressed to-day, but no air passed into or out of the chest; the plaster was again carefully applied; is thirsty; continue low diet; to keep very quiet in bed: ordered—

℞ Pot. nitrat. gr. v.
Liq. ammon. acet. ʒiij.,
Mist. camphoræ ℥ss. M.
Ft. haustus 4tis. horis sumend.
℞ Ol. ricini ℥j. statim.

20th, eleven a. m.—Passed a good night; pulse 80, fuller; breathing 16; the bowels have been freely open; has a slight cough; no bloody sputa; complains of pain in the right shoulder-joint; this is increased when he speaks or coughs: it extends across the scapula, and passes forwards towards the axillary margin of the great pectoral muscle; the emphysema is less elevated, but more diffused; to continue the same treatment.

21st, eleven a. m.—Pulse 64, intermitting every four or five beats, and has done so since his admission; sleeps well during the night; complains of little pain over the chest behind. The breathing over the axillary region is feeble, and behind, below the wound, it is dull on percussion; there is no "rubbing sound" anywhere to be heard; the breathing over the wound is prolonged; can lie on either side. The wound was dressed to-day, and looks well. Continue the same treatment.

℞ Ol. ricini ℥ss. statim.

22nd.—Bowels open; tongue clean; is thirsty; pulse 68; respiration 18; scarcely complains of the right shoulder; the condition of the lung, on auscultation, much the same; continue the mixture; to have milk diet.

23rd.—Pulse and breathing the same as at the last report; can lie on either side; can take a deep inspiration, or cough, without any pain. There is no bronchophony, nor œgophony, over the dulness; emphysema has disappeared; continue the same.

24th.—The same as at the last report.

25th.—Pulse and breathing the same, the latter becoming louder over the right side. Appetite good; to have middle diet.

28th.—The same report as the last; to leave off the mixture, and take no medicine; to get up for an hour or two daily.

Sept. 4th.—Has been improving, without any relapse since the last report; pulse still intermitting; breathing not so loud as natural over the axillary region, and the right side; the wound is quite well. Discharged, cured.

Remarks.—There was nothing unusual in the treatment of this case, except that there was no roller applied around the chest, to prevent the diffusion of the emphysema, on account of the great difficulty of breathing, amounting to orthopnœa. What was the cause of the dulness on percussion, and the feeble respiratory murmur in the axillary region, and over the back? Was it effusion of blood into the cavity of the pleura, from the wounded intercostal artery?—or was it emphysema pulmonum? Certainly, it was not the latter, because, in that case, the lung would contain a large proportion of air, though not in motion, and would yield a resonant sound, on percussion, whether the air was in the lung, or in the cavity of the pleura.

GOSSIP AND NEWS OF THE WEEK.

A Meeting was held at Chelsea, on Tuesday week, and is reported in the *Times* of Tuesday last. Mr. D. O. Edwards, Mr. Morrah, and Mr. Dickenson were the principal speakers. The resolutions were vague, but one declared that no Bill ought to receive the sanction of Parliament, which did not enact strict *public* examinations; and another ran in this fashion:—"*They*" (this Meeting) "consider such repeal would be *pregnant, not only with* the most dangerous results *to the public*, by exposing them to the daring and insidious acts of scheming and ignorant men, *but would* prove alike injurious to the *protective* interests of the medical, AND to the health and welfare of *the community at large*."

THE BIRMINGHAM GENERAL HOSPITAL.—An unfortunate strife is raging in Birmingham. The medical officers of the Hospital, Mr. Hodgson and Dr. Blakiston having several malpractices imputed to them on the authority of Messrs. Ledsam and Gutteridge two surgeons of the town, and described as very respectable. The charge against Dr. Blakiston is: "That for a boy of eighteen years old affected with chorea, or St. Vitus's dance—morphine, in grain doses, was ordered, and partially administered; after that he was ordered to take prussic acid, of the London Pharmacopœia strength, in the following doses;—Ten drops every two hours; the dose to be increased five drops every time. Three doses of ten drops (without the increase as ordered) were swallowed by the patient in the space of four hours; the effect was mortal; no sign of disease was found after death; only lumbrici in the intestines." The second charge—against Mr. Hodgson—was an unskilful operation of which a patient died. On Friday last (as we see by the *Birmingham Journal*,) a large meeting of the Governors was convened; the accusers were invited to bring forward their charges; and declining on the ground that the meeting did not offer a proper tribunal,—a vote of thanks was passed to the incriminated officers. The matter, it is said, will not end here.

POISONING BY ARSENIC.—M. Grimaud, a chymist at Poietiers, has proposed a mode of rendering poisoning by arsenic more difficult. He recommends that this article shall be sold only when mixed with a certain quantity of sulphate of iron and cyanure of potash. About one per cent. of each substance would, he alleges, be sufficient. The arsenic thus qualified shows itself either by colour or smell, when used in the various aliments fit for man. Thus, arsenic prepared this way, and thrown into warm meat soup, gives immediately a green bronze colour; into hot milk an opal; into red wine, a violet; into bread, a deep blue; and so on for 20 mixtures, on which M. Grimaud has made experiments.—*Galignani's Messenger.*

THE LATE SIR ASTLEY COOPER.—A statue has but now been placed in St. Paul's Cathedral to the memory of the good and celebrated Sir Astley Cooper, It was raised by a public subscription, confined to the profession of which he was so valuable and valued a member. The greater portion of the donors were pupils of the late Sir Astley Cooper, headed by Mr. Callaway and Mr. Travers. The statue, exclusive of the pedestal, is 8 feet high, and the likeness is considered good. It is by Mr. Bailey, the Royal Academician.

APOTHECARIES' HALL.—Gentlemen admitted members on the 19th Sept. 1844:—Thomas Shaw, Benjamin Micklethwait, James Reid, John Ross Diamond, James Adams Poole, Hayes Kyd.

OBITUARY.—At his residence, the Castle, Wexford, James Gordon Cavenagh, Esq., late Surgeon of the Royal Staff Corps, aged 74 years.—On the 16th inst., at Broadwood, near Cowes, Isle of Wight, Charles Cooke, Esq., formerly Surgeon of the 45th Regiment.—At Pallasgreen, after a short, but severe illness, Dr. William Apjohn.

NAVAL APPOINTMENTS.—Surgeons: James Stewart (1814) to the Osfrey; H. R. Banks (1843) to the Flying Fish; John Douglas, M.D. (1844) to the Water Witch; O'Neill Furgusson, M.D. (1841) to the Daring.

POWER OF FASCINATION IN SERPENTS.—Many causes might have given rise to the origin of the pretended *power of fascination* of serpents. It is true that most animals appear absolutely ignorant of the danger which menaces them, when they find themselves in the presence of enemies as cruel as serpents. We often see them walk over the bodies of those reptiles, pick at their head, bite them or lie down familiarly beside them; but we need not also deny that an animal, unexpectedly surprised, attacked by so formidable an adversary, seeing his menacing attitude, his movements, performed with such celerity, may be so seized with fear as, at the first moment, to be deprived of its faculties and rendered incapable of avoiding the fatal blow which is inflicted at the moment when it perceives itself assailed. Mr. Barton Smith, in a memoir expressly written to refute all that has been advanced on the fascination of the rattlesnake, relates several instances, which prove that birds do not show themselves afraid, except when the serpent approaches their nests to seize their young. Then one may see the terrified parents fly around their enemy, uttering plaintive cries, just as our warblers do when any one stops in the vicinity of their nests. It may also be, that the animals which it is pretended had been seen fluttering around the snake, and at last falling into his mouth, have been already wounded by his poison-fangs: a supposition which perfectly corresponds to the way in which venomous serpents master their prey. Many tree-snakes seize their prey by twisting their slender tails around their victim. Dampier has several times been a witness to this spectacle. Observing a bird flapping his wings and uttering cries, without flying, this traveller perceived that the poor bird was locked in the folds of a snake, when he attempted to lay hold of it. Russel presented one day a fowl to a dipsas, and the bird, in a short time, gave signs of death. Not conceiving how the bite of a snake, not poisonous and so small, could produce such an effect, he carefully examined the fowl, and found the folds of the tail of the snake around the neck of the bird, which would have perished had he not disengaged it. Many birds of small size are accustomed to pursue birds of prey, and other enemies of their race, or fly about the place where the object of their hatred lies concealed. There is reason to believe that this phenomenon, known in Europe to every observer, also takes place in exotic regions; and, perhaps, this, also, is one of the circumstances which have contributed to the invention of the stories which have been related of the power of fascination in serpents.—*Schlegel's Physiognomy of Serpents.*

Metropolitan Mortality for the Week ending Saturday, September 21.

Causes of Death.	Total.	Average of 5 Springs.	Average of 5 Years.
ALL CAUSES	857	900	946
Zymotic, or Epidemic, Endemic, and Contagious Diseases	250	191	178
SPORADIC DISEASES—			
Dropsy, Cancer, and other Diseases of uncertain or variable Seat	103	106	111
Diseases of the Brain, Spinal Marrow, Nerves, and Senses.	131	159	157
Diseases of the Lungs, and of the other Organs of Respiration	192	233	286
Diseases of the Heart, and Blood-vessels	23	19	21
Diseases of the Stomach, Liver, and other Organs of Digestion	74	88	69
Diseases of the Kidneys, &c.	8	5	5
Childbirth, Diseases of the Uterus, &c.	10	9	10
Rheumatism, Diseases of the Bones, Joints, &c.	5	5	6
Diseases of the Skin, Cellular Tissues, &c.	1	1	1
Old Age	45	56	71
Violence, Privation, Cold, and Intemperance	7	25	26